

February 25, 2021

Mr. Justin Starr, PG
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C
625 Broadway
Albany, NY 12233-70134

**Re: National Grid Kingsley Avenue Site
Rome, New York
2020 3rd Quarter OM&M Report**

Dear Mr. Starr:

Enclosed for your review is the 2020 4th Quarter Operation, Maintenance, and Monitoring (OM&M) Report for the National Grid Rome (Kingsley Avenue) Site. OM&M is being conducted in accordance with the Site Management Plan (SMP). National Grid submitted the SMP and Final Engineering Report (FER) on November 30, 2019. The NYSDEC approved the SMP and FER on May 8, 2020.

The completed quarterly OM&M activities included:

- A quarterly site inspection;
- Collection of quarterly static water level measurements of site wells;
- Collection and laboratory analysis of quarterly groundwater samples from OU-1 groundwater wells;
- Collection and laboratory analysis of quarterly groundwater extraction system samples; and
- Monitoring and/or collection of light non-aqueous phase liquid and dense non-aqueous phase liquid at site wells.

The groundwater extraction system is operating continuously and discharging to the sanitary sewer under the existing City of Rome Water Pollution Control Authority discharge permit. A chemical treatment system to minimize iron fouling within the groundwater extraction manhole, submersible pump, and piping also operates continuously.

Mr. Justin Starr, PG
February 25, 2021
Page 2 of 2

If you have any questions regarding the report or the scheduled activities, feel free to contact me at (315) 428-5652.

Very truly yours,

A handwritten signature in black ink, appearing to be 'S. Stucker', written in a cursive style.

for SPS

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

Enclosures

Cc: Devin Shay - Groundwater & Environmental Services, Inc.

National Grid

2020 4th Quarter Operations, Maintenance, and Monitoring Report



National Grid Rome Former MGP Site
233 Kingsley Avenue
Rome, NY 13440

February 2021

Version 1





2020 4th Quarter OM&M Report

National Grid Rome Former MGP Site
233 Kingsley Avenue
Rome, NY 13440

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February 25, 2021

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Acronyms

AWQS	Ambient Water Quality Standards	OM&M	Operations, Maintenance, and Monitoring
BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes	OU	Operable Unit
DNAPL	Dense Non-Aqueous Phase Liquid	Pace	Pace Analytical Services, LLC
DUSR	Data Usability Summary Report	PAH	Polycyclic Aromatic Hydrocarbons
GES	Groundwater & Environmental Services, Inc.	POTW	Publically Owned Treatment Works
gpm	Gallons per Minute	QA/QC	Quality Assurance / Quality Control
IRM	Interim Remedial Measures	ROD	Record of Decision
LNAPL	Light Non-Aqueous Phase Liquid	SMP	Site Management Plan
MGP	Manufactured Gas Plant	USEPA	United States Environmental Protection Agency
NYSDEC	New York State Department of Environmental Conservation	WPCF	Water Pollution Control Facility



1 Introduction

1.1 Overview

Groundwater & Environmental Services, Inc. (GES) has prepared this 2020 4th Quarter Operations, Maintenance, and Monitoring Report (OM&M) on behalf of National Grid. This report compiles the OM&M activities completed in the 4th quarter of 2020 at the Former Kingsley Avenue Manufactured Gas Plant (MGP) Site (the Site), located in Rome, New York. The Site has been classified as a Class 2 inactive hazardous waste disposal site by the New York State Department of Environmental Conservation (NYSDEC) and is identified as Site No. 633043.

In accordance with the Record of Decision (March 2002) and following successful completion of the selected remedy, long-term OM&M is required at the Site. The Site Management Plan (SMP) and Final Engineering Report (FER) for Operable Unit (OU) -1 and OU-2 were submitted to NYSDEC on November 30, 2019. The NYSDEC approved the SMP and the FER on May 8, 2020.

The following long-term OM&M activities are conducted in accordance with the SMP to monitor the effectiveness of the remediation previously conducted:

- Quarterly inspection of the Site (March, June, September, December);
- Collection of quarterly static water level measurements at the 34 site wells (16 Operable Unit [OU]-1 shallow and deep groundwater wells, eight dense non-aqueous phase liquid (DNAPL) wells, five OU-2 groundwater wells, and five extraction trench monitoring wells);
- Collection of quarterly groundwater samples from the 16 OU-1 shallow and deep groundwater wells and laboratory analysis of samples;
- Monitoring and/or collection of light non-aqueous phase liquid (LNAPL) and DNAPL monitoring at the 34 site wells, as needed. Offsite disposal of collected DNAPL at least once every 12 months;
- Removal of vegetation and snow, as necessary, to allow for access to the Site; and
- Submittal of quarterly OM&M reports to NYSDEC.

The groundwater extraction system is fully operational and discharges to the nearby sanitary sewer under an existing City of Rome Water Pollution Control Facility (WPCF) discharge permit. Discharge water samples are collected and analyzed quarterly for comparison to the permit limits as part of OM&M.

This OM&M Quarterly Report covers OM&M activities conducted during October, November, and December 2020.

1.2 Site Description

The Site is located within the City of Rome, Oneida County, New York. Refer to **Figure 1** for the Site location map. The Site consists of an approximately 22 acre parcel owned by National Grid.



MGP operations formerly covered the northern half of the Site. The southern portion of the Site consists of a National Grid electric substation, where some MGP impacts were left in place due to the inability to excavate on an active substation. National Grid presently operates and maintains a natural gas valving station located adjacent to the terminus of Kingsley Avenue.

The Site is located south of East Dominick Street, bordering a historic commercial and residential district, approximately 2,000 feet north of the confluence of the Mohawk River with the New York State Barge Canal. It is bounded by the Genesee and Mohawk Valley Railroad to the north, and the Mohawk River forms the western boundary of the Site. Whitesboro Street terminates near the southern boundary of the Site. The City of Rome Department of Public Works facility is located to the east and southeast of the Site. Residential properties are located near the Site entrance on Kingsley Avenue.

The Site is relatively flat, with existing grades ranging from 430 to 442 feet above mean sea level. The primary surface water feature in the area is the Mohawk River, which discharges into the Barge Canal approximately 2,000 feet downstream toward the south. The groundwater flow direction in both the water table aquifer (near surface) and deep aquifer (within the overburden above the clay) is toward the south-southwest. Depth to groundwater generally ranges from 2 to 15 feet below ground surface at the Site.

1.3 Site History

The Kingsley Avenue MGP was constructed in 1917. Gas production began at the Site in 1917 and peaked in 1927. Manufactured gas was produced at the Site using the coal gas and water gas processes. Coal carbonization produced coal gas by heating coal in retorts or beehive ovens. The water gas process involved the passage of steam through burning coal. This formed a gaseous mixture that was passed through a super heater into which an oil feed stock was sprayed. In each process, the gas produced was condensed and purified prior to distribution. The production of manufactured gas created many by-products, some of which remain onsite. A dense, oily liquid known as coal tar condensed out of the gas at various stages during its production, purification, and distribution. Although much of the coal tar produced was reused, recovery of the coal tar waste was incomplete. Substantial amounts of coal tar leaked from storage and processing facilities, contaminating surface and subsurface soils, as well as groundwater. Another by-product includes the discarded lime and/or wood chips treated with iron oxides to remove cyanide and sulfur from the gas (known as purifier waste).

By 1930, production of gas at the Kingsley Avenue MGP was limited to emergency capacity, as the supply of gas for the City of Rome came from other facilities. Between 1938 and 1941, the retort house and relief holder were decommissioned. By 1949, gas manufacturing equipment had been removed from the central building. In 1959, the main gas holder was dismantled.

Environmental concerns at the Site caused NYSDEC and the United States Environmental Protection Agency (USEPA) to evaluate the need for investigation and remedial action. Regulators typically define a single site into a number of OUs. An OU, for technical or administrative reasons, can be addressed separately to eliminate or mitigate a release, threat of release, or exposure pathway resulting from the Site contamination. The lead agency, NYSDEC, defined OUs: OU-1 and OU-2. NYSDEC continues to administer the Site under a Consent Order



with National Grid. OU-1 includes the former Kingsley Avenue MGP property, the surface soils of a small contiguous area of undeveloped New York State-owned land along the Mohawk River, and sediments in a backwater area west of the Site. OU-2 includes an approximate 2-acre area between the National Grid property and the eastern shore of the Mohawk River. Additionally, OU-2 includes the area beneath the Mohawk River and property west of the Mohawk River to East Westboro Street. OU-2 encompasses approximately 20 acres of land. Refer to **Figure 2** for a depiction of OU-1 and OU-2.

This report is focused on OU-1. The following provides a general chronology of key events related to OU-1.

- 1987 – USEPA Preliminary Assessment
- 1992 – Preliminary Site Assessment/Interim Remedial Measures (IRM) Work Plan
- May 1994 – Concentrator House IRM
- July 1994 – Start of Remedial Investigation
- January 1995 – Purifier Disposal Area IRM
- July 1998 – Light non-aqueous phase liquid (LNAPL) Removal IRM initiated
- March 1999 – Remedial Investigation Report
- December 2001 – Offsite Remedial Investigation Report complete
- January 2002 – OU-1 Feasibility Study complete
- March 2002 – OU-1 Record of Decision (ROD) issued by NYSDEC
- August 2006 – Remedial Design approved
- August 2007 – Remedial Action started
- December 2010 – Remedial Action completed
- January 2011 – long-term groundwater and LNAPL and DNAPL monitoring commenced
- December 2011 – long-term groundwater extraction system OM&M commenced
- November 2012 – chemical treatment system for the extraction manhole completed

The remedial elements for OU-1 that have been completed include:

- Utility relocation.
- DNAPL and LNAPL source area soil removal and offsite thermal treatment/disposal.
- Purifier waste material removal and offsite disposal.
- River bank soil removal and offsite disposal.
- Demolition and offsite disposal of the MGP tar well and holder foundations.
- Installation of a sheet pile cutoff wall to contain and minimize offsite migration of DNAPL.



- Installation of a groundwater extraction trench with passive recovery pipe along the upgradient side of the wall. The trench includes a series of collection manholes/sumps. Submersible pumps deliver untreated groundwater to a sanitary manhole under an existing City of Rome WPCF.
- Installation of a 14-acre soil cover in the northern portion of the Site.
- The two foot thick vegetative cover (clean soil above geotextile layer).
- Installation of eight DNAPL collection wells within known source areas.
- Installation of five groundwater monitoring wells along the extraction trench.
- Installation of 16 groundwater monitoring wells to monitor shallow and deep aquifers.
- Installation of five groundwater monitoring wells within the OU-2 area.
- An Environmental Easement has been placed on the property and is included with the final Site Management Plan.

Figure 3 presents the monitoring well locations for the western portion of the Site. **Figure 4** presents monitoring well locations for the eastern portion of the Site.

Following start-up of the groundwater extraction system, it became apparent that iron fouling would be an operational issue. Therefore, National Grid installed a chemical treatment system to help protect the groundwater wells, piping, and submersible pump associated with the groundwater extraction system. As part of the chemical treatment system, a weather-proof structure was installed adjacent to the groundwater pumping manhole and houses a chemical tote and chemical feed pump. An environmental friendly iron inhibitor (REDUX 340) is injected into the pumping manhole to protect the submersible pump, piping, and metering instruments. This chemical is used at similar National Grid sites across central and eastern New York State in order to minimize iron fouling and reduce operation and maintenance costs and has been approved by the City of Rome publicly owned treatment works (POTW). The chemical treatment system became operational in November 2012.

2 Operation, Maintenance, and Monitoring Activities

2.1 Quarterly Site Inspection

GES conducted the 2020 4th quarter site inspection on December 3, 2020. Inspections are generally conducted in March, June, September, and December of each year. The Site inspection included the Site wells, security perimeter fence/gates, drainage system, vegetation, and the Site access road. In general, the Site was noted to be in compliance during the inspection. Refer to **Appendix A** for the Site Inspection Form.

There are 34 total site wells that were inspected as part of this event. **Figures 3** and **4** show the well locations. **Table 2** details each well in terms of horizontal location, vertical elevation, diameter, material, and screen elevation.

2.2 Quarterly Static Water Level Measurements

Quarterly static water level measurements were collected from the 34 wells on December 3 and 4, 2020. **Table 3** presents historical and recent static water level measurements. Refer to **Appendix B** for the field log sheet with water level measurements.

Prior to the construction of the barrier wall and groundwater extraction trench/system remedy, groundwater generally flowed northwesterly toward the Mohawk River. The remedy was designed and constructed to intercept that groundwater flow pattern and minimize migration of site-related DNAPL from the upgradient side of the barrier wall to the river. To ensure that the barrier wall meets the intent of the remedial action, it was agreed by NYSDEC and National Grid that the long-term compliance mechanism would be to compare the top of steel sheeting barrier wall (generally 435 to 437 feet above sea level) with the groundwater levels immediately upgradient of the barrier wall.

Eight manholes (MH-2, MH-3, MH-4, MH-5, MH-6, MH-6A, MH-7, and MH-8) and ten groundwater monitoring wells (DNAPL-2, DNAPL-3, DNAPL-4, DNAPL-5, DNAPL-6, VTW-1, VTW-2, VTW-3, VTW-4, and VTW-5) were constructed immediately upgradient of the barrier wall within the gravel extraction trench. The static water levels in each of the upgradient groundwater monitoring wells were measured and found to be between 425 and 431 (**Table 3**) feet above sea level since start-up of the groundwater extraction system. Groundwater does not overtop the barrier wall. **Figure 5** presents the groundwater levels compared to the barrier wall profile. Gauging data for all 34 wells and containment data for the 10 upgradient groundwater monitoring wells are presented in **Appendix B**.

2.3 Quarterly Groundwater Monitoring Event

The 2020 4th quarter groundwater monitoring event was conducted on December 3 and 4, 2020. Sixteen groundwater monitoring wells were sampled (LTMW-D01, LTMW-S01, LTMW-D02, LTMW-S02, LTMW-D03, LTMW-S03, LTMW-D04, LTMW-S04, LTMW-D05, LTMW-S05, LTMW-D06, LTMW-S06, LTMW-S07, LTMW-S08, LTMW-S09, LTMW-S10).



The wells were sampled in accordance with USEPA Low-Flow Groundwater Sampling Procedures [1996]. Purge water was contained and subsequently discharged to the onsite groundwater extraction system which discharges water to the City of Rome WPCF. Field measurements (temperature, pH, oxidation-reduction potential, conductivity, turbidity, dissolved oxygen, and total dissolved solids) were recorded at each well during the sampling using a water quality meter and are presented in **Appendix C**.

In addition to the 16 water samples collected, four quality assurance/quality control (QA/QC) samples were collected, including one Matrix Spike sample, one Matrix Spike Duplicate sample, one field duplicate sample, and one trip blank sample. Twenty total samples were shipped on ice to the Pace Analytical Services, LLC (Pace) of Greensburg, Pennsylvania, for laboratory analysis. Analyses included: polycyclic aromatic hydrocarbons (PAHs) via USEPA Method 8270D; benzene, toluene, ethylbenzene, and total xylenes (BTEX) via USEPA Method 8260C; heavy metals via USEPA Method 200.7; and total cyanide via USEPA Method 335.4.

The analytical results included detections of BTEX, acenaphthene, benzo(a)anthracene, chrysene, cyanide, fluorene, and naphthalene above the New York State regulatory maximum allowable limits. Analytical results at LTMW-S03 indicated zinc levels above the guidance value provided in NYSDEC's Technical and Operational Guidance Series section 1.1.1. A summary of laboratory analytical results is provided in **Table 4**. Of the 16 wells sampled, LTMW-D01, LTMW-S01, and LTMW-D03 had BTEX concentrations above the New York State Groundwater Ambient Water Quality Standards (AWQS). Results indicated no detections of any compound for LTMW-D04, LTMW-D05, LTMW-S07 and LTMW-S10.

The analytical data report was validated by GES. The primary objective of the data validation is to identify any questionable or invalid laboratory processes or data. The data validator reviewed the summary form information, the raw sample data, and a limited review of associated raw QC data. In summary, sample results are usable as reported. Qualifications are detailed in Table 1 of **Appendix D**, which presents the Data Usability Summary Report (DUSR) including the validated laboratory data.

2.4 Quarterly Light Non-Aqueous Phase Liquid and Dense Non-Aqueous Phase Liquid Monitoring/Collection Event

Each of the 34 wells was monitored for LNAPL and DNAPL in December for this quarter. The gauging data for these events are presented in **Appendix B**. This activity is conducted in conjunction with the collection of static water level measurements. A probe is lowered to the water level in the well and inspected for LNAPL. The probe is then lowered to the bottom of the well and inspected for DNAPL. If LNAPL or DNAPL is discovered in measurable quantities, product is removed from the well using a submersible pump. The removed product/water mixture is subsequently containerized in a properly labeled NYSDOT-approved 55-gallon drum for future offsite disposal. DNAPL in measurable quantities was noted in four site wells: MW-OU2-1, MW-OU2-2 and MW-OU2-4.



As part of the NAPL monitoring/collection event, a total of 5.5 gallons of DNAPL were collected (3.0 gallons from MW-OU2-1, and 2.5 gallons from MW-OU2-4) during this quarter.

Since the start of the NAPL monitoring/collection program, a total of 563.5 gallons of DNAPL have been removed for offsite disposal. Zero gallons of LNAPL have been detected/recovered.

2.5 Quarterly Groundwater Extraction System Discharge Sampling Event

Under an existing City of Rome WPCF discharge permit, quarterly sampling, analysis, and reporting of the groundwater extraction system discharge to the local sewer system is required. A water sample was collected on December 3, 2020, and analyzed by Pace for the permit-specified parameters. No detections above permit limits were noted. **Table 5** provides the analytical results compared to the permit limits.

The analytical data report was validated by GES. The primary objective of the data validation is to identify any questionable or invalid laboratory processes or data. The validator reviewed the summary form information, the raw sample data, and a limited review of associated raw QC data. The review stated that field sample analyte values/reporting limits were usable as reported. The laboratory result for pH is always considered estimated as the EPA recommended short hold time of 15 minutes can only be met by in-field measurements. Qualifications are detailed in Table 1 of **Appendix D**, which presents the Data Usability Summary Report (DUSR) including the validated laboratory data.

2.6 Groundwater Extraction System Discharge Flow and Operation, Maintenance, and Monitoring

The groundwater extraction system consists of a gravel trench, a pumping manhole, dual submersible pumps, and below ground piping. The piping enters the onsite groundwater treatment building where flow measurements, discharge sampling, pressure measurements, and other OM&M activities can be conducted. The piping then continues below ground from the nearby sanitary sewer manhole to the City of Rome WPCF.

