

April 21, 2020

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 1st Quarter OM&M Report**

Dear Mr. Starr:

Enclosed for your review is the 2020 1st 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) and OM&M Plan issued May 31, 2013. National Grid filed the updated Declaration of Covenants and Restrictions with Oneida County on December 15, 2017. National Grid also submitted the final Site Management Plan to the NYSDEC on January 24, 2018. The NYSDEC provided comments to the SMP and Final Engineering Report on March 3, 2019. National Grid submitted the final SMP and FER on November 30, 2019.

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

Mr. Justin Starr, PG
April 21, 2020
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groundwater extraction manhole, submersible pump, and piping also operates continuously.

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 read '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 1st Quarter Operations, Maintenance, and Monitoring Report



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

April 2020

Version 1





2020 1st Quarter OM&M Report

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

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Date:
April 17, 2020

Devin T. Shay, PG
Program Manager / Principal Hydrogeologist



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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 1st Quarter Operations, Maintenance, and Monitoring Report (OM&M) on behalf of National Grid. This report compiles the OM&M activities completed in the 1st 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 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 January, February, and March 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 1st quarter site inspection on March 20, 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 March 18 and 19, 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 1st quarter groundwater monitoring event was conducted on March 18 and 19, 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. Additionally, 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-D02, LTMW-D05, and LTMW-S07.

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 March 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: DNAPL-03, MW-OU2-1, MW-OU2-2 and MW-OU2-4.



As part of the NAPL monitoring/collection event, a total of 6.5 gallons of DNAPL were collected (4 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 540 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 March 19, 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 City of Rome WPCF discharge fees. During the 2020 1st quarter, approximately 3,775,177 gallons (average flow ~ 28 gpm) were discharged. Since the groundwater extraction system was installed, approximately 159 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
TOTAL	159,129,362

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 1st quarter 2020 as needed.

3 Conclusions, Recommendations, and Certifications

3.1 Conclusions

Based on data collected from the 2020 1st 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 1st 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 431 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, chrysene, cyanide, fluorine, and naphthalene above the New York State regulatory maximum allowable limits. Additionally, analytical results for well LTMW-S03 indicated zinc concentrations above the NYSDEC AWQS guidance value. Seven of the 16 wells (LTMW-D01, LTMW-S01, LTMW-D03, LTMW-S03, LTMW-S04, LTMW-S08, and LTMW-S10) sampled had at least one detection of a site-related constituent above the New York State limits.
- The total quarterly volume of DNAPL collected (6.5 gallons) was removed from two wells (MW-OU2-1, and MW-OU2-4). 540 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 28 gpm, and a quarterly total of 3,775,177 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 159 million gallons of water have been discharged without any permit limit exceedances.

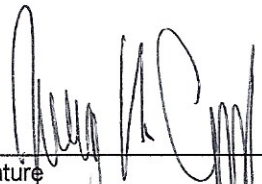
3.2 Recommendations

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

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

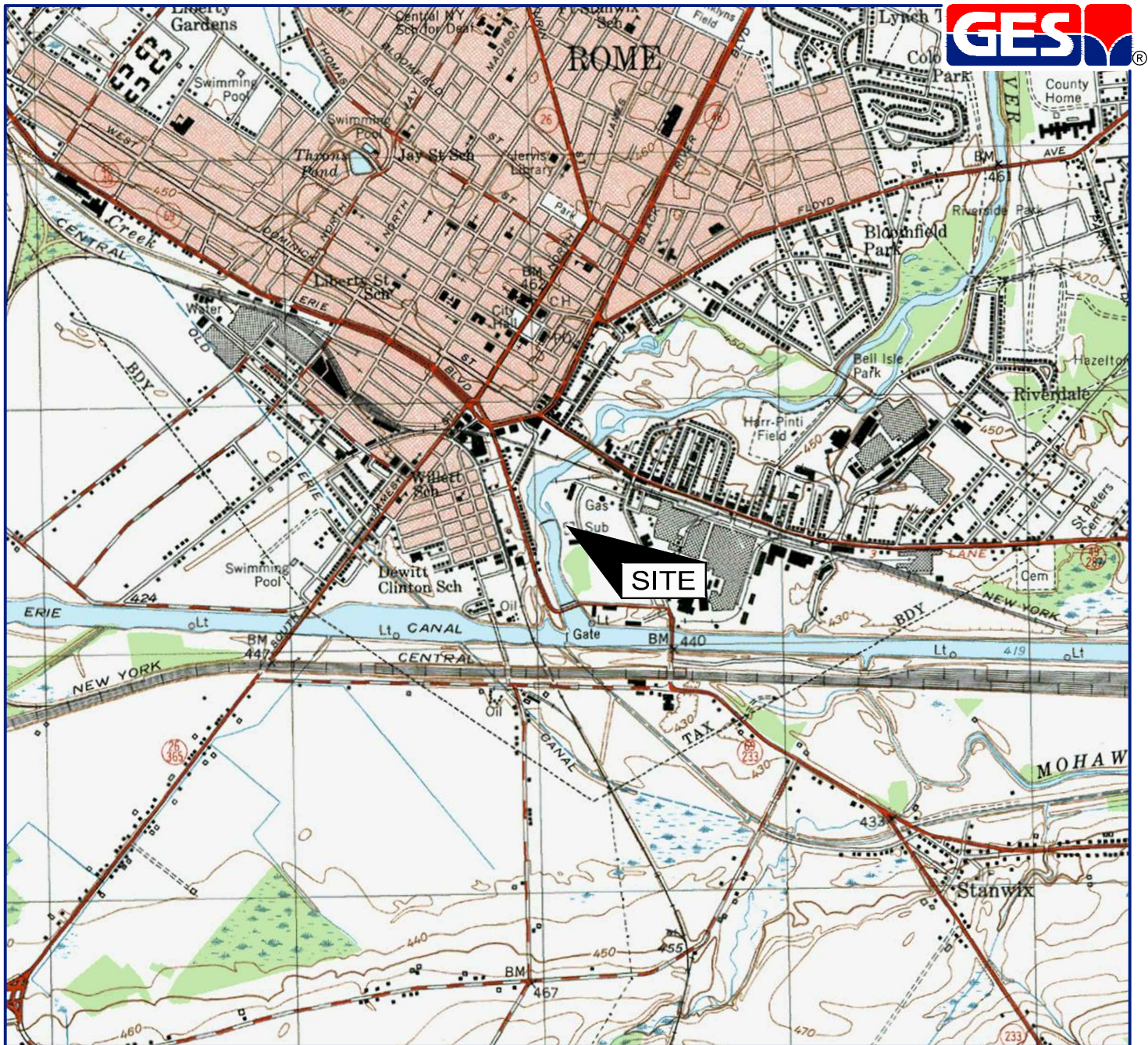
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Date





Figures