A mechanical flow meter is located within the Site building and serves as the recording device for the effluent water. During this reporting period, 3,216,081 gallons (average flow ~ 24.6 gpm) were discharged. Since the groundwater extraction system was installed, approximately 169 million gallons have been discharged. Below is a summary table for the groundwater extraction system discharge flow:

Table 1 – Groundwater Extraction System Discharge Flow

Time Period	Discharge Flow (gallons)
2010	11,600,000
2011	14,400,000
2012	19,900,000
2013	19,500,000
2014	16,500,000
2015	16,686,700
2016	13,695,010
2017	13,874,930
2018	13,208,189
2019	15,989,356
2020 1 st Quarter	3,775,177
2020 2 nd Quarter	3,513,675
2020 3 rd Quarter	3,205,924
2020 4 th Quarter	3,216,081
TOTAL	169,065,042

The previous consultant conducted an evaluation of the groundwater extraction system, including inspections of the extraction manhole, submersible pumps, valving/controls, and clean-outs. Iron fouling throughout the system, particularly scaling on the submersible pumps, piping, and metering instruments, had been observed. As such, a chemical scale inhibitor (Redux 340) system, which applies the Redux 340 at the groundwater extraction manhole/submersible pumps, was installed and became operational in November 2012. A heating element located at the pumping manhole was installed in June 2012. Electrical power and building lighting/heating was installed in August/September 2012. Information regarding the environmentally-friendly, iron scale inhibitor was previously provided to the City of Rome POTW. The groundwater treatment system (including pumping station, conveyance piping, and flow meters) was cleaned (water lancing) during September 2012 in order to remove iron scale build-up in advance of the chemical treatment system installation.

2.7 Vegetation Management and Snow Removal

Vegetation management and snow removal activities were conducted during the 4th quarter 2020 as needed.

3 Conclusions, Recommendations, and Certifications

3.1 Conclusions

Based on data collected from the 2020 4th quarter OM&M activities, the following conclusions were made:

- Overall, the site is in regulatory compliance. Vegetation maintenance and snow removal was conducted as needed during 4th quarter 2020.
- Quarterly static water level measurements were collected at ten groundwater monitoring wells upgradient of the steel sheeting barrier within the gravel extraction trench. The static water levels of the upgradient wells (ranging between 425 to 429 feet above sea level) did not overtop the barrier wall (top of wall ranges between 435 to 437 feet above sea level).
- Site groundwater contained detectable concentrations of BTEX, acenaphthene, benzo(a)anthracene, chrysene, cyanide, fluorene, and naphthalene above the New York State regulatory maximum allowable limits. Additionally, analytical results for well LTMW-S03 indicated zinc above the NYSDEC AWQS guidance values. Five of the 16 wells (LTMW-D01, LTMW-S01, LTMW-D03, LTMW-S03, and LTMW-S04) sampled had at least one detection of a site-related constituent above the New York State limits.
- The total quarterly volume of DNAPL collected (5.5 gallons) was removed from two wells (MW-OU2-1 and MW-OU2-4). 563.5 gallons of DNAPL have been removed from the site wells since the inception of the program. LNAPL has not been observed in any site wells to date.
- The groundwater extraction system operated continuously at an average flow rate of approximately 24.6 gpm, and a quarterly total of 3,216,081 gallons were discharged to the local sanitary sewer in accordance with the City of Rome WPCF discharge permit. A quarterly effluent water sample was collected and analyzed. There were no permit limit exceedances. Since December 2011, approximately 169 million gallons of water have been discharged without any permit limit exceedances.

3.2 Recommendations

It is recommended that all OM&M activities continue.



3.3 Certifications

I certify the following:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional controls and engineering controls employed at this site are unchanged from the date the controls were put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the controls to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any SMP for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of the controls;
- Use of the Site is compliant with the Declarations of Covenants and Restrictions;
- The engineering control systems are performing as designed and are effective;
- 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
- The information presented in this report is accurate and complete.

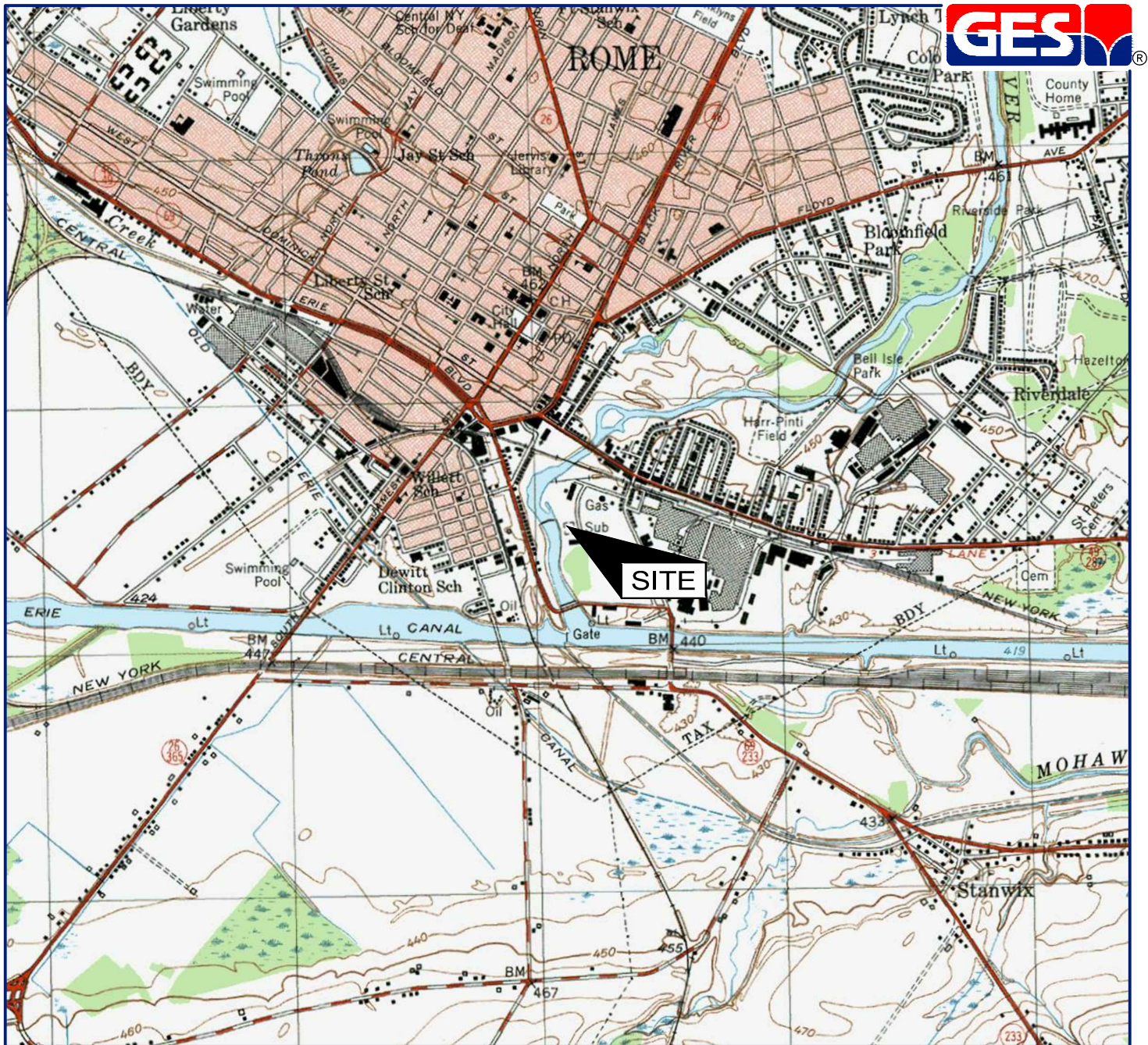
Signature

Date

Name: Gerald H. Cresap, P.E.
Title: Director of Engineering
Company: Groundwater & Environmental Services, Inc.





Figures

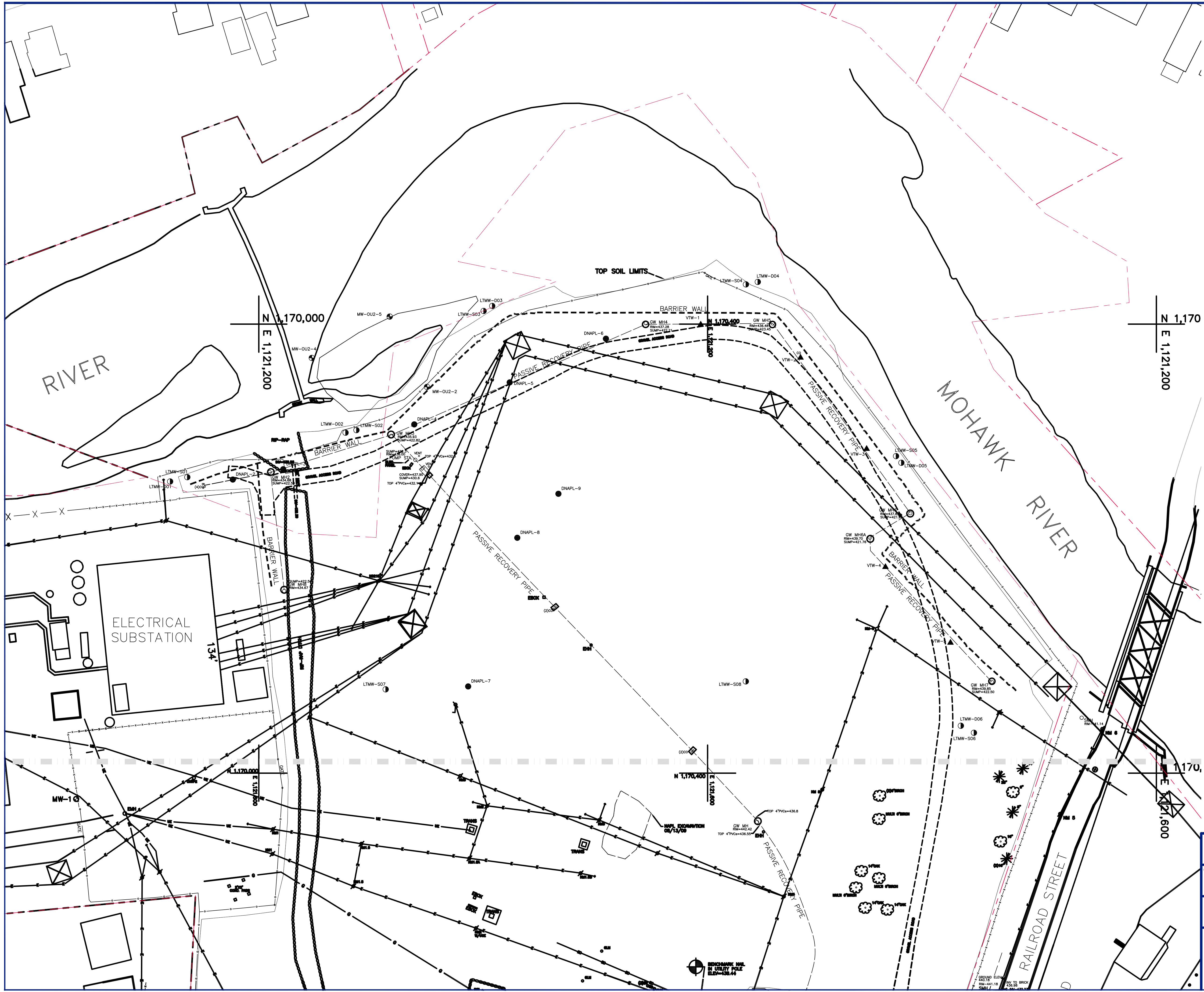


SOURCE: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE 1955
ROME, NEW YORK
CONTOUR INTERVAL = 10'



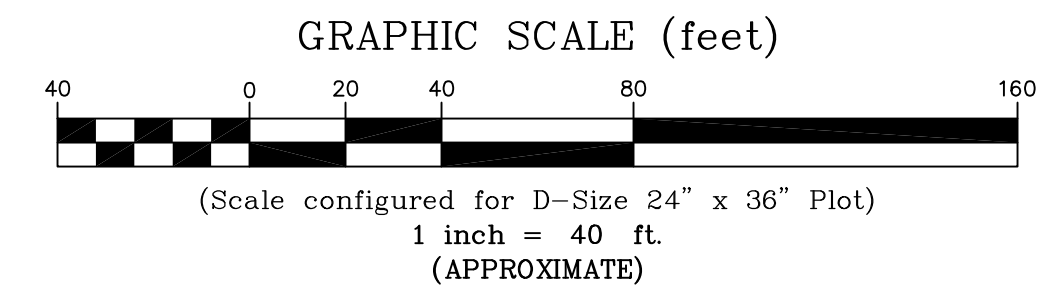
QUADRANGLE LOCATION

DRAFTED BY: W.G.S.	SITE LOCATION MAP		
CHECKED BY:	NATIONAL GRID KINGSLEY AVENUE ROME, NEW YORK		
REVIEWED BY:			
	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057		
	SCALE IN FEET 	DATE 10-17-16	FIGURE 1

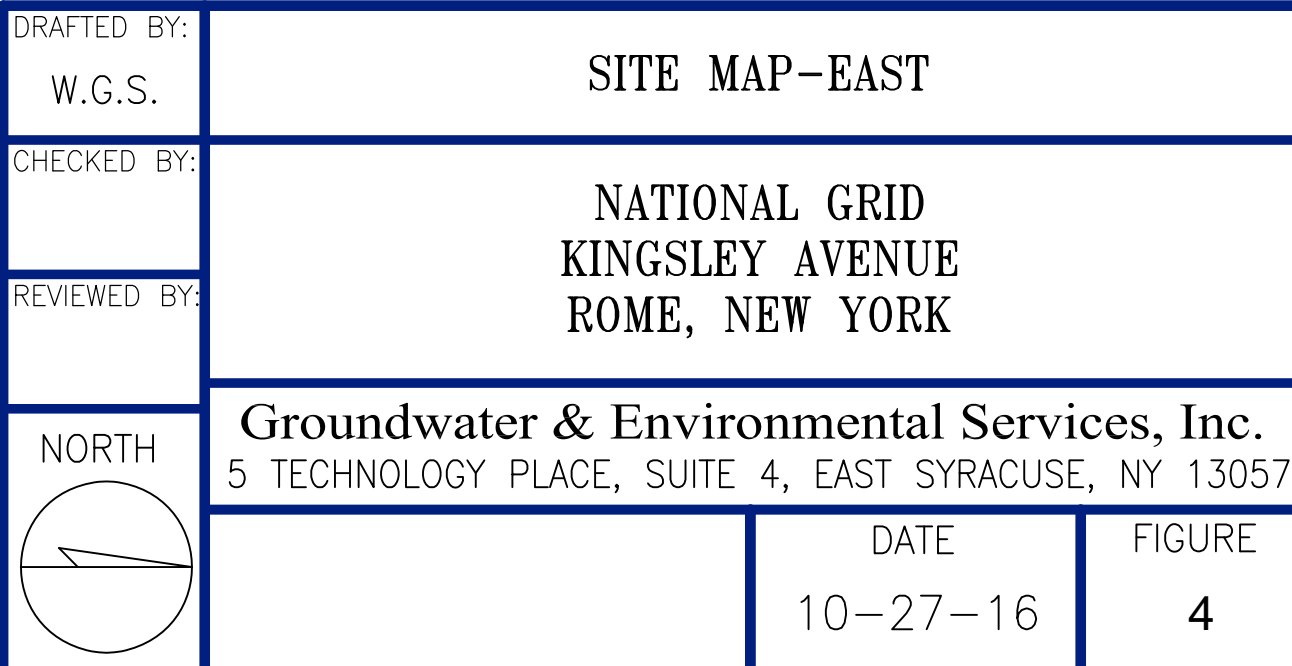


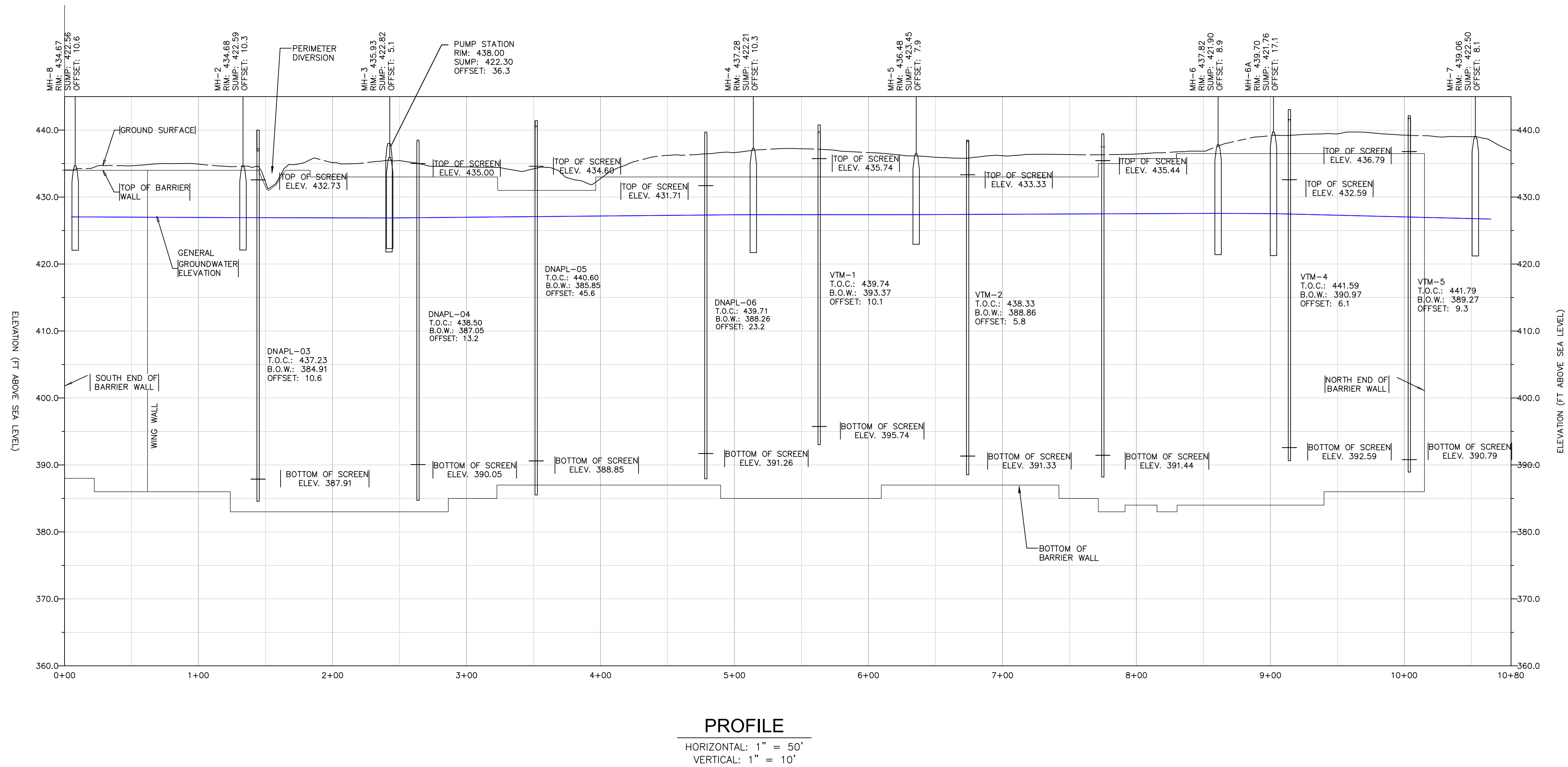
- LEGEND
- PROPERTY BOUNDARY
 - EAST WEST DIVIDE
 - FENCE
 - UTILITY POLE
 - UNDERGROUND ELECTRIC LINE
 - UNDERGROUND GAS LINE
 - OVERHEAD ELECTRIC
 - ELECTRICAL CONDUIT
 - UNDERGROUND TELEPHONE LINE
 - LTMW-D01
 - VTW-1
 - MW-OU2-1

WELL	NORTHING	EASTING	CASING	PVC	GROUND
LTMW-S01	1169936.2970	1121336.3233	435.52	435.10	433.2
LTMW-D01	1169920.9810	1121340.1793	434.90	434.80	432.7
LTMW-S02	1170087.0350	1121294.4073	436.79	436.59	434.3
LTMW-D02	1170077.3450	1121296.6553	436.74	436.60	434.2
LTMW-S03	1170200.4014	1121188.2719	431.43	431.29	429.3
LTMW-D03	1170208.0726	1121183.8138	431.27	431.13	429.2
LTMW-S04	1170434.1910	1121184.5883	437.24	437.09	435.6
LTMW-D04	1170444.1690	1121182.3583	437.18	436.88	434.9
LTMW-S05	1170567.9900	1121317.5703	437.92	437.77	435.9
LTMW-D05	1170572.7400	1121323.4973	437.78	437.58	435.7
LTMW-S06	1170637.4230	1121564.0283	441.64	441.52	439.7
LTMW-D06	1170625.7620	1121557.7643	441.70	441.55	440.2
LTMW-S07	1170113.1090	1121525.3273	439.94	439.70	438.0
LTMW-D08	1170434.0830	1121518.2593	443.81	443.63	442.4
LTMW-S09	1170469.4300	1121969.1733	439.78	439.54	437.6
LTMW-S10	1170123.6800	1121817.1213	439.67	439.42	437.4
DNAPL-2	1169976.8400	1121338.4483	436.81	no pipe	434.6
DNAPL-3	1170021.7760	1121329.2613	437.23	no pipe	434.6
DNAPL-4	1170138.5720	1121289.3033	438.50	no pipe	436.3
DNAPL-5	1170223.6230	1121251.9083	440.60	no pipe	438.4
DNAPL-6	1170309.3920	1121212.9643	439.71	no pipe	438.0
DNAPL-7	1170186.6060	1121522.7453	441.46	no pipe	439.4
DNAPL-8	1170230.3820	1121390.3173	441.80	no pipe	439.6
DNAPL-9	1170267.0450	1121351.1333	442.63	no pipe	440.1
MW-OU2-1	1169964.4870	1121322.8873	435.72	435.48	433.5
MW-OU2-2	1170149.8980	1121255.9363	436.40	436.06	433.9
MW-OU2-3					
MW-OU2-4	1170047.2131	1121230.1096			
MW-OU2-5	1170116.6727	1121193.2720			
VTW-1	1170393.9230	1121200.2643	439.74	no pipe	437.7
VTW-2	1170482.8870	1121229.5033	438.33	no pipe	436.1
VTW-3	1170541.8140	1121311.1743	439.44	no pipe	437.1
VTW-4	1170558.5060	1121416.3693	441.59	no pipe	439.3
VTW-5	1170616.4890	1121483.6873	441.79	no pipe	439.8



DRAFTED BY: W.G.S.	SITE MAP-WEST	
CHECKED BY:	NATIONAL GRID KINGSLEY AVENUE ROME, NEW YORK	
REVIEWED BY:		
NORTH	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057	
	DATE 10-27-16	FIGURE 3





- LEGEND
- T.O.C. TOP OF CASING
 - B.O.W. BOTTOM OF WELL
 - TOP OF WALL
 - GROUNDWATER ELEVATION (JUNE 2012)

- NOTES:
- THE DEPTH OF THE BARRIER WALL IS APPROXIMATELY 50 FEET.
 - GROUNDWATER ELEVATION MEASUREMENTS TAKEN JUNE 2012.

DRAFTED BY:	BARRIER WALL PROFILE		
W.G.S.			
CHECKED BY:	NATIONAL GRID		
	KINGSLEY AVENUE		
REVIEWED BY:	ROME, NEW YORK		
NORTH	Groundwater & Environmental Services, Inc.		
	300 GATEWAY PARK DRIVE, NORTH SYRACUSE, NY 13212		
	DATE	FIGURE	
	10-17-16	5	



Tables

Table 2
Site Monitoring Wells

Well ID	Northing	Easting	Elevation of Ground	Elevation Top of Outer Casing	Elevation Top of Inner Casing	Nominal Well Diameter (inches)	Well Material	Well Sump Depth (ft)	Depth to Bottom of Well (ft)	Elevation Bottom of Well	Depth to Top Screen (ft)	Elevation Top Screen	Depth to Bottom Screen (ft)	Elevation Bottom Screen	Action
MW-OU2-1	1169964.4870	1121322.8873	433.5	435.72	435.48	4	SS	3.0	46.12	389.36	33.0	402.48	43.0	392.48	Quarterly Inspection; Quarterly Static Water Level Measurement
MW-OU2-2	1170149.8980	1121255.9363	433.9	436.40	436.06	4	SS	3.0	49.60	386.46	39.0	397.06	49.0	387.06	Quarterly Inspection; Quarterly Static Water Level Measurement
MW-OU2-3	1170101.2208	1121177.4485	430.63	433.25	432.96	4	SS	3.0	35.15	397.81	31.0	401.96	41.0	391.96	Quarterly Inspection; Quarterly Static Water Level Measurement (Surveyed in January 2014)
MW-OU2-4	1170149.6326	1121136.1811	430.63	433.05	432.88	4	SS	3.0	38.85	394.03	31.0	401.88	41.0	391.88	Quarterly Inspection; Quarterly Static Water Level Measurement (Surveyed in January 2014)
MW-OU2-5	1170167.9650	1121091.2658	431.23	433.77	433.46	4	SS	3.0	36.34	397.12	31.0	402.46	41.0	392.46	Quarterly Inspection; Quarterly Static Water Level Measurement (Surveyed in January 2014)
DNAPL-02	1169976.8400	1121338.4483	434.6	436.81	NA	6	SS	3.0	50.40	386.41	4.0	432.81	46.0	389.41	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-03	1170021.7760	1121329.2613	434.6	437.23	NA	6	SS	3.0	52.32	384.91	4.5	432.73	46.5	387.91	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-04	1170138.5720	1121289.3033	436.3	438.50	NA	6	SS	3.0	51.45	387.05	3.5	435.00	47.5	390.05	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-05	1170223.6230	1121251.9083	438.4	440.60	NA	6	SS	3.0	54.75	385.85	6.0	434.60	50.0	388.85	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-06	1170309.3920	1121212.9643	438	439.71	NA	6	SS	3.0	51.45	388.26	8.0	431.71	48.0	391.26	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-07	1170186.6060	1121522.7453	439.4	441.46	NA	6	SS	3.0	53.60	387.86	5.0	436.46	55.5	390.86	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-08	1170230.3820	1121390.3173	439.6	441.80	NA	6	SS	3.0	58.01	383.79	7.0	434.80	53.0	386.79	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
DNAPL-09	1170267.0450	1121351.1333	440.1	442.63	NA	6	SS	3.0	57.58	385.05	5.0	437.63	53.2	388.05	Quarterly Inspection; Quarterly Static Water Level Measurement; DNAPL Monitoring/Collection
VTM-1	1170393.9230	1121200.2643	437.7	439.74	NA	6	SS	NA	46.37	393.37	4.0	435.74	44.0	395.74	Quarterly Inspection; Quarterly Static Water Level Measurement
VTM-2	1170482.8870	1121229.5033	436.1	438.33	NA	6	SS	NA	49.47	388.86	5.0	433.33	47.0	391.33	Quarterly Inspection; Quarterly Static Water Level Measurement
VTM-3	1170541.8140	1121311.1743	437.1	439.44	NA	6	SS	NA	50.91	388.53	4.0	435.44	48.0	391.44	Quarterly Inspection; Quarterly Static Water Level Measurement
VTM-4	1170558.5060	1121416.3693	439.3	441.59	NA	6	SS	NA	50.62	390.97	9.0	432.59	49.0	392.59	Quarterly Inspection; Quarterly Static Water Level Measurement
VTM-5	1170616.4890	1121483.6873	439.8	441.79	NA	6	SS	NA	52.52	389.27	5.0	436.79	51.0	390.79	Quarterly Inspection; Quarterly Static Water Level Measurement
LTMW-D01	1169920.9810	1121340.1793	432.7	434.90	434.80	2	PVC	NA	46.84	387.96	34.0	400.80	44.0	390.80	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S01	1169936.2970	1121336.3233	433.2	435.52	435.10	2	PVC	NA	16.92	418.18	5.0	430.10	15.0	420.10	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-D02	1170077.3450	1121296.6853	434.2	436.74	436.60	2	PVC	NA	40.29	396.31	30.0	406.60	40.0	396.60	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S02	1170087.0350	1121294.4073	434.3	436.79	436.59	2	PVC	NA	17.98	418.61	5.0	431.59	15.0	421.59	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-D03	1170208.0726	1121183.8138	429.2	431.27	431.13	2	PVC	NA	40.73	390.40	29.0	402.13	39.0	392.13	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S03	1170200.4014	1121188.2719	429.3	431.43	431.29	2	PVC	NA	13.70	417.59	2.0	429.29	12.0	419.29	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-D04	1170444.7690	1121162.3583	434.9	437.18	436.88	2	PVC	NA	46.36	390.52	34.0	402.88	44.0	392.88	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S04	1170434.1910	1121164.5883	435.6	437.24	437.09	2	PVC	NA	17.26	419.83	5.0	432.09	15.0	422.09	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-D05	1170572.7400	1121323.4973	435.7	437.78	437.58	2	PVC	NA	46.53	391.05	35.0	402.58	45.0	392.58	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S05	1170567.9900	1121317.5703	435.9	437.92	437.77	2	PVC	NA	16.83	420.94	5.0	432.77	15.0	422.77	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-D06	1170625.7620	1121557.7643	440.2	441.70	441.55	2	PVC	NA	52.22	389.33	40.0	401.55	50.0	391.55	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S06	1170637.4230	1121564.0263	439.7	441.64	441.52	2	PVC	NA	17.60	423.92	5.0	436.52	15.0	426.52	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S07	1170113.1090	1121525.3273	438	439.94	439.70	2	PVC	NA	17.82	421.88	5.0	434.70	15.0	424.70	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S08	1170434.0830	1121518.2593	442.4	443.81	443.63	2	PVC	NA	17.39	426.24	5.0	438.63	15.0	428.63	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S09	1170469.4300	1121969.1733	437.6	439.79	439.54	2	PVC	NA	16.92	422.62	5.0	434.54	15.0	424.54	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling
LTMW-S10	1170123.6800	1121817.1213	437.4	439.67	439.42	2	PVC	NA	17.18	422.24	5.0	434.42	15.0	424.42	Quarterly Inspection; Quarterly Static Water Level Measurement; Quarterly Sampling

Notes:

- 1) Shallow monitoring wells were sampled with a low flow peristaltic pump with battery pack
- 2) Deep monitoring wells were sampled with a low flow submersible pump with generator
- 3) Static water level measurements were taken from top of inner casing. If the well has no inner casing, the measurement will be taken from the top of outer casing

Table 3

Historical Groundwater Data
Operable Unit 2 Wells

Well			Well			Well			Well			Well		
MW-OU2-1			MW-OU2-2			MW-OU2-3			MW-OU2-4			MW-OU2-5		
TOC = 435.72			TOC = 436.40			TOC = 432.96			TOC = 432.88			TOC = 433.46		
Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.
12/03/20	9.40	435.72	12/03/20	10.29	426.11	12/03/20	6.91	426.05	12/03/20	6.88	426.00	12/03/20	7.59	425.87
09/11/20	9.66	426.06	09/11/20	10.62	425.78	09/11/20	7.25	425.71	09/11/20	7.20	425.68	09/11/20	7.91	425.55
06/11/20	10.06	425.66	06/11/20	10.82	425.58	06/11/20	7.10	425.86	06/11/20	7.10	425.78	06/11/20	7.75	425.71
03/20/20	8.10	427.62	03/20/20	9.25	427.15	03/20/20	6.40	426.56	03/20/20	5.40	427.48	03/20/20	6.05	427.41
12/05/19	9.20	426.52	12/05/19	10.10	426.30	12/05/19	6.70	426.26	12/05/19	6.68	426.20	12/05/19	7.37	426.09
09/19/19	9.54	426.18	09/19/19	10.90	425.50	09/19/19	6.95	426.01	09/19/19	6.90	425.98	09/19/19	7.60	425.86
06/06/19	8.90	426.82	06/06/19	9.60	426.80	06/06/19	6.18	426.78	06/06/19	6.05	426.83	06/06/19	6.23	427.23
03/21/19	8.65	427.07	03/21/19	9.80	426.60	03/21/19	6.00	426.96	03/21/19	5.90	426.98	03/21/19	6.50	426.96
12/05/18	8.90	426.82	12/05/18	9.05	427.35	12/05/18	5.69	427.27	12/05/18	5.60	427.28	12/05/18	6.25	427.21
09/13/18	9.58	426.14	09/13/18	10.40	426.00	09/13/18	7.02	425.94	09/13/18	7.06	425.82	09/13/18	7.72	425.74
06/07/18	9.53	426.19	06/07/18	10.25	426.15	06/07/18	7.90	425.06	06/07/18	6.90	425.98	06/07/18	7.56	425.90
03/22/18	9.15	426.57	03/22/18	9.85	426.55	03/22/18	6.60	426.36	03/22/18	6.55	426.33	03/22/18	7.20	426.26
12/06/17	9.37	426.35	12/06/17	9.96	426.44	12/06/17	6.60	426.36	12/06/17	6.50	426.38	12/06/17	7.20	426.26
09/01/17	9.53	426.19	09/01/17	10.35	426.05	09/01/17	NM	-	09/01/17	6.98	425.90	09/01/17	7.73	425.73
06/23/17	9.35	426.37	06/23/17	10.02	426.38	06/23/17	7.10	425.86	06/23/17	6.70	426.18	06/23/17	7.15	426.31
03/08/17	8.68	427.04	03/08/17	5.94	430.46	03/08/17	5.93	427.03	03/08/17	5.94	426.94	03/08/17	6.62	426.84
12/15/16	8.91	426.81	12/15/16	9.80	426.60	12/15/16	6.42	426.54	12/15/16	6.35	426.53	12/15/16	7.02	426.44
09/19/16	9.58	426.14	09/19/16	10.52	425.88	09/19/16	7.29	425.67	09/19/16	7.15	425.73	09/19/16	7.84	425.62
06/07/16	9.45	426.27	06/07/16	10.28	426.12	06/07/16	6.95	426.01	06/07/16	6.87	426.01	06/07/16	7.57	425.89
03/07/16	8.45	427.27	03/07/16	9.28	427.12	03/07/16	5.91	427.05	03/07/16	5.82	427.06	03/07/16	6.49	426.97
12/02/15	9.30	426.42	12/02/15	10.19	426.21	12/02/15	6.85	426.11	12/02/15	6.77	426.11	12/02/15	7.44	426.02
09/16/15	9.66	426.06	09/16/15	10.47	425.93	09/16/15	7.15	425.81	09/16/15	7.05	425.83	09/16/15	7.74	425.72
06/03/15	9.34	426.38	06/03/15	9.73	426.67	06/03/15	6.41	426.55	06/03/15	6.34	426.54	06/03/15	6.95	426.51
04/08/15	8.63	427.09	04/08/15	9.29	427.11	04/08/15	6.14	426.82	04/08/15	5.96	426.92	04/08/15	6.98	426.48
12/01/14	9.32	426.40	12/01/14	9.84	426.56	12/01/14	6.49	426.47	12/01/14	6.41	426.47	12/01/14	7.08	426.38
09/10/14	9.49	426.23	09/10/14	9.89	426.51	09/10/14	7.02	425.94	09/10/14	6.95	425.93	09/10/14	7.63	425.83
06/12/14	9.58	426.14	06/12/14	10.33	426.07	06/12/14	6.99	425.97	06/12/14	6.94	425.94	06/12/14	7.63	425.83
03/25/14	9.12	426.60	03/25/14	10.22	426.18	03/25/14	6.75	426.21	03/25/14	6.85	426.03	03/25/14	7.24	426.22
12/12/13	8.47	427.25	12/12/13	9.35	427.05	12/12/13	5.92	427.04	12/12/13	5.84	427.04	12/12/13	6.51	426.95
09/23/13	9.52	426.20	09/23/13	10.32	426.08	09/23/13	7.08	425.88	09/23/13	6.98	425.90	09/23/13	7.63	425.83
06/10/13	8.46	427.26	06/10/13	9.32	427.08	06/10/13	5.78	427.18	06/10/13	5.68	427.20	06/10/13	5.35	428.11
03/27/13	9.30	426.42	03/27/13	10.11	426.29	03/27/13	6.78	426.18	03/27/13	6.95	425.93	03/27/13	7.42	426.04
12/03/12	9.49	426.23	12/03/12	10.33	426.07	12/03/12	7.02	425.94	12/03/12	6.93	425.95	12/03/12	7.70	425.76
09/12/12	9.75	425.97	09/12/12	10.63	425.77	09/12/12	7.32	425.64	09/12/12	7.25	425.63	09/12/12	8.02	425.44
06/18/12	9.51	426.21	06/18/12	10.36	426.04	06/18/12	7.05	425.91	06/18/12	6.95	425.93	06/18/12	7.69	425.77
03/19/12	8.88	426.84	03/19/12	9.79	426.61	03/19/12	6.46	426.50	03/19/12	6.32	426.56	03/19/12	7.13	426.33
12/05/11	9.10	426.62	12/05/11	9.84	426.56	12/05/11	6.72	426.24	12/05/11	6.73	426.15	12/05/11	7.50	425.96
09/26/11	9.31	426.41	09/26/11	10.11	426.29	09/26/11	6.64	426.32	09/26/11	6.68	426.20	09/26/11	7.35	426.11
06/13/11	9.29	426.43	06/13/11	10.07	426.33	06/13/11	6.71	426.25	06/13/11	7.87	425.01	06/13/11	7.33	426.13
03/29/11	8.64	427.08	03/29/11	9.43	426.97	03/29/11	6.04	426.92	03/29/11	5.93	426.95	03/29/11	6.68	426.78

Notes:

TOC = Top of Inner Well Casing Elevation in Feet
DTW = Depth to Water from Top of Casing in Feet
El. = Elevation in Feet

Table 3

Historical Groundwater Data
DNAPL Wells

Well			Well			Well			Well		
DNAPL-02			DNAPL-03			DNAPL-04			DNAPL-05		
TOC = 436.81			TOC = 437.23			TOC = 438.50			TOC = 440.60		
Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.
12/03/20	9.40	427.41	12/03/20	9.76	427.47	12/03/20	10.90	427.60	12/03/20	13.05	427.55
09/11/20	7.95	428.86	09/11/20	9.35	427.88	09/11/20	11.65	426.85	09/11/20	13.13	427.47
06/11/20	10.06	426.75	06/11/20	10.29	426.94	06/11/20	11.67	426.83	06/11/20	13.76	426.84
03/20/20	8.10	428.71	03/20/20	8.55	428.68	03/20/20	9.70	428.80	03/20/20	11.32	429.28
12/05/19	9.20	427.61	12/05/19	9.60	427.63	12/05/19	10.85	427.65	12/05/19	12.92	427.68
09/19/19	9.54	427.27	09/19/19	8.85	428.38	09/19/19	11.14	427.36	09/19/19	13.20	427.40
06/06/19	9.10	427.71	06/06/19	9.25	427.98	06/06/19	10.60	427.90	06/06/19	12.70	427.90
03/21/19	8.20	428.61	03/21/19	8.45	428.78	03/21/19	9.70	428.80	03/21/19	11.80	428.80
12/05/18	8.10	428.71	12/05/18	8.70	428.53	12/05/18	9.65	428.85	12/05/18	11.75	428.85
09/13/18	9.60	427.21	09/13/18	9.70	427.53	09/13/18	11.00	427.50	09/13/18	13.08	427.52
06/07/18	9.70	427.11	06/07/18	10.00	427.23	06/07/18	11.26	427.24	06/07/18	13.34	427.26
03/22/18	9.35	427.46	03/22/18	9.60	427.63	03/22/18	10.90	427.60	03/22/18	12.99	427.61
12/06/17	9.00	427.81	12/06/17	9.31	427.92	12/06/17	10.59	427.91	12/06/17	12.65	427.95
09/01/17	9.75	427.06	09/01/17	10.00	427.23	09/01/17	11.36	427.14	09/01/17	13.44	427.16
06/23/17	9.30	427.51	06/23/17	9.56	427.67	06/23/17	10.90	427.60	06/23/17	13.00	427.60
03/08/17	8.92	427.89	03/08/17	9.19	428.04	03/08/17	10.51	427.99	03/08/17	12.57	428.03
12/15/16	8.33	428.48	12/15/16	8.60	428.63	12/15/16	9.89	428.61	12/15/16	11.98	428.62
09/19/16	9.56	427.25	09/19/16	9.88	427.35	09/19/16	11.20	427.30	09/19/16	13.27	427.33
06/07/16	9.41	427.40	06/07/16	9.73	427.50	06/07/16	11.05	427.45	06/07/16	13.12	427.48
03/07/16	8.45	428.36	03/07/16	8.73	428.50	03/07/16	10.05	428.45	03/07/16	12.10	428.50
12/02/15	9.41	427.40	12/02/15	9.71	427.52	12/02/15	11.01	427.49	12/02/15	13.09	427.51
09/16/15	9.91	426.90	09/16/15	10.21	427.02	09/16/15	11.51	426.99	09/16/15	13.58	427.02
06/03/15	8.33	428.48	06/03/15	8.84	428.39	06/03/15	10.15	428.35	06/03/15	12.24	428.36
04/08/15	8.39	428.42	04/08/15	8.68	428.55	04/08/15	9.96	428.54	04/08/15	12.07	428.53
12/01/14	9.16	427.65	12/01/14	9.45	427.78	12/01/14	10.75	427.75	12/01/14	12.81	427.79
09/10/14	9.25	427.56	09/10/14	9.55	427.68	09/10/14	10.62	427.88	09/10/14	12.70	427.90
06/12/14	9.90	426.91	06/12/14	10.20	427.03	06/12/14	11.41	427.09	06/12/14	13.56	427.04
03/25/14	9.52	427.29	03/25/14	9.81	427.42	03/25/14	11.15	427.35	03/25/14	13.21	427.39
12/12/13	8.71	428.10	12/12/13	9.03	428.20	12/12/13	10.35	428.15	12/12/13	12.41	428.19
09/23/13	9.92	426.89	09/23/13	10.25	426.98	09/23/13	11.56	426.94	09/23/13	13.61	426.99
06/10/13	8.27	428.54	06/10/13	8.62	428.61	06/10/13	9.91	428.59	06/10/13	11.98	428.62
03/27/13	9.51	427.30	03/27/13	9.81	427.42	03/27/13	11.15	427.35	03/27/13	13.21	427.39
12/03/12	9.19	427.62	12/03/12	10.10	427.13	12/03/12	11.45	427.05	12/03/12	13.48	427.12
09/12/12	10.14	426.67	09/12/12	10.48	426.75	09/12/12	11.81	426.69	09/12/12	13.84	426.76
06/18/12	9.46	427.35	06/18/12	9.80	427.43	06/18/12	11.15	427.35	06/18/12	13.24	427.36
03/19/12	9.02	427.79	03/19/12	9.35	427.88	03/19/12	10.69	427.81	03/19/12	12.74	427.86
12/05/11	9.46	427.35	12/05/11	9.79	427.44	12/05/11	11.13	427.37	12/05/11	13.30	427.30
09/26/11	9.36	427.45	09/26/11	9.70	427.53	09/26/11	11.09	427.41	09/26/11	13.08	427.52
06/13/11	9.18	427.63	06/13/11	9.54	427.69	06/13/11	10.84	427.66	06/13/11	12.89	427.71
03/29/11	8.41	428.40	03/29/11	8.72	428.51	03/29/11	10.05	428.45	03/29/11	12.11	428.49

Notes:

TOC = Top of Inner Well Casing Elevation in Feet
DTW = Depth to Water from Top of Casing in Feet
El. = Elevation in Feet

Table 3

Historical Groundwater Data
DNAPL Wells

Well			Well			Well			Well		
DNAPL-06			DNAPL-07			DNAPL-08			DNAPL-09		
TOC = 439.71			TOC = 441.46			TOC = 441.80			TOC = 442.63		
Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.
12/03/20	12.16	427.55	12/03/20	12.91	428.55	12/03/20	13.28	428.52	12/03/20	14.19	428.44
09/11/20	12.80	426.91	09/11/20	13.57	427.89	09/11/20	14.02	427.78	09/11/20	14.82	427.81
06/11/20	12.73	426.98	06/11/20	13.36	428.10	06/11/20	13.85	427.95	06/11/20	14.73	427.90
03/20/20	10.90	428.81	03/20/20	11.80	429.66	03/20/20	12.10	429.70	03/20/20	13.05	429.58
12/05/19	11.96	427.75	12/05/19	12.81	428.65	12/05/19	13.25	428.55	12/05/19	14.15	428.48
09/19/19	12.27	427.44	09/19/19	13.14	428.32	09/19/19	13.58	428.22	09/19/19	14.50	428.13
06/06/19	6.23	433.48	06/06/19	12.25	429.21	06/06/19	12.75	429.05	06/06/19	13.70	428.93
03/21/19	10.90	428.81	03/21/19	11.50	429.96	03/21/19	12.00	429.80	03/21/19	12.90	429.73
12/05/18	10.70	429.01	12/05/18	11.70	429.76	12/05/18	12.10	429.70	12/05/18	13.00	429.63
09/13/18	12.15	427.56	09/13/18	13.20	428.26	09/13/18	13.65	428.15	09/13/18	14.50	428.13
06/07/18	12.33	427.38	06/07/18	13.18	428.28	06/07/18	13.61	428.19	06/07/18	14.50	428.13
03/22/18	12.00	427.71	03/22/18	12.67	428.79	03/22/18	13.16	428.64	03/22/18	14.06	428.57
12/06/17	11.74	427.97	12/06/17	12.55	428.91	12/06/17	13.00	428.80	12/06/17	13.91	428.72
09/01/17	12.40	427.31	09/01/17	13.40	428.06	09/01/17	13.80	428.00	09/01/17	14.69	427.94
06/23/17	11.97	427.74	06/23/17	12.70	428.76	06/23/17	13.15	428.65	06/23/17	14.07	428.56
03/08/17	11.57	428.14	03/08/17	12.37	429.09	03/08/17	12.75	429.05	03/08/17	13.65	428.98
12/15/16	11.05	428.66	12/15/16	10.80	430.66	12/15/16	12.24	429.56	12/15/16	13.15	429.48
09/19/16	12.31	427.40	09/19/16	13.22	428.24	09/19/16	13.64	428.16	09/19/16	14.55	428.08
06/07/16	12.15	427.56	06/07/16	12.98	428.48	06/07/16	13.44	428.36	06/07/16	14.32	428.31
03/07/16	11.17	428.54	03/07/16	11.91	429.55	03/07/16	12.36	429.44	03/07/16	13.25	429.38
12/02/15	12.21	427.50	12/02/15	13.03	428.43	12/02/15	13.49	428.31	12/02/15	14.39	428.24
09/16/15	12.69	427.02	09/16/15	13.32	428.14	09/16/15	13.78	428.02	09/16/15	14.67	427.96
06/03/15	11.36	428.35	06/03/15	11.88	429.58	06/03/15	12.37	429.43	06/03/15	13.29	429.34
04/08/15	11.19	428.52	04/08/15	11.71	429.75	04/08/15	12.19	429.61	04/08/15	13.12	429.51
12/01/14	11.92	427.79	12/01/14	12.55	428.91	12/01/14	12.98	428.82	12/01/14	13.88	428.75
09/10/14	11.76	427.95	09/10/14	12.91	428.55	09/10/14	13.35	428.45	09/10/14	14.29	428.34
06/12/14	12.61	427.10	06/12/14	13.12	428.34	06/12/14	13.60	428.20	06/12/14	14.57	428.06
03/25/14	12.25	427.46	03/25/14	13.01	428.45	03/25/14	13.44	428.36	03/25/14	14.21	428.42
12/12/13	11.51	428.20	12/12/13	12.19	429.27	12/12/13	12.63	429.17	12/12/13	13.51	429.12
09/23/13	12.71	427.00	09/23/13	13.26	428.20	09/23/13	13.75	428.05	09/23/13	13.91	428.72
06/10/13	11.07	428.64	06/10/13	11.85	429.61	06/10/13	12.28	429.52	06/10/13	13.16	429.47
03/27/13	12.31	427.40	03/27/13	12.80	428.66	03/27/13	13.26	428.54	03/27/13	14.20	428.43
12/03/12	12.61	427.10	12/03/12	13.75	427.71	12/03/12	13.71	428.09	12/03/12	14.65	427.98
09/12/12	12.91	426.80	09/12/12	13.76	427.70	09/12/12	14.21	427.59	09/12/12	15.11	427.52
06/18/12	12.28	427.43	06/18/12	13.11	428.35	06/18/12	13.56	428.24	06/18/12	14.47	428.16
03/19/12	11.84	427.87	03/19/12	12.61	428.85	03/19/12	13.95	427.85	03/19/12	13.05	429.58
12/05/11	12.28	427.43	12/05/11	12.88	428.58	12/05/11	13.36	428.44	12/05/11	14.28	428.35
09/26/11	10.18	429.53	09/26/11	12.86	428.60	09/26/11	13.35	428.45	09/26/11	14.25	428.38
06/13/11	11.94	427.77	06/13/11	12.84	428.62	06/13/11	13.27	428.53	06/13/11	14.14	428.49
03/29/11	11.12	428.59	03/29/11	12.25	429.21	03/29/11	12.66	429.14	03/29/11	13.75	428.88

Notes:

TOC = Top of Inner Well Casing Elevation in Feet
DTW = Depth to Water from Top of Casing in Feet
El. = Elevation in Feet

Table 3

Historical Groundwater Data
Trench Wells

Well			Well			Well			Well			Well		
VTM-1			VTM-2			VTM-3			VTM-4			VTM-5		
TOC = 439.74			TOC = 438.33			TOC = 439.44			TOC = 441.59			TOC = 441.79		
Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.
12/03/20	12.02	427.72	12/03/20	10.54	427.79	12/03/20	11.70	427.74	12/03/20	13.54	428.05	12/03/20	13.62	428.17
09/11/20	12.73	427.01	09/11/20	11.18	427.15	09/11/20	12.22	427.22	09/11/20	14.07	427.52	09/11/20	14.26	427.53
06/11/20	10.06	429.68	06/11/20	10.85	427.48	06/11/20	11.97	427.47	06/11/20	13.85	427.74	06/11/20	14.00	427.79
03/20/20	8.10	431.64	03/20/20	9.10	429.23	03/20/20	10.20	429.24	03/20/20	12.05	429.54	03/20/20	12.15	429.64
12/05/19	9.20	430.54	12/05/19	10.22	428.11	12/05/19	11.39	428.05	12/05/19	13.44	428.15	12/05/19	13.61	428.18
09/19/19	9.54	430.20	09/19/19	10.69	427.64	09/19/19	11.86	427.58	09/19/19	13.68	427.91	09/19/19	13.88	427.91
06/06/19	11.60	428.14	06/06/19	10.00	428.33	06/06/19	11.20	428.24	06/06/19	13.00	428.59	06/06/19	6.23	435.56
03/21/19	10.60	429.14	03/21/19	9.00	429.33	03/21/19	10.20	429.24	03/21/19	12.50	429.09	03/21/19	12.25	429.54
12/05/18	10.55	429.19	12/05/18	8.95	429.38	12/05/18	10.05	429.39	12/05/18	12.00	429.59	12/05/18	12.15	429.64
09/13/18	12.20	427.54	09/13/18	10.65	427.68	09/13/18	11.80	427.64	09/13/18	13.70	427.89	09/13/18	13.85	427.94
06/07/18	12.14	427.60	03/22/18	10.46	427.87	03/22/18	11.62	427.82	06/07/18	13.61	427.98	03/22/18	13.75	428.04
03/22/18	11.86	427.88	03/22/18	10.41	427.92	03/22/18	11.36	428.08	03/22/18	13.31	428.28	03/22/18	13.45	428.34
12/06/17	11.65	428.09	12/06/17	10.07	428.26	12/06/17	11.22	428.22	12/06/17	13.17	428.42	12/06/17	13.32	428.47
09/01/17	12.10	427.64	09/01/17	10.40	427.93	09/01/17	10.55	428.89	09/01/17	13.60	427.99	09/01/17	13.77	428.02
06/23/17	11.80	427.94	06/23/17	10.10	428.23	06/23/17	11.21	428.23	06/23/17	13.15	428.44	06/23/17	13.29	428.50
03/08/17	11.24	428.50	03/08/17	9.52	428.81	03/08/17	10.65	428.79	03/08/17	12.58	429.01	03/08/17	12.76	429.03
12/15/16	10.99	428.75	12/15/16	9.33	429.00	12/15/16	10.49	428.95	12/15/16	12.49	429.10	12/15/16	12.54	429.25
09/19/16	12.23	427.51	09/19/16	10.56	427.77	09/19/16	11.71	427.73	09/19/16	13.65	427.94	09/19/16	13.82	427.97
06/07/16	11.98	427.76	06/07/16	10.29	428.04	06/07/16	11.43	428.01	06/07/16	13.44	428.15	06/07/16	13.61	428.18
03/07/16	10.98	428.76	03/07/16	9.25	429.08	03/07/16	10.36	429.08	03/07/16	12.32	429.27	03/07/16	12.49	429.30
12/02/15	12.12	427.62	12/02/15	10.53	427.80	12/02/15	11.68	427.76	12/02/15	13.58	428.01	12/02/15	13.74	428.05
09/16/15	12.55	427.19	09/16/15	10.75	427.58	09/16/15	11.85	427.59	09/16/15	13.73	427.86	09/16/15	14.67	427.12
06/03/15	11.21	428.53	06/03/15	9.55	428.78	06/03/15	10.72	428.72	06/03/15	12.68	428.91	06/03/15	12.86	428.93
04/08/15	11.06	428.68	04/08/15	9.49	428.84	04/08/15	11.65	427.79	04/08/15	12.65	428.94	04/08/15	12.81	428.98
12/01/14	11.55	428.19	12/01/14	9.79	428.54	12/01/14	10.92	428.52	12/01/14	12.91	428.68	12/01/14	13.09	428.70
09/10/14	11.62	428.12	09/10/14	9.91	428.42	09/10/14	11.10	428.34	09/10/14	13.14	428.45	09/10/14	13.31	428.48
06/12/14	11.94	427.80	06/12/14	10.28	428.05	06/12/14	11.45	427.99	06/12/14	13.48	428.11	06/12/14	13.63	428.16
03/25/14	11.69	428.05	03/25/14	10.01	428.32	03/25/14	11.17	428.27	03/25/14	13.32	428.27	03/25/14	13.35	428.44
12/12/13	10.91	428.83	12/12/13	9.31	429.02	12/12/13	10.46	428.98	12/12/13	12.51	429.08	12/12/13	12.56	429.23
09/23/13	12.19	427.55	09/23/13	10.63	427.70	09/23/13	11.79	427.65	09/23/13	15.75	425.84	09/23/13	13.91	427.88
06/10/13	10.45	429.29	06/10/13	8.75	429.58	06/10/13	9.98	429.46	06/10/13	12.08	429.51	06/10/13	13.16	428.63
03/27/13	11.83	427.91	03/27/13	10.82	427.51	03/27/13	11.48	427.96	03/27/13	13.51	428.08	03/27/13	13.69	428.10
12/03/12	12.31	427.43	12/03/12	10.82	427.51	12/03/12	11.98	427.46	12/03/12	13.84	427.75	12/03/12	14.06	427.73
06/18/12	12.01	427.73	06/18/12	10.46	427.87	06/18/12	11.66	427.78	06/18/12	13.70	427.89	06/18/12	13.89	427.90
03/19/12	11.49	428.25	03/19/12	9.91	428.42	03/19/12	11.11	428.33	03/19/12	13.16	428.43	03/19/12	13.33	428.46
12/05/11	12.01	427.73	12/05/11	10.48	427.85	12/05/11	11.62	427.82	12/05/11	13.61	427.98	12/05/11	13.81	427.98
09/26/11	11.95	427.79	09/26/11	10.41	427.92	09/26/11	11.61	427.83	09/26/11	13.66	427.93	09/26/11	13.82	427.97
06/13/11	11.74	428.00	06/13/11	10.15	428.18	06/13/11	11.32	428.12	06/13/11	13.39	428.20	06/13/11	13.59	428.20
03/29/11	11.02	428.72	03/29/11	9.48	428.85	03/29/11	10.65	428.79	03/29/11	12.81	428.78	03/29/11	12.97	428.82

Notes:

TOC = Top of Inner Well Casing Elevation in Feet
DTW = Depth to Water from Top of Casing in Feet
El. = Elevation in Feet

Table 3

Historical Groundwater Data
Operable Unit 1 Wells

Well	LTMW-D01		LTMW-S01		LTMW-D02		LTMW-S02		LTMW-D03		LTMW-S03		LTMW-D04		LTMW-S04	
	TOC =	434.90	TOC =	435.52	TOC =	436.74	TOC =	436.79	TOC =	431.27	TOC =	431.43	TOC =	437.18	TOC =	437.24
Date	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.
12/03/20	8.80	426.10	8.60	426.92	10.60	426.14	10.38	426.41	5.15	426.12	4.15	427.28	9.75	427.43	9.44	427.80
09/11/20	8.85	426.05	8.85	426.67	10.77	425.97	10.45	426.34	6.46	424.81	4.30	427.13	10.25	426.93	9.68	427.56
06/11/20	10.06	424.84	8.88	426.64	11.69	425.05	10.46	426.33	5.23	426.04	4.28	427.15	10.05	427.13	9.70	427.54
03/20/20	8.10	426.80	8.30	427.22	8.90	427.84	8.20	428.59	3.50	427.77	1.80	429.63	8.25	428.93	7.10	430.14
12/05/19	9.20	425.70	8.47	427.05	10.50	426.24	10.17	426.62	4.93	426.34	3.95	427.48	9.65	427.53	9.39	427.85
09/19/19	9.54	425.36	8.70	426.82	10.60	426.14	10.45	426.34	5.20	426.07	4.20	427.23	9.90	427.28	9.55	427.69
06/06/19	7.80	427.10	8.00	427.52	9.70	427.04	9.33	427.46	4.25	427.02	2.90	428.53	6.23	430.95	8.12	429.12
03/21/19	8.00	426.90	8.20	427.32	10.15	426.59	9.77	427.02	4.45	426.82	3.63	427.80	9.35	427.83	8.90	428.34
12/05/18	7.54	427.36	7.54	427.98	9.29	427.45	8.95	427.84	5.75	425.52	2.40	429.03	8.64	428.54	7.78	429.46
09/13/18	8.81	426.09	8.67	426.85	10.60	426.14	10.36	426.43	5.48	425.79	4.18	427.25	10.02	427.16	9.35	427.89
06/07/18	8.55	426.35	8.70	426.82	10.35	426.39	10.32	426.47	4.32	426.95	4.11	427.32	9.78	427.40	9.48	427.76
03/22/18	8.22	426.68	9.41	426.11	10.21	426.53	9.98	426.81	5.65	425.62	3.60	427.83	9.35	427.83	9.05	428.19
12/06/17	8.17	426.73	8.16	427.36	10.07	426.67	9.61	427.18	4.76	426.51	3.30	428.13	9.35	427.83	8.35	428.89
09/01/17	8.75	426.15	8.74	426.78	10.64	426.10	10.31	426.48	5.23	426.04	4.15	427.28	9.99	427.19	9.50	427.74
06/23/17	8.30	426.60	8.53	426.99	10.45	426.29	10.27	426.52	4.91	426.36	4.05	427.38	9.58	427.60	9.45	427.79
03/08/17	8.13	426.77	8.27	427.25	10.11	426.63	9.79	427.00	4.48	426.79	3.53	427.90	9.00	428.18	8.79	428.45
12/15/16	8.11	426.79	8.02	427.50	10.03	426.71	9.73	427.06	4.55	426.72	3.28	428.15	9.32	427.86	8.41	428.83
09/19/16	8.78	426.12	8.73	426.79	10.70	426.04	10.41	426.38	5.26	426.01	4.25	427.18	10.03	427.15	9.61	427.63
06/07/16	8.56	426.34	7.85	427.67	10.16	426.58	10.21	426.58	4.75	426.52	4.07	427.36	9.47	427.71	9.38	427.86
03/07/16	7.75	427.15	7.18	428.34	9.05	427.69	9.15	427.64	3.69	427.58	2.45	428.98	8.55	428.63	7.85	429.39
12/03/15	7.71	427.19	8.29	427.23	9.85	426.89	9.74	427.05	4.38	426.89	3.51	427.92	9.63	427.55	8.65	428.59
09/16/15	8.30	426.60	8.76	426.76	10.29	426.45	10.32	426.47	4.91	426.36	4.15	427.28	9.69	427.49	9.52	427.72
06/03/15	8.07	426.83	8.03	427.49	10.02	426.72	10.13	426.66	4.45	426.82	3.92	427.51	9.35	427.83	9.27	427.97
04/08/15	7.34	427.56	7.99	427.53	9.58	427.16	9.71	427.08	4.01	427.26	3.54	427.89	8.85	428.33	8.75	428.49
12/01/14	7.94	426.96	8.15	427.37	9.75	426.99	9.64	427.15	4.11	427.16	3.13	428.30	9.09	428.09	8.57	428.67
09/10/14	8.14	426.76	8.12	427.40	9.99	426.75	9.64	427.15	4.58	426.69	3.19	428.24	9.30	427.88	8.70	428.54
06/12/14	8.68	426.22	8.24	427.28	10.57	426.17	10.26	426.53	4.71	426.56	4.11	427.32	9.60	427.58	9.42	427.82
03/25/14	8.22	426.68	8.50	427.02	10.11	426.63	10.19	426.60	4.71	426.56	4.09	427.34	9.56	427.62	9.43	427.81
12/12/13	7.61	427.29	7.64	427.88	9.19	427.55	8.75	428.04	3.97	427.30	1.99	429.44	8.57	428.61	7.45	429.79
09/23/13	8.36	426.54	8.75	426.77	10.28	426.46	10.28	426.51	5.11	426.16	4.05	427.38	9.84	427.34	9.52	427.72
06/10/13	7.17	427.73	7.52	428.00	9.09	427.65	8.73	428.06	3.52	427.75	2.18	429.25	7.99	429.19	6.99	430.25
03/27/13	8.27	426.63	8.64	426.88	10.28	426.46	9.98	426.81	4.84	426.43	3.87	427.56	9.61	427.57	9.36	427.88
12/03/12	8.65	426.25	8.60	426.92	10.42	426.32	9.90	426.89	5.08	426.19	3.80	427.63	9.85	427.33	9.91	427.33
09/12/12	8.84	426.06	8.91	426.61	10.76	425.98	10.35	426.44	5.39	425.88	4.17	427.26	10.20	426.98	9.62	427.62
06/18/12	8.35	426.55	8.61	426.91	10.35	426.39	10.26	426.53	5.10	426.17	4.08	427.35	8.76	428.42	9.48	427.76
03/19/12	8.01	426.89	8.11	427.41	9.92	426.82	9.46	427.33	4.50	426.77	3.04	428.39	9.24	427.94	8.29	428.95
12/05/11	8.16	426.74	8.31	427.21	10.12	426.62	9.61	427.18	4.63	426.64	3.35	428.08	9.39	427.79	8.81	428.43
09/26/11	8.38	426.52	8.45	427.07	10.45	426.29	10.18	426.61	4.71	426.56	3.93	427.50	9.45	427.73	9.44	427.80
06/13/11	7.61	427.29	8.36	427.16	10.27	426.47	9.95	426.84	4.78	426.49	3.75	427.68	9.42	427.76	9.17	428.07
03/28/11	7.83	427.07	7.85	427.67	9.68	427.06	9.43	427.36	4.41	426.86	3.34	428.09	9.07	428.11	8.91	428.33

Notes:

TOC = Top of Inner Well Casing Elevation in Feet
DTW = Depth to Water from Top of Casing in Feet
El. = Elevation in Feet

Table 3

Historical Groundwater Data
Operable Unit 1 Wells

Well	LTMW-D05		LTMW-S05		LTMW-D06		LTMW-S06		LTMW-S07		LTMW-S08		LTMW-S09		LTMW-S10	
	TOC =	437.78	TOC =	437.92	TOC =	441.70	TOC =	441.64	TOC =	439.70	TOC =	443.81	TOC =	439.79	TOC =	439.67
Date	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.
12/03/20	9.60	428.18	10.79	427.13	12.45	429.25	13.20	428.44	10.97	428.73	15.58	428.23	9.82	429.97	10.30	429.37
09/11/20	10.82	426.96	9.95	427.97	12.90	428.80	13.65	427.99	11.70	428.00	16.60	427.21	10.55	429.24	11.07	428.60
06/11/20	9.67	428.11	9.93	427.99	12.61	429.09	13.51	428.13	11.43	428.27	15.95	427.86	10.12	429.67	10.86	428.81
03/20/20	7.50	430.28	7.80	430.12	11.00	430.70	11.70	429.94	9.75	429.95	14.15	429.66	9.00	430.79	9.60	430.07
12/05/19	9.30	428.48	9.73	428.19	12.29	429.41	13.12	428.52	10.80	428.90	15.45	428.36	9.73	430.06	10.29	429.38
09/19/19	9.44	428.34	9.86	428.06	11.45	430.25	13.40	428.24	11.20	428.50	15.80	428.01	10.03	429.76	10.70	428.97
06/06/19	8.35	429.43	8.65	429.27	11.60	430.10	12.55	429.09	10.15	429.55	14.94	428.87	9.26	430.53	9.74	429.93
03/21/19	8.92	428.86	9.38	428.54	11.80	429.90	12.50	429.14	10.08	429.62	14.08	429.73	9.15	430.64	9.52	430.15
12/05/18	8.18	429.60	7.30	430.62	11.10	430.60	11.55	430.09	8.55	431.15	13.90	429.91	8.70	431.09	9.20	430.47
09/13/18	9.67	428.11	9.68	428.24	12.70	429.00	13.35	428.29	11.55	428.15	15.80	428.01	10.23	429.56	10.75	428.92
06/07/18	9.47	428.31	9.64	428.28	12.42	429.28	13.26	428.38	11.06	428.64	15.70	428.11	10.10	429.69	10.64	429.03
03/22/18	8.95	428.83	8.80	429.12	12.10	429.60	12.92	428.72	10.40	429.30	15.30	428.51	9.50	430.29	10.15	429.52
12/06/17	9.02	428.76	9.16	428.76	12.00	429.70	12.25	429.39	10.67	429.03	15.10	428.71	9.58	430.21	10.10	429.57
09/01/17	9.51	428.27	9.60	428.32	12.62	429.08	13.50	428.14	12.60	427.10	15.78	428.03	10.38	429.41	10.96	428.71
06/23/17	9.14	428.64	9.60	428.32	12.07	429.63	12.88	428.76	10.73	428.97	15.22	428.59	12.88	426.91	10.18	429.49
03/08/17	8.26	429.52	7.54	430.38	11.52	430.18	11.78	429.86	10.39	429.31	14.69	429.12	9.21	430.58	9.98	429.69
12/15/16	8.80	428.98	9.00	428.92	12.28	429.42	11.70	429.94	9.89	429.81	14.50	429.31	8.60	431.19	9.30	430.37
09/19/16	9.63	428.15	9.65	428.27	12.61	429.09	13.24	428.40	11.44	428.26	15.59	428.22	9.82	429.97	10.68	428.99
06/07/16	8.82	428.96	9.53	428.39	11.98	429.72	13.03	428.61	11.01	428.69	15.36	428.45	9.81	429.98	10.41	429.26
03/07/16	7.85	429.93	8.27	429.65	11.16	430.54	12.13	429.51	9.94	429.76	14.48	429.33	9.05	430.74	9.65	430.02
12/02/15	8.77	429.01	9.21	428.71	12.31	429.39	13.20	428.44	11.55	428.15	15.67	428.14	10.40	429.39	10.95	428.72
09/16/15	8.97	428.81	9.51	428.41	12.58	429.12	13.25	428.39	11.54	428.16	15.65	428.16	9.89	429.90	10.65	429.02
06/03/15	9.25	428.53	9.41	428.51	12.15	429.55	12.93	428.71	10.81	428.89	15.21	428.60	9.15	430.64	9.93	429.74
04/08/15	8.74	429.04	9.36	428.56	11.67	430.03	12.55	429.09	10.06	429.64	14.85	428.96	8.89	430.90	9.54	430.13
12/01/14	8.28	429.50	8.91	429.01	11.77	429.93	12.49	429.15	10.97	428.73	14.78	429.03	9.31	430.48	9.93	429.74
09/10/14	8.85	428.93	8.97	428.95	11.91	429.79	12.68	428.96	10.96	428.74	15.34	428.47	9.35	430.44	10.29	429.38
06/12/14	9.02	428.76	9.52	428.40	12.28	429.42	13.08	428.56	11.14	428.56	15.34	428.47	9.63	430.16	10.46	429.21
03/25/14	9.03	428.75	8.50	429.42	11.95	429.75	12.81	428.83	10.85	428.85	15.03	428.78	9.11	430.68	9.93	429.74
12/12/13	7.96	429.82	7.85	430.07	11.20	430.50	11.87	429.77	10.16	429.54	14.11	429.70	8.95	430.84	9.63	430.04
09/23/13	8.94	428.84	9.52	428.40	12.36	429.34	13.21	428.43	11.39	428.31	15.46	428.35	9.86	429.93	10.64	429.03
06/10/13	7.55	430.23	7.48	430.44	11.15	430.55	11.78	429.86	10.27	429.43	14.12	429.69	9.43	430.36	10.17	429.50
03/27/13	9.13	428.65	9.45	428.47	12.16	429.54	13.10	428.54	10.92	428.78	15.27	428.54	9.55	430.24	10.31	429.36
12/03/12	9.51	428.27	9.48	428.44	13.43	428.27	12.78	428.86	11.59	428.11	15.72	428.09	10.25	429.54	10.91	428.76
09/12/12	9.76	428.02	9.64	428.28	12.81	428.89	13.69	427.95	11.97	427.73	15.95	427.86	10.58	429.21	11.27	428.40
06/18/12	9.26	428.52	9.51	428.41	12.41	429.29	13.23	428.41	11.31	428.39	15.40	428.41	9.81	429.98	10.56	429.11
03/19/12	8.79	428.99	9.04	428.88	12.12	429.58	12.99	428.65	11.05	428.65	15.19	428.62	9.73	430.06	10.43	429.24
12/05/11	9.02	428.76	9.08	428.84	12.22	429.48	13.04	428.60	10.97	428.73	15.19	428.62	9.58	430.21	10.34	429.33
09/26/11	9.32	428.46	9.53	428.39	12.40	429.30	13.20	428.44	11.01	428.69	15.21	428.60	9.55	430.24	10.31	429.36
06/13/11	8.91	428.87	9.34	428.58	11.99	429.71	12.88	428.76	10.79	428.91	15.03	428.78	9.49	430.30	10.29	429.38
03/28/11	8.08	429.70	9.12	428.80	11.62	430.08	12.41	429.23	10.08	429.62	14.46	429.35	10.14	429.65	9.75	429.92

Notes:

TOC = Top of Inner Well Casing Elevation in Feet
DTW = Depth to Water from Top of Casing in Feet
El. = Elevation in Feet

Table 4
Groundwater Analytical Data
LTMW-D01

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	4,800	1,700	5,310	8,990	5,800	5,290	2,470	4,250	5,460	3,440	3,900	1,410	7,360	6,290	2,370	3,400	4,310	2,060	1,600	3,400
Toluene	1,000	5	1	1,100	340	1,090	2,080	1,320	1,470	809	1,230	1,140	992	1,080	1,740	2,200	1,410	630	876	183	392	202	247
Ethylbenzene	700	5	1	82	ND	167	241	145	137	179	177	95.0	119	163	203	202	170	142	222	1,120	96.3	101	179
Xylene (total)	10,000	5	2	170	ND	176	254	206	201	157	187	135	155	164	214.5	339	229	134.8	180.8	277	134	109	152
Acenaphthene	N/A	20	4.9	ND	ND	0.59	0.43	0.19	0.10	0.19	0.35	0.18	0.19	0.14	0.40	0.48	0.23	0.21	0.33	0.47	0.16	0.22	0.36
Acenaphthylene	N/A	NA	4.9	ND	ND	5.0	6.2	0.31	0.11	0.36	7.1	3.1	1.1	1.9	7.1	8.6	2.3	0.51	2.8	5.9	0.17	1.5	4.4
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	13	ND	ND	14	11	ND	ND	ND	10	ND	ND	15	ND	ND	ND	ND	14	ND	ND	12
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	0.51	0.35	0.15	ND	ND	0.41	0.17	0.14	0.10	0.30	0.55	0.16	ND	0.20	0.47	0.11	0.12	0.24
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	97.1	229	ND	ND	ND	7.2	94.6	0.44	0.83	170	381	8.3	ND	4.3	121	ND	0.17	20.6
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	107	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	6.9	ND	6.8	9.1	ND	ND	ND	9.1	6.2	6.6	9.7	8.1	8.6
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standards
µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S01

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	1.9	ND	ND	1.2
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	76	120	125	91.2	69.4	56.4	105	75.1	56.5	68.1	101	64.4	53.1	70.6	69.0	74.5	63.7	46.9	88.3	108.0
Acenaphthylene	N/A	NA	4.9	ND	ND	4.1	3	3.2	2.5	3.6	2.7	2.2	3.3	4.4	2.6	2	2.7	3.2	3.3	2.3	1.7	3.3	4.3
Anthracene	N/A	NA	4.9	ND	ND	0.44	0.38	0.52	0.28	0.40	0.34	0.27	0.37	0.47	0.35	0.25	0.47	0.41	0.44	0.24	0.17	0.4	0.4
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	20	21	ND	13	55	18	12	15	11	17	19	14	14	16	18	18	25	25	26	19
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	4.9	4	3.6	2.8	4.8	3.5	2.4	3.7	6.1	3.6	2.6	3.8	5.4	5.0	2.8	2.7	5.4	5.7
Fluorene	N/A	0.002	4.9	21	28	34.1	27.6	19.9	12.6	28.5	19.2	15.4	18.1	28.3	15.6	13.6	18	22.9	19.6	14.3	12.7	26.1	29.7
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	0.2	0.38	0.4	0.15	0.24	0.31	ND	0.23	ND	0.31	0.15	0.26	0.23	0.27	0.25	ND	0.16	0.3
Phenanthrene	N/A	50	4.9	ND	ND	0.25	0.74	1.7	ND	0.14	0.20	0.26	0.13	0.20	0.16	0.11	0.41	0.13	0.17	0.13	ND	0.16	0.17
Pyrene	N/A	50	4.9	ND	ND	5.0	4.2	3.6	2.7	4.9	3.7	2.5	3.8	6.6	4.4	2.7	3.9	5.7	5.3	3.0	2.9	5.7	6.1
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.5	ND	ND

EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standards
µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-D02

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	3.3	2.2	1.6	ND	2.0	0.97	1.2	1.0	0.91	0.23	0.36	0.25	0.15	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	0.8	0.43	0.39	ND	0.48	0.22	0.29	0.31	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	93	85	ND	150	200	ND	160	160	160	150	140	10	140	140	110	ND	130	11	ND	140
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	13	61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standards
µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S02

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	130	150	ND	130	75	73	110	90	60	59	110	10	57	71	70	73	76	64	94	96
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	15	15	5.1	ND	7.7	ND	ND	7.6	ND	7.1	7.2	ND	ND	ND	5.1	6.3	ND	9.1	7.2	7.5
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standards
µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-D03

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	8.9	20	15.9	27.1	10.2	8.5	8.9	9.5	4.7	6.4	5.4	8.4	6.2	9.6	6.2	2.5	3.3	4.6	2.5	5.0
Toluene	1,000	5	1	ND	20	13.9	55	5.9	1.9	1.9	5.4	ND	1.2	2.0	3.9	18.2	5.6	2.0	ND	11.0	2.6	ND	ND
Ethylbenzene	700	5	1	86	58	69.6	23.9	63.7	44	49.0	40.2	26.0	34.1	23.6	22.2	3	20.7	16.5	11.3	ND	11.8	10.4	10.4
Xylene (total)	10,000	5	2	14	42	30.1	25.7	13.5	5.6	7.5	8.4	4.0	4.4	5.5	6.2	7.1	8.4	1.4	ND	ND	3.4	ND	ND
Acenaphthene	N/A	20	4.9	11	ND	411.9	ND	10.7	3.70	10.2	5.9	5.8	8.3	5.7	6.2	8.0	6.0	7.90	4.3	4.3	6.8	5.4	8.8
Acenaphthylene	N/A	NA	4.9	ND	ND	34.7	10.6	3.1	2.5	2.2	1.5	1.3	2.0	1.6	2.8	2.2	2.1	1.4	0.89	0.54	1.8	1.9	1.5
Anthracene	N/A	NA	4.9	ND	ND	5.2	ND	5.6	0.3	3.7	2.4	2.2	2.8	2.1	2	2.1	1.6	1.6	0.9	0.45	0.73	2.80	0.68
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	0.43	ND	0.42	ND	0.40	0.26	0.30	0.34	0.29	0.28	0.4	0.38	0.41	0.26	0.23	0.31	3.6	0.45
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68	ND
Chrysene	N/A	0.002	4.9	ND	ND	0.21	ND	0.25	ND	0.24	0.18	0.17	0.19	0.18	0.16	0.21	0.23	0.25	0.17	0.15	0.18	2.10	0.24
Cyanide	N/A	200	10	75	93	77	79	84	76	66	78	64	66	62	62	65	72	60	53	67	62	63	58
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	5.4
Fluoranthene	N/A	50	4.9	6.2	ND	6.2	ND	6.1	2.9	5.9	3.7	4.1	4.7	4.0	3.5	5.1	4.2	5.4	3.2	3.4	4.2	12.3	5.6
Fluorene	N/A	0.002	4.9	7.8	ND	11.5	ND	7.1	13.2	6.2	3.7	3.6	5.1	3.5	3.8	5.1	3.6	4.9	2.8	2.3	4.1	5.2	5.6
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	9.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68	ND
Naphthalene	N/A	10	4.9	13	81	556	284	32.2	0.15	10.0	16.5	3.9	3.7	6.9	12.7	9.8	10.6	3.5	0.5	0.3	13.2	2.5	8.1
Phenanthrene	N/A	50	4.9	27	25	29.5	1.5	30.3	0.11	24.1	15.2	16.3	18.1	18.1	17.9	19.9	15.2	19.6	8.5	2.9	15.9	22.2	20.1
Pyrene	N/A	50	4.9	8.3	8.3	8.3	1.2	7.6	2.8	7.6	4.8	5.5	6.0	5.3	5.1	6.6	5.3	6.9	4	4.6	5.5	17.4	7.0
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND

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µg/L = Micrograms per Liter
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J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S03

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	0.16	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	4,600	4,300	4,300	4,600	5,330	4,250	3,740	3,620	4,070	3,660	3,060	5,620	4,040	3,740	3,710	4,160	3,840	3,550	3,160	3,640

EPA = Environmental Protection Agency
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µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-D04

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	10	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	35.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.5	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32	ND	ND
Zinc	N/A	2,000	10	490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standards
µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S04

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	450	600	59	2,000	900	1,200	200	1,300	400	230	220	1,300	860	660	190	120	1,700	440	470	1,700
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	510	340	23	618	358	108	128	472	472	267	179	230	242	184	156	156	44.4	122	113	384

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µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
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J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-D05

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA = Environmental Protection Agency
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J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S05

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	5,800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	1,320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	145	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	206	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	450	250	16	830	510	570	270	380	430	120	89	260	120	230	65	170	150	110	110	76
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	19	23	ND	27.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-D06

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	ND	ND	ND	92	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	0.64	ND	ND	8.1	8.5	8.0	6.0	12.0	10.4	7.3	5.7	ND	9.2	8.8	9.6	7.1	7.5	8.8
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA = Environmental Protection Agency
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AWQS = Ambient Water Quality Standards
µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
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J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S06

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	32	66	31	ND	190	79	14	18	64	55	19	110	66	11	54	84	53	82	40	72
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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µg/L = Micrograms per Liter
ND = Not detected above laboratory reporting limits
H = Quantitated using peak height rather than peak area
J = Estimated Concentration Value
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Groundwater Analytical Data
LTMW-S07

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	96.8	ND	ND	ND	ND	ND	ND	ND

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Table 4
Groundwater Analytical Data
LTMW-S08

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	280	120	120	140	240	16	140	16	200	150	80	250	30	10	62	180	380	110	110	180
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51	ND	ND	ND	0.13	0.12
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	ND	ND	ND	ND	0.15
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.46	ND	ND	ND	0.11	0.14
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.5	ND	ND	ND	ND	ND

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Table 4
Groundwater Analytical Data
LTMW-S09

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	10	13	23.2	97.6	24.4	ND	15.3	ND	ND	10.7	27.6	ND	14.3	10.1	ND	12.7	ND	ND	10.3

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Table 4
Groundwater Analytical Data
LTMW-S10

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	03/04/16	06/09/16	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (total)	10,000	5	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	N/A	20	4.9	6.3	6.3	23	17.4	3.1	4.30	11.0	6.8	2.3	9.7	11.8	5.7	10.8	5.1	13.60	7.70	8.80	19.30	18.10	ND
Acenaphthylene	N/A	NA	4.9	ND	ND	0.9	0.96	0.2	0.23	0.73	0.54	0.20	0.51	0.61	0.39	0.74	0.42	0.67	0.63	0.38	0.63	0.64	ND
Anthracene	N/A	NA	4.9	ND	ND	0.17	0.12	0.12	ND	0.11	ND	ND	ND	0.14	ND	0.13	0.11	0.15	0.13	ND	0.11	0.16	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	N/A	ND	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	N/A	50	4.9	ND	ND	2.1	1.5	0.5	0.62	2.0	1.4	0.71	1.3	1.8	1.1	1.6	1.3	2.1	1.9	1.1	1.4	1.4	ND
Fluorene	N/A	0.002	4.9	ND	ND	1.5	1.1	0.17	0.35	1.1	0.73	0.25	0.71	1.0	0.7	1.2	0.6	1.3	1.0	0.8	1.6	1.5	ND
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	0.2	0.17	ND	ND	0.20	9.1	ND	ND	1.5	0.37	0.13	ND	ND	1.9	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	1.4	0.94	ND	0.22	0.73	0.43	0.12	0.32	0.76	0.32	0.62	0.26	0.86	0.53	0.39	0.76	0.58	ND
Pyrene	N/A	50	4.9	ND	ND	2.6	1.9	0.45	0.71	2.4	1.7	0.90	1.7	2.3	1.5	2	1.6	2.70	2.40	1.4	1.9	1.8	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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J = Estimated Concentration Value
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Table 5
Discharge Analytical Data
Groundwater Extraction System Effluent Concentrations

Parameter	City of Rome WPCF Permit Max Daily Limit (mg/L)	01/05/17	03/09/17	06/07/17	09/21/17	12/06/17	03/27/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/04/20
Benzene	0.13	0.0393	0.0536	0.0611	0.0360	0.0200	0.0274	0.0315	0.0239	0.0297	0.0618	0.0359	0.0423	0.0527	0.0315	0.034	0.0254	0.0499
Ethylbenzene	1.59	0.0025	0.0045	0.0050	0.0052	0.0019	0.0024	0.0040	0.0024	0.0024	0.0046	0.0047	0.0050	0.0065	0.0042	0.0052	0.0041	0.0056
Toluene	1.35	0.0019	0.0028	0.0095	ND (<0.001)	0.0017	0.0025	0.0025	0.0037	0.0026	0.0113	0.0058	0.0082	0.0079	0.0056	0.0036	0.002	0.0048
Xylene	1.35	ND (<0.001)	ND (<0.0030)	0.0034	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	0.0042	0.0011	0.0011	0.0039	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)
Total BTEX	2.87	0.0437	0.0609	0.0790	0.0412	0.0236	0.0323	0.0380	0.0300	0.0347	0.0777	0.0475	0.0566	0.0710	0.0412	0.0428	0.0315	0.0602
Arsenic	0.1	ND (<0.010)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.012	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
Cadmium	0.11	ND (<0.0025)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	0.0054	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)
Chromium	2.77	ND (<0.010)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
Copper	1.3	ND (<0.025)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.08	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.016	ND (<0.0050)	ND (<0.0050)
Cyanide	1.2	ND (<0.010)	0.090	0.084	0.056	0.074	0.069	0.070	0.059	0.086	0.067	0.097	0.083	0.098	0.11	0.079	0.076	0.078
Lead	1.1	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.0071	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)
Mercury	0.2	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)	ND (<0.00020)
Nickel	1.9	ND (<0.04)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.10)
Silver	0.43	ND (<0.010)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)	ND (<0.0060)
Zinc	2.6	0.0241	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	0.13	ND (<0.010)	ND (<0.010)	ND (<0.010)	0.015	ND (<0.010)	ND (<0.010)
pH	5.5 - 11.5 su	6.8	6.7	6.9	6.8	6.8	6.8	6.7	6.9	7.1	6.9	6.9	6.9	7	6.9	6.7	6.9	6.8

Results in mg/L.
mg/L = Milligrams per Liter
WPCF = Water Pollution Control Facility
NS = Not Sampled
NA = Not Analyzed



Appendix A – Field Inspection Report

Field Inspection Report**Former MGP Site****Kingsley Avenue****Rome, New York**Date: 12/4/2020Technician: KLTime: 8:00Weather: Cloudy 38**Site Controls**

Fence Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Kingsley Ave Gate	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG/GES	OPERATIONAL	NON-OPERATIONAL		COMMENTS:
Railroad Ave Gate	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG/GES	OPERATIONAL	NON-OPERATIONAL		COMMENTS:

Vegetation (Surface Cover System)

Condition of Grass	GOOD	FAIR	POOR	COMMENTS:
Site Trees	NONE	MINOR	SIGNIFICANT	COMMENTS:
Surface Erosion	NONE	MINOR	SIGNIFICANT	COMMENTS:

Stoned Areas

Condition of Main Access Road	GOOD	FAIR	POOR	COMMENTS:
Condition of Main Staging Area	GOOD	FAIR	POOR	COMMENTS:
Condition of Rear Turn Around Area	GOOD	FAIR	POOR	COMMENTS:

Drainage Systems

Rip Rap Area	Culvert	UNOBSTRUCTED	OBSTRUCTED	
	Flow	NONE	LITTLE	SIGNIFICANT
	Outlet Channel	OPERATIONAL	NON-OPERATIONAL	COMMENTS:

Miscellaneous

Evidence of Trespassing	NO	YES	COMMENTS:
Litter	NONE	MINOR	SIGNIFICANT

General Comments:



Appendix B – Quarterly Gauging and Containment Data

Quarterly Well Data
Kingsley Avenue, Former MGP Site
Utica, New York

WELL ID.	DTW	DTP	DTB	Comments
MW-OU2-1	9.40	42.40	45.81	Removed 3.0 gallons of DNAPL
MW-OU2-2	10.29	47.35	47.53	
MW-OU2-3	6.91	NP	34.18	
MW-OU2-4	6.88	35.10	39.55	Removed 2.5 gallons of DNAPL
MW-OU2-5	7.59	NP	36.01	
DNAPL-02	9.40	NP	50.40	
DNAPL-03	9.76	NP	52.32	trace on probe
DNAPL-04	10.90	NP	51.45	
DNAPL-05	13.05	NP	54.75	
DNAPL-06	12.16	NP	51.45	
DNAPL-07	12.81	NP	53.60	
DNAPL-08	13.28	NP	58.01	
DNAPL-09	14.19	NP	57.58	
VTM-1	12.02	NP	46.37	
VTM-2	10.54	NP	49.47	
VTM-3	11.70	NP	50.91	
VTM-4	13.54	NP	50.62	
VTM-5	13.62	NP	52.52	
LTMW-D01	8.80	NP	46.84	
LTMW-S01	8.60	NP	16.92	
LTMW-D02	10.60	NP	40.29	
LTMW-S02	10.38	NP	17.98	
LTMW-D03	5.15	NP	40.73	
LTMW-S03	4.15	NP	13.70	
LTMW-D04	9.75	NP	46.36	
LTMW-S04	9.44	NP	17.26	
LTMW-D05	9.60	NP	46.53	
LTMW-S05	10.79	NP	16.83	
LTMW-D06	12.45	NP	52.22	
LTMW-S06	13.20	NP	17.60	
LTMW-S07	10.97	NP	17.82	
LTMW-S08	15.58	NP	17.39	
LTMW-S09	9.82	NP	16.92	
LTMW-S10	10.30	NP	17.18	

Containment

Well Id.	Elevation	DTW	Water Elevation	Positive Delta
DNAPL-02	436.81	9.40	427.41	6.43
Top Steel Sheet Wall	433.84			
DNAPL-03	437.23	9.76	427.47	3.74
Top Steel Sheet Wall	431.21			
DNAPL-04	438.50	10.90	427.60	5.22
Top Steel Sheet Wall	432.82			
DNAPL-05	440.60	13.05	427.55	2.65
Top Steel Sheet Wall	430.20			
DNAPL-06	439.71	12.16	427.55	6.00
Top Steel Sheet Wall	433.55			
VTM-1	439.74	12.02	427.72	4.10
Top Steel Sheet Wall	431.82			
VTM-2	438.33	10.54	427.79	4.91
Top Steel Sheet Wall	432.70			
VTM-3	439.44	11.70	427.74	9.18
Top Steel Sheet Wall	436.92			
VTM-4	441.59	13.54	428.05	5.49
Top Steel Sheet Wall	433.54			
VTM-5	441.79	13.62	428.17	7.83
Top Steel Sheet Wall	436.00			



Appendix C – Well Sampling Field Data

Well ID	Sample ?	Well Size	DTW	DTP	DTB	Comments
MW-OU2-1	No	4"	9.40	42.40	45.81	Removed 3.0 gallons of DNAPL
MW-OU2-2	No	4"	10.29	47.35	47.53	
MW-OU2-3	No	4"	6.91	NP	34.18	
MW-OU2-4	No	4"	6.88	35.10	39.55	Removed 2.5 gallons of DNAPL
MW-OU2-5	No	4"	7.59	NP	36.01	
DNAPL-02	No	6"	9.40	NP	50.40	
DNAPL-03	No	6"	9.76	NP	52.32	trace on probe
DNAPL-04	No	6"	10.90	NP	51.45	
DNAPL-05	No	6"	13.05	NP	54.75	
DNAPL-06	No	6"	12.16	NP	54.45	
DNAPL-07	No	6"	12.81	NP	53.60	
DNAPL-08	No	6"	13.28	NP	58.01	
DNAPL-09	No	6"	14.19	NP	57.58	
VTM-1	No	6"	12.02	NP	46.37	
VTM-2	No	6"	10.54	NP	49.47	
VTM-3	No	6"	11.70	NP	50.91	
VTM-4	No	6"	13.54	NP	50.62	
VTM-5	No	6"	13.62	NP	52.52	
LTMW-D01	Yes	2"	8.80	NP	46.84	
LTMW-S01	Yes	2"	8.60	NP	16.96	
LTMW-D02	Yes	2"	10.60	NP	40.29	
LTMW-S02	Yes	2"	10.38	NP	17.98	
LTMW-D03	Yes	2"	5.15	NP	40.73	
LTMW-S03	Yes	2"	4.15	NP	13.70	
LTMW-D04	Yes	2"	9.75	NP	46.36	
LTMW-S04	Yes	2"	9.44	NP	17.26	
LTMW-D05	Yes	2"	9.60	NP	46.53	
LTMW-S05	Yes	2"	10.79	NP	16.83	
LTMW-D06	Yes	2"	12.45	NP	52.22	
LTMW-S06	Yes	2"	13.20	NP	17.60	
LTMW-S07	Yes	2"	10.97	NP	17.82	
LTMW-S08	Yes	2"	15.58	NP	17.39	
LTMW-S09	Yes	2"	9.82	NP	16.92	DUP
LTMW-S10	Yes	2"	10.30	NP	17.18	MS/MSD

DTW -depth to water
DTP -depth to product
DTB -depth to bottom
All from top of casing

Sampling Personnel:
Job Number: 0603200-134400-221
Well Id. LTMW-D01

Date: 12/3/20
Weather: Cloudy
Time In: 13:30 Time Out: 14:10

Well Information		TOC	Other
Depth to Water:	(feet)	8.80	
Depth to Bottom:	(feet)	46.84	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	38.04	
Volume of Water in Well:	(gal)	16.08	
Three Well Volumes:	(gal)	48.25	

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

Purging Information		Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump <input type="checkbox"/>	gal/ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/> Stainless St. <input type="checkbox"/> Polyethylene <input checked="" type="checkbox"/>	of				
Sampling Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump <input type="checkbox"/>	water	0.04	0.16	0.66	1.47
Average Pumping Rate:	(ml/min) 2.00	1 gallon=3.785L=3785mL=133.7cu. feet				
Duration of Pumping:	(min) 30					
Total Volume Removed:	(gal) 2					
Horiba U-32 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
13:35	9.14	14.63	6.68	-79	0.535	25.6	1.72	0.323
13:40	11.48	14.31	7.43	-152	0.352	5.1	3.77	0.229
13:45	13.88	14.16	7.83	-178	0.345	4.4	5.30	0.204
13:50	15.02	14.14	7.87	-179	0.343	4.0	5.13	0.223
13:55	16.48	14.07	7.91	-181	0.341	3.9	4.96	0.222
14:00	17.59	13.97	7.94	-184	0.345	3.8	4.91	0.224
14:05	18.60	13.91	7.96	-188	0.348	3.8	4.76	0.226

Sampling Information:		SVOC PAH's		2 - 100ml ambers	
EPA SW-846 Method 8270		VOC's BTEX		3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260		Cyanide		1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA Method 335.4		Metals		1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA Method 200.7					
Sample ID: LTMW-D01-1220	Duplicate?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup <input checked="" type="checkbox"/>		
Sample Time: 14:05	MS/MSD?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Drop-off Albany Service Center <input type="checkbox"/>		
Comments/Notes:		Laboratory: Pace Analytical Greensburg, PA			

Sampling Personnel: KA
Job Number: 0603200-13400-221
Well Id.: LTMW-S01

Date: 12/3/20
Weather: Sunny 45
Time In: 14:00 Time Out:

Well Information		TOC	Other
Depth to Water:	(feet)	<u>8.60</u>	
Depth to Bottom:	(feet)	16.92	
Depth to Product:	(feet)	<u>-</u>	
Length of Water Column:	(feet)	<u>8.32</u>	
Volume of Water in Well:	(gal)	<u>1.33</u>	
Three Well Volumes:	(gal)	<u>3.99</u>	

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input checked="" type="checkbox"/>
Well Locked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:				

Purging Information	
Purging Method:	<input type="checkbox"/> Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump
Tubing/Bailer Material:	<input type="checkbox"/> Teflon <input type="checkbox"/> Stainless St. <input checked="" type="checkbox"/> Polyethylene
Sampling Method:	<input type="checkbox"/> Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump
Average Pumping Rate:	(ml/min) <u>200</u>
Duration of Pumping:	(min) <u>30</u>
Total Volume Removed:	(gal) <u>2</u>
Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Horiba U-52 Water Quality Meter Used? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

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)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
14:15	8.71	13.35	7.21	-100	0.852	6.3	7.15	0.481
14:20	8.68	13.55	6.84	-98	0.838	5.6	6.32	0.536
14:25	8.68	13.56	6.79	-97	0.853	6.4	6.58	0.546
14:30	8.68	13.56	6.77	-98	0.854	5.4	5.29	0.546
14:35	8.68	13.54	6.76	-98	0.955	5.2	5.04	0.547
14:40	8.68	13.46	6.75	-98	0.855	4.9	5.05	0.547
14:45	8.68	13.40	6.75	-98	0.854	5.0	5.03	0.549

Sampling Information:	
EPA SW-846 Method 8270	SVOC PAH's
EPA SW-846 Method 8260	VOC's BTEX
EPA Method 335.4	Cyanide
EPA Method 200.7	Metals
Sample ID: LTMW-S01-220	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample Time: <u>14:45</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2 - 100ml ambers Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 3 - 40 ml vials Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 1 - 250 ml plastic Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 1 - 250 ml plastic Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Shipped: Pace Courier Pickup <input checked="" type="checkbox"/> Drop-off Albany Service Center <input type="checkbox"/>	
Laboratory: Pace Analytical Greensburg, PA	

Comments/Notes:

Sampling Personnel:
Job Number: 0603200-134400-221
Well Id: LTMW-D02

Date: 12/3/20
Weather: Sunny 48
Time In: 14:50 Time Out:

Well Information		TOC	Other
Depth to Water:	(feet)	10.60	
Depth to Bottom:	(feet)	40.29	
Depth to Product:	(feet)	✓	
Length of Water Column:	(feet)	29.69	
Volume of Water in Well:	(gal)	4.75	
Three Well Volumes:	(gal)	14.25	

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

Purging Information

Purging Method: Bailer ☐ Peristaltic ☒ Grundfos Pump ☐
Tubing/Bailer Material: Teflon ☐ Stainless St. ☐ Polyethylene ☒
Sampling Method: Bailer ☐ Peristaltic ☒ Grundfos Pump ☐
Average Pumping Rate: (ml/min) 200
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2 Did well go dry? Yes ☐ No ☒
Horiba U-50 Water Quality Meter Used? Yes ☒ 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)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
14:55	11.20	13.14	7.18	-100	0.406	12.7	1.53	0.253
15:00	12.21	12.90	7.31	-98	0.207	9.3	1.24	0.134
15:05	13.25	12.66	7.36	-79	0.207	9.7	0.84	0.134
15:10	13.70	12.47	7.16	-93	0.479	9.9	7.26	0.322
15:15	13.98	12.29	7.17	-100	0.67	9.1	7.10	0.294
15:20	14.06	12.06	7.19	-102	0.687	6.9	6.99	0.441
15:25	14.21	11.88	7.19	-103	0.715	5.9	6.88	0.468
16:00								

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA Method 335.4 Cyanide
EPA Method 200.7 Metals

Sample ID: LTMW-D02-1220 Duplicate? Yes ☐ No ☒
Sample Time: 15:25 MS/MSD? Yes ☐ No ☒

Comments/Notes:

2 - 100ml ambers Yes ☒ No ☐
3 - 40 ml vials Yes ☒ No ☐
1 - 250 ml plastic Yes ☒ No ☐
1 - 250 ml plastic Yes ☒ No ☐

Shipped: Pace Courier Pickup ☒
Drop-off Albany Service Center ☐

Laboratory: Pace Analytical
Greensburg, PA

Sampling Personnel: Peter Lyon

Job Number 0603200-134400-221

Well Id. **TMW-S02**

Date: 12/03/20

Weather: Sunny 40°

Time In: 1450 Time Out: 1530

Well Information		TOC	Other
Depth to Water:	(feet)	10.38	
Depth to Bottom:	(feet)	17.98	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	7.6	
Volume of Water in Well:	(gal)	1.21	
Three Well Volumes:	(gal)	3.6	

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input checked="" type="checkbox"/>
Well Locked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:				

Purging Information	
Purging Method:	<div> <div>Bailer <input type="checkbox"/></div> <div>Peristaltic <input checked="" type="checkbox"/></div> <div>Grundfos Pump <input type="checkbox"/></div> </div>
Tubing/Bailer Material:	<div> <div>Teflon <input type="checkbox"/></div> <div>Stainless St. <input type="checkbox"/></div> <div>Polyethylene <input checked="" type="checkbox"/></div> </div>
Sampling Method:	<div> <div>Bailer <input type="checkbox"/></div> <div>Peristaltic <input checked="" type="checkbox"/></div> <div>Grundfos Pump <input type="checkbox"/></div> </div>
Average Pumping Rate:	(ml/min) _____
Duration of Pumping:	(min) _____
Total Volume Removed:	(gal) _____
Horiba U-52 Water Quality Meter Used?	<div> <div>Yes <input checked="" type="checkbox"/></div> <div>No <input type="checkbox"/></div> </div>

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

Did well go dry?

Yes ☐

No ☒

[illegible]

Sampling Information: EPA SW-846 Method 8270 SVOC PAH's EPA SW-846 Method 8260 VOC's BTEX EPA Method 335.4 Cyanide EPA Method 200.7 Metals		2 - 100ml ambers Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 3 - 40 ml vials Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 1 - 250 ml plastic Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 1 - 250 ml plastic Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: <u>LTMW-S02-1220</u> Sample Time: <u>1525</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup <input checked="" type="checkbox"/> Drop-off Albany Service Center <input type="checkbox"/>
Comments/Notes:		Laboratory: Pace Analytical Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: Pete Lyon

Job Number: 0603200-134400-221

Well Id.: LTMW-D03

Date: 12/03/20

Weather: 34°

Time In: 0950

Time Out: 1050

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>5.15</u>	
Depth to Bottom:	(feet)	<u>40.73</u>	
Depth to Product:	(feet)	<u>—</u>	
Length of Water Column:	(feet)	<u>35.58</u>	
Volume of Water in Well:	(gal)	<u>39.90 5.69</u>	
Three Well Volumes:	(gal)	<u>119.81 1202</u>	

Well Type:

Flushmount

Stick-Up

Well Locked:

Yes

No

Measuring Point Marked:

Yes

No

Well Material:

PVC

SS

Other:

Well Diameter:

1"

2"

Other:

Comments:

Purging Information

Purging Method:

Bailer

Peristaltic

Grundfos Pump

Tubing/Bailer Material:

Teflon

Stainless St.

Polyethylene

Sampling Method:

Bailer

Peristaltic

Grundfos Pump

Average Pumping Rate:

(ml/min)

Duration of Pumping:

(min)

Total Volume Removed:

(gal)

Did well go dry?

Yes

No

Horiba U-50 Water Quality Meter Used?

Yes

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)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1010	6.31	11.05	6.67	-66	1.13	0	.90	.728
1015	7.38	10.85	6.98	-118	1.17	0	.21	.746
1020	8.11	10.80	7.02	-132	1.15	0	0.00	.736
1025	8.46	10.80	7.10	-135	1.05	0	0.00	.667
1030	8.62	10.79	7.16	-140	.934	0	0	.698
1035	8.77	10.79	7.17	-142	.968	0	0	.620
1040	8.85	10.79	7.16	-143	1.00	0	0	.645

Sampling Information:

EPA SW-846 Method 8270

EPA SW-846 Method 8260

EPA Method 335.4

EPA Method 200.7

SVOC PAH's

VOC's BTEX

Cyanide

Metals

Sample ID: LTMW-D03-1220

Duplicate?

Yes

No

Sample Time: 1040

MS/MSD?

Yes

No

Comments/Notes:

2 - 100ml ambers

Yes

No

3 - 40 ml vials

Yes

No

1 - 250 ml plastic

Yes

No

1 - 250 ml plastic

Yes

No

Shipped:

Pace Courier Pickup

Drop-off Albany Service Center

Laboratory:

Pace Analytical
Greensburg, PA

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Sampling Personnel: K
Job Number: 0603200-134400-221
Well Id: LTMW-D04

Date: 12/3/20
Weather: Curry 380
Time In: 10:50 Time Out: _____

Well Information		TOC	Other
Depth to Water:	(feet)	<u>9.75</u>	
Depth to Bottom:	(feet)	<u>46.36</u>	
Depth to Product:	(feet)	<u>✓</u>	
Length of Water Column:	(feet)	<u>36.61</u>	
Volume of Water in Well:	(gal)	<u>5.85</u>	
Three Well Volumes:	(gal)	<u>17.57</u>	

Well Type:	Flushmount	Stick-Up
Well Locked:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Measuring Point Marked:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Well Material:	PVC <input checked="" type="checkbox"/> SS <input checked="" type="checkbox"/> Other: _____	PVC <input checked="" type="checkbox"/> SS <input checked="" type="checkbox"/> Other: _____
Well Diameter:	1" <input checked="" type="checkbox"/> 2" <input checked="" type="checkbox"/> Other: _____	1" <input checked="" type="checkbox"/> 2" <input checked="" type="checkbox"/> Other: _____
Comments: _____		

Purging Information		Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump <input type="checkbox"/>	gal/ft. of water	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/> Stainless St. <input type="checkbox"/> Polyethylene <input checked="" type="checkbox"/>		0.04	0.16	0.66	1.47
Sampling Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump <input type="checkbox"/>	1 gallon=3.785L=3785mL=133.7cu. feet				
Average Pumping Rate:	(ml/min) <u>200</u>					
Duration of Pumping:	(min) <u>30</u>					
Total Volume Removed:	(gal) <u>2</u>	Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Horiba U-52 Water Quality Meter Used? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
11:00	10.52	9.30	6.68	-48	0.532	76.0	10.23	0.342
11:03	10.78	9.85	6.92	-78	0.546	34.4	9.91	0.349
11:10	10.97	10.02	7.22	-66	0.584	14.3	9.50	0.351
11:15	11.04	9.99	7.42	-77	0.556	12.2	8.94	0.357
11:20	11.08	9.98	7.46	-87	0.635	13.7	8.32	0.407
11:25	11.10	10.08	7.49	-90	0.644	13.4	7.79	0.412
11:30	11.10	10.20	7.53	-93	0.644	10.6	6.34	0.412

Sampling Information:		SVOC PAH's		VOC's BTEX		Cyanide		Metals	
EPA SW-846 Method 8270		2 - 100ml ambers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260		Shipped: Pace Courier Pickup <input checked="" type="checkbox"/> Drop-off Albany Service Center <input type="checkbox"/>							
EPA Method 335.4		Laboratory: Pace Analytical Greensburg, PA							
EPA Method 200.7									
Sample ID: LTMW-D04-1220	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>								
Sample Time: 11:30	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>								
Comments/Notes: _____									

Sampling Personnel:

Job Number: 0603200-134400-221

Well Id: LTMW-S04

Date: 12/3/20

Weather: Cloudy 38°

Time In: 1050

Time Out: 1135

Well Information

		TOC	Other
Depth to Water:	(feet)	9.44	
Depth to Bottom:	(feet)	17.26	
Depth to Product:	(feet)	7.82	
Length of Water Column:	(feet)	7.82	
Volume of Water in Well:	(gal)	1.25	
Three Well Volumes:	(gal)	3.75	

Well Type:

Flushmount

Stick-Up

Well Locked:

Yes

No

Measuring Point Marked:

Yes

No

Well Material:

PVC

SS

Other:

Well Diameter:

1"

2"

Other:

Comments:

Purging Information

Purging Method:

Bailer

Peristaltic

Grundfos Pump

Tubing/Bailer Material:

Teflon

Stainless St.

Polyethylene

Sampling Method:

Bailer

Peristaltic

Grundfos Pump

Average Pumping Rate:

(ml/min)

Duration of Pumping:

(min)

Total Volume Removed:

(gal)

Did well go dry?

Yes

No

Yes

No

Horiba U-50 Water Quality Meter Used?

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)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1100	9.28	10.25	6.49	55	.623	0	4.33	.393
1105	9.84	10.29	6.13	286	.568	0	4.46	.393
1110	9.88	10.97	6.01	332	.573	0	4.40	.367
1115	9.91	10.99	5.95	342	.579	0	4.31	.371
1120	9.91	11.05	5.93	352	.584	0	4.27	.374
1125	9.91	11.15	5.92	356	.590	0	4.21	.378
1130	9.91	11.22	5.91	358	.595	0	4.13	.381

Sampling Information:

EPA SW-846 Method 8270

EPA SW-846 Method 8260

EPA Method 335.4

EPA Method 200.7

SVOC PAH's

VOC's BTEX

Cyanide

Metals

Sample ID: LTMW-S04-1220

Duplicate?

Yes

No

Sample Time: 1130

MS/MSD?

Yes

No

Comments/Notes:

2 - 100ml ambers

Yes

No

3 - 40 ml vials

Yes

No

1 - 250 ml plastic

Yes

No

1 - 250 ml plastic

Yes

No

Shipped:

Pace Courier Pickup

Drop-off Albany Service Center

Laboratory:

Pace Analytical
Greensburg, PA

Sampling Personnel: KC
Job Number: 0603200-134400-221
Well Id.: LTMW-D05

Date: 12/3/20
Weather: Cloudy 34
Time In: 09:00 Time Out: 09:50

Well Information		TOC	Other
Depth to Water:	(feet)	<u>9.60</u>	
Depth to Bottom:	(feet)	<u>46.53</u>	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	<u>36.93</u>	
Volume of Water in Well:	(gal)	<u>5.90</u>	
Three Well Volumes:	(gal)	<u>17.72</u>	

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

Purging Information
Purging Method: ☐ Bailer ☐ Peristaltic ☒ Grundfos Pump ☐
Tubing/Bailer Material: ☐ Teflon ☐ Stainless St. ☒ Polyethylene ☒
Sampling Method: ☐ Bailer ☐ Peristaltic ☒ Grundfos Pump ☐
Average Pumping Rate: (ml/min) 200
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 7 Did well go dry? Yes ☐ No ☒
Horiba U-52 Water Quality Meter Used? Yes ☒ 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=133.7cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
09:15	10.95	12.68	7.97	-115	0.351	6.4	0.31	0.224
09:20	12.20	12.41	7.93	-126	0.347	6.2	0.41	0.228
09:25	13.35	12.15	7.85	-122	0.347	5.4	0.19	0.224
09:30	14.66	11.93	7.83	-121	0.319	4.5	0.05	0.227
09:35	12.02	11.44	7.85	-109	0.350	4.3	7.84	0.227
09:40	16.70	11.55	7.84	-94	0.351	4.2	7.72	0.229
09:45	17.50	11.39	7.83	-93	0.353	4.2	7.69	0.230

Sampling Information:

EPA SW-846 Method 8270
EPA SW-846 Method 8260
EPA Method 335.4
EPA Method 200.7

SVOC PAH's
VOC's BTEX
Cyanide
Metals

Sample ID: LTMW-D05-1220 Duplicate? Yes ☐ No ☒
Sample Time: 09:45 MS/MSD? Yes ☐ No ☒

Comments/Notes:

2 - 100ml ambers Yes ☒ No ☐
3 - 40 ml vials Yes ☒ No ☐
1 - 250 ml plastic Yes ☒ No ☐
1 - 250 ml plastic Yes ☒ No ☐

Shipped: Pace Courier Pickup ☒
Drop-off Albany Service Center ☐

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: Peter Lyon
Job Number: 0603200-13400-221
Well Id.: LTMW-D06

Date: 12/03/20
Weather: Sunny 38°
Time In: 1320 Time Out: 1400

Well Information		TOC	Other
Depth to Water:	(feet)	<u>12.45</u>	
Depth to Bottom:	(feet)	<u>52.22</u>	
Depth to Product:	(feet)	<u>-</u>	
Length of Water Column:	(feet)	<u>39.77</u>	
Volume of Water in Well:	(gal)	<u>6.36</u>	
Three Well Volumes:	(gal)	<u>19.08</u>	

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

Purging Information		Conversion Factors	
Purging Method:		gal/ft. of water	1" ID 2" ID 4" ID 6" ID
Tubing/Bailer Material:			0.04 0.16 0.66 1.47
Sampling Method:		1 gallon=3.785L=3785mL=1337cu. feet	
Average Pumping Rate:	(ml/min) <u>200</u>		
Duration of Pumping:	(min) <u>30</u>		
Total Volume Removed:	(gal) <u>2</u>		
Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Horiba U-52 Water Quality Meter Used? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1325</u>	<u>12.89</u>	<u>12.42</u>	<u>6.57</u>	<u>-7</u>	<u>.860</u>	<u>2.0</u>	<u>1.08</u>	<u>.519</u>
<u>1330</u>	<u>13.31</u>	<u>12.40</u>	<u>7.19</u>	<u>-52</u>	<u>.454</u>	<u>0</u>	<u>.07</u>	<u>.294</u>
<u>1335</u>	<u>13.41</u>	<u>12.42</u>	<u>7.36</u>	<u>-72</u>	<u>.440</u>	<u>0</u>	<u>0</u>	<u>.286</u>
<u>1340</u>	<u>13.46</u>	<u>12.42</u>	<u>7.42</u>	<u>-83</u>	<u>.446</u>	<u>0</u>	<u>0</u>	<u>.290</u>
<u>1345</u>	<u>13.47</u>	<u>12.38</u>	<u>7.43</u>	<u>-88</u>	<u>.464</u>	<u>0</u>	<u>0</u>	<u>.302</u>
<u>1350</u>	<u>13.49</u>	<u>12.47</u>	<u>7.43</u>	<u>-89</u>	<u>.490</u>	<u>0</u>	<u>0</u>	<u>.319</u>
<u>1355</u>	<u>13.50</u>	<u>12.50</u>	<u>7.41</u>	<u>-87</u>	<u>.507</u>	<u>0</u>	<u>0</u>	<u>.325</u>

Sampling Information:		SVOC PAH's		VOC's BTEX		Cyanide		Metals	
EPA SW-846 Method 8270									
EPA SW-846 Method 8260									
EPA Method 335.4									
EPA Method 200.7									
Sample ID: <u>LTMW-D06-1220</u>		Duplicate?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	MS/MSD?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Sample Time: <u>13.55</u>									
Comments/Notes:									

2 - 100ml ambers Yes ☒ No ☐
3 - 40 ml vials Yes ☒ No ☐
1 - 250 ml plastic Yes ☒ No ☐
1 - 250 ml plastic Yes ☒ No ☐
Shipped: Pace Courier Pickup ☒
Drop-off Albany Service Center ☐
Laboratory: Pace Analytical
Greensburg, PA

Sampling Personnel: Peter Lyon
Job Number: 0603200-134400-221
Well Id: LTMW-S06

Date: 12/03/20

Weather: Sunny 36°

Time In: 1240

Time Out: 1320

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>13.20</u>	
Depth to Bottom:	(feet)	<u>17.60</u>	
Depth to Product:	(feet)	<u>-</u>	
Length of Water Column:	(feet)	<u>4.4</u>	
Volume of Water in Well:	(gal)	<u>0.704</u>	
Three Well Volumes:	(gal)	<u>2.11</u>	

Well Type

Well Locked: ☐ Yes ☒ No

Measuring Point Marked: ☐ Yes ☒ No

Well Material: ☒ PVC ☐ SS ☐ Other: _____

Well Diameter: ☐ 1" ☒ 2" ☐ Other: _____

Comments: _____

Flushmount: ☐ Yes ☒ No

Stick-Up: ☒ Yes ☐ No

Purging Information

Purging Method: ☐ Bailer ☐ Peristaltic ☒ Grundfos Pump

Tubing/Bailer Material: ☐ Teflon ☐ Stainless St. ☒ Polyethylene

Sampling Method: ☐ Bailer ☐ Peristaltic ☒ Grundfos Pump

Average Pumping Rate: (ml/min) 2.00

Duration of Pumping: (min) 30

Total Volume Removed: (gal) 2

Did well go dry? Yes ☐ No ☒

Horiba U-50 Water Quality Meter Used? Yes ☒ 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)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1245	13.38	12.40	6.17	59	1.22	75.5	7.88	0.842
1250	13.39	12.50	6.25	-2	1.40	29.7	4.27	0.899
1255	13.36	12.57	6.26	-12	1.41	6.5	1.75	0.902
1300	13.38	12.65	6.26	-16	1.41	5.6	1.00	0.900
1305	13.38	12.62	6.25	-17	1.41	0	0.82	0.900
1310	13.38	12.67	6.25	-18	1.41	2.2	0.68	0.901
1315	13.38	12.69	6.26	-19	1.41	0	0.57	0.900

Sampling Information:

EPA SW-846 Method 8270

EPA SW-846 Method 8260

EPA Method 335.4

EPA Method 200.7

SVOC PAH's

VOC's BTEX

Cyanide

Metals

Sample ID: LTMW-S06-1220

Sample Time: 1315

Duplicate? Yes ☐ No ☒

MS/MSD? Yes ☐ No ☒

2 - 100ml ambers Yes ☒ No ☐

3 - 40 ml vials Yes ☒ No ☐

1 - 250 ml plastic Yes ☒ No ☐

1 - 250 ml plastic Yes ☒ No ☐

Shipped: Pace Courier Pickup ☒
Drop-off Albany Service Center ☐

Laboratory: Pace Analytical
Greensburg, PA

Comments/Notes: _____

Sampling Personnel: Peter Lyon
Job Number: 0603200-134400-221
Well Id: LTMW-S08

Date: 12/03/20
Weather: Sunny 36°
Time In: 1155 Time Out: 1240

Well Information		TOC	Other
Depth to Water:	(feet)	<u>15.58</u>	
Depth to Bottom:	(feet)	<u>17.39</u>	
Depth to Product:	(feet)	<u>—</u>	
Length of Water Column:	(feet)	<u>1.81</u>	
Volume of Water in Well:	(gal)	<u>.28</u>	
Three Well Volumes:	(gal)	<u>.86</u>	

Well Type:	Flushmount	Stick-Up
Well Locked:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Measuring Point Marked:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Well Material:	PVC <input checked="" type="checkbox"/> SS <input type="checkbox"/> Other: <input type="text"/>	PVC <input checked="" type="checkbox"/> SS <input type="checkbox"/> Other: <input type="text"/>
Well Diameter:	1" <input type="checkbox"/> 2" <input checked="" type="checkbox"/>	1" <input type="checkbox"/> 2" <input checked="" type="checkbox"/>
Comments:	<input type="text"/>	

Purging Information	
Purging Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump <input type="checkbox"/>
Tubing/Bailer Material:	Teflon <input type="checkbox"/> Stainless St. <input type="checkbox"/> Polyethylene <input checked="" type="checkbox"/>
Sampling Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Grundfos Pump <input type="checkbox"/>
Average Pumping Rate:	(ml/min) <u>200</u>
Duration of Pumping:	(min) <u>30</u>
Total Volume Removed:	(gal) <u>2</u>
Did well go dry?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

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)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1200	15.86	11.79	6.38	310	.269	0	9.20	.170
1205	15.95	12.42	6.57	264	.220	3.6	9.81	.143
1210	15.98	12.82	6.50	248	.245	0	7.01	.160
1215	16.01	12.92	6.42	241	.263	0	6.76	.172
1220	16.01	12.94	6.35	242	.295	0	6.38	.193
1225	16.01	12.96	6.31	246	.328	0	5.90	.214
1230	16.02	12.95	6.30	249	.348	0	5.71	.227

Sampling Information:	
EPA SW-846 Method 8270	SVOC PAH's
EPA SW-846 Method 8260	VOC's BTEX
EPA Method 335.4	Cyanide
EPA Method 200.7	Metals
Sample ID: <u>LTMW-S08-1220</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample Time: <u>1230</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comments/Notes:	

2 - 100ml ambers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Shipped:	Pace Courier Pickup <input checked="" type="checkbox"/> Drop-off Albany Service Center <input type="checkbox"/>
Laboratory:	Pace Analytical Greensburg, PA



Appendix D – Data Usability Summary Report and Analytical Data



Groundwater & Environmental Services, Inc.

708 North Main Street, Suite 201
Blacksburg, VA 24060

T. 800.662.5067

February 22, 2021

Devin Shay
Groundwater & Environmental Services, Syracuse
5 Technology Place, Suite 4
East Syracuse, NY 13057

RE: Data Usability Summary Report for National Grid- Rome Kingsley Avenue Site Data Packages Pace Analytical Job Nos. 30395641, 30395641

Groundwater & Environmental Services, Inc. (GES) reviewed two data packages (Laboratory Project Number 30395641, 30395641) from Pace Analytical Services, Inc., for the analysis of an effluent sample and trip blank as well as groundwater samples collected December 3, 2020 from monitoring wells located at the National Grid: Rome Kingsley Avenue Site. Sixteen aqueous samples and a field duplicate are analyzed for BTEX, PAHs, arsenic, lead, zinc pH, and total cyanide. The effluent system sample was processed for TCL volatiles, semivolatiles, eight metals, mercury and total cyanide. Methodologies utilized are those of the USEPA 200.7, 245.1 and 335.4, SM 4500H+B, and the USEPA SW846 methods 7470/8260C/8270D with additional QC requirements of the NYSDEC ASP.

The data are reported as part of a complete full deliverable type B data validation. This usability report is generated from review of the following:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate (MS/MSD) Correlations
- Field Duplicate Correlations
- Laboratory Control Sample (LCS)
- Preparation/Calibration Blanks
- Calibration/Low Level Standard Responses
- Instrumental Tunes
- Instrument MDLs
- Sample Quantitation and Identification

The items listed above which show deficiencies are discussed within the text of this narrative.

All of the other items are determined to be acceptable for the DUSR level review.

Table 1 – Data Qualifications

Sample ID	Qualifier	Analyte	Reason for qualification
Effluent	J	pH	Holding time exceedance
Effluent	UJ-	Bromomethane	Low Calibration verification recovery
LTMW-S02 LTMW-D03	J	Benzo(b)fluoranthene Benzo(k)fluoranthene	Co-elution of peaks

In summary, sample results are usable as reported, with non-compliances noted. The result for pH in all applicable samples was qualified by the laboratory as estimated due to the short hold time of 15 minutes. Qualifications are detailed in Table 1.

The laboratory case narratives and sample identification summary forms are attached to this text, and should be reviewed in conjunction with this report.

BTEX and TCL Volatiles by EPA 8260C/NYSDEC ASP

Sample holding times for groundwater and effluent samples and instrumental tune fragmentations are within acceptance ranges. Surrogate and internal standard recoveries are within required limits. Calibrations standards show acceptable responses within analytical protocol and validation action limits, with the exception of bromomethane associated with the effluent, which reported low recoveries. The non-detect data is qualified as estimated non-detect “UJ-”.

Matrix spike and matrix spike recoveries were within laboratory specified criteria. The duplicate correlations of LTMW-S09 were not calculated, as there was no detections reported. Qualifications are noted in **Table 1**.

PAHs by EPA8270D/NYSDEC ASP

Holding times are met. Instrumental tune fragmentations are within acceptance ranges. Surrogate recoveries are within analytical and validation guidelines. Blanks show no contamination. Calibration standards, both initial and continuing, show acceptable responses within analytical method protocols and validation guidelines. The laboratory control spike recoveries and precision indicate the method is within laboratory control, Matrix spike and matrix spike recoveries were within laboratory specified criteria. For samples LTMW-S02 and LTMW-D03, the peaks of benzo(b) and benzo(k) fluoranthene did not exhibit appropriate resolution in the standards, and the data is considered a combination of both compounds. The duplicate correlations of LTMW-S09 were not calculated, as there was no detections reported. Qualifications are noted in **Table 1**.

Metals by EPA 200.7/EPA 245.3/NYSDEC ASP

The matrix spikes show acceptable accuracy and precision. The duplicate correlations of LTMW-S09 were not calculated, as there was no detections reported. Instrument performance is compliant, and blanks show no contamination above the reporting limit. The recovery on the post

digestion spike of mercury was high out of specification, however, the reported value was non-detect. The potential high bias does not affect non-detect data.

Wet Chemistry-Total Cyanide by 9012B and pH

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All are acceptable for the validated samples, with the exception of a possible high bias for cyanide in LTMW-S10 noted by high recoveries in the MS/MSD. Calibration standard responses are compliant. Blanks show no detections above the reporting limits.

Cyanide recovered high in the MS/MSD associated with LTMW-S10, but was non-detect in the sample, and the possible high bias does not impact the data.

The pH for the Effluent sample is qualified as estimated due to outlying holding time, as noted in the laboratory case narrative.

The duplicate correlations of LTMW-S09 were not calculated, as there was no detections reported.

All other quality control for total cyanide show acceptable recoveries or correlations. Qualifications are noted in **Table 1**.

Data Package Completeness

Complete NYSDEC Category B deliverables were included in the laboratory data package, all information required for validation of the data is present.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Sincerely,



Bonnie Janowiak, Ph.D.
Senior Chemist

SAMPLE SUMMARY

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30395641001	Effluent System 1220	Water	12/03/20 08:20	12/04/20 10:30
30395641002	Trip Blank	Water	12/03/20 00:01	12/04/20 10:30

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 200.7 Rev. 4.4, 1994

Description: 200.7 Metals, Total

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

General Information:

1 sample was analyzed for EPA 200.7 Rev. 4.4, 1994 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 Rev. 4.4, 1994 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 245.1 Rev. 3.0, 1994

Description: 245.1 Mercury

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

General Information:

1 sample was analyzed for EPA 245.1 Rev. 3.0, 1994 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 245.1 Rev. 3.0, 1994 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 425975

2c: The PDS recovery was outside of the laboratory control limits. Result may be biased high

- Effluent System 1220 (Lab ID: 30395641001)
 - Mercury

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

General Information:

1 sample was analyzed for EPA 8270D by SIM by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 426493

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

Additional Comments:

Analyte Comments:

QC Batch: 426493

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

- Effluent System 1220 (Lab ID: 30395641001)
 - Acenaphthene
 - Acenaphthylene
 - Anthracene

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

Analyte Comments:

QC Batch: 426493

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

- Effluent System 1220 (Lab ID: 30395641001)

- Benzo(k)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(a)pyrene
- Chrysene
- Dibenz(a,h)anthracene
- Fluorene
- Fluoranthene
- Indeno(1,2,3-cd)pyrene
- Naphthalene
- Phenanthrene
- Pyrene

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 8260C

Description: 8260C MSV

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

General Information:

2 samples were analyzed for EPA 8260C by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

QC Batch: 426965

CL: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

- BLANK (Lab ID: 2063614)
 - Bromomethane
- Effluent System 1220 (Lab ID: 30395641001)
 - Bromomethane
- LCS (Lab ID: 2063615)
 - Bromomethane
- MS (Lab ID: 2063622)
 - Bromomethane
- MSD (Lab ID: 2063623)
 - Bromomethane
- Trip Blank (Lab ID: 30395641002)
 - Bromomethane

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 8260C

Description: 8260C MSV

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

Additional Comments:

Analyte Comments:

QC Batch: 426965

3c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased high and should be considered estimated.

- BLANK (Lab ID: 2063614)
 - Bromoform
 - Dibromochloromethane
- Effluent System 1220 (Lab ID: 30395641001)
 - Bromoform
 - Dibromochloromethane
- LCS (Lab ID: 2063615)
 - Bromoform
- MS (Lab ID: 2063622)
 - Bromoform
 - Dibromochloromethane
- MSD (Lab ID: 2063623)
 - Bromoform
 - Dibromochloromethane
- Trip Blank (Lab ID: 30395641002)
 - Bromoform
 - Dibromochloromethane

4c: The read back of the low concentration calibration standard for this compound is not within 30% of the true value. The results may be biased low and should be considered estimated.

- LCS (Lab ID: 2063615)
 - Dibromochloromethane

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: SM 4500H+B-2011

Description: 4500H+ pH, Electrometric

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

General Information:

1 sample was analyzed for SM 4500H+B-2011 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

H3: Sample was received or analysis requested beyond the recognized method holding time.

- Effluent System 1220 (Lab ID: 30395641001)

H6: Analysis initiated outside of the 15 minute EPA required holding time.

- Effluent System 1220 (Lab ID: 30395641001)

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395641

Method: EPA 335.4

Description: 335.4 Cyanide, Total

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 18, 2020

General Information:

1 sample was analyzed for EPA 335.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 335.4 with any exceptions noted below.

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: National Grid - Rome Kingsley

Pace Project No.: 30395686

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30395686001	LTMW-D01-1220	Water	12/03/20 14:05	12/04/20 10:30
30395686002	LTMW-S01-1220	Water	12/03/20 14:45	12/04/20 10:30
30395686003	LTMW-D02-1220	Water	12/03/20 15:25	12/04/20 10:30
30395686004	LTMW-S02-1220	Water	12/03/20 15:25	12/04/20 10:30
30395686005	LTMW-D03-1220	Water	12/03/20 10:40	12/04/20 10:30
30395686006	LTMW-S03-1220	Water	12/03/20 10:40	12/04/20 10:30
30395686007	LTMW-D04-1220	Water	12/03/20 11:30	12/04/20 10:30
30395686008	LTMW-S04-1220	Water	12/03/20 11:30	12/04/20 10:30
30395686009	LTMW-D05-1220	Water	12/03/20 09:45	12/04/20 10:30
30395686010	LTMW-S05-1220	Water	12/03/20 09:45	12/04/20 10:30
30395686011	LTMW-D06-1220	Water	12/03/20 13:55	12/04/20 10:30
30395686012	LTMW-S06-1220	Water	12/03/20 13:15	12/04/20 10:30
30395686013	LTMW-S07-1220	Water	12/03/20 13:15	12/04/20 10:30
30395686014	LTMW-S08-1220	Water	12/03/20 12:30	12/04/20 10:30
30395686015	LTMW-S09-1220	Water	12/03/20 14:35	12/04/20 10:30
30395686016	LTMW-S10-1220	Water	12/03/20 12:25	12/04/20 10:30
30395686017	LTMW-S10-MS-1220	Water	12/03/20 12:25	12/04/20 10:30
30395686018	LTMW-S10-MSD-1220	Water	12/03/20 12:25	12/04/20 10:30
30395686019	Field Duplicate-1220	Water	12/03/20 00:01	12/04/20 10:30
30395686020	Trip Blank	Water	12/03/20 15:53	12/04/20 10:30

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395686

Method: EPA 200.7 Rev. 4.4, 1994

Description: 200.7 Metals, Total

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 16, 2020

General Information:

19 samples were analyzed for EPA 200.7 Rev. 4.4, 1994 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 Rev. 4.4, 1994 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395686

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 16, 2020

General Information:

19 samples were analyzed for EPA 8270D by SIM by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395686

Method: EPA 8260C

Description: 8260C MSV

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 16, 2020

General Information:

20 samples were analyzed for EPA 8260C by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

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

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30395686

Method: EPA 335.4

Description: 335.4 Cyanide, Total

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: December 16, 2020

General Information:

19 samples were analyzed for EPA 335.4 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with EPA 335.4 with any exceptions noted below.

Method Blank:

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

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

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

QC Batch: 426130

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30395686016,7351912002

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2059453)
 - Cyanide
- MSD (Lab ID: 2059454)
 - Cyanide

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2059383)
 - Cyanide
- MSD (Lab ID: 2059384)
 - Cyanide

Additional Comments:

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

REPORT OF LABORATORY ANALYSIS

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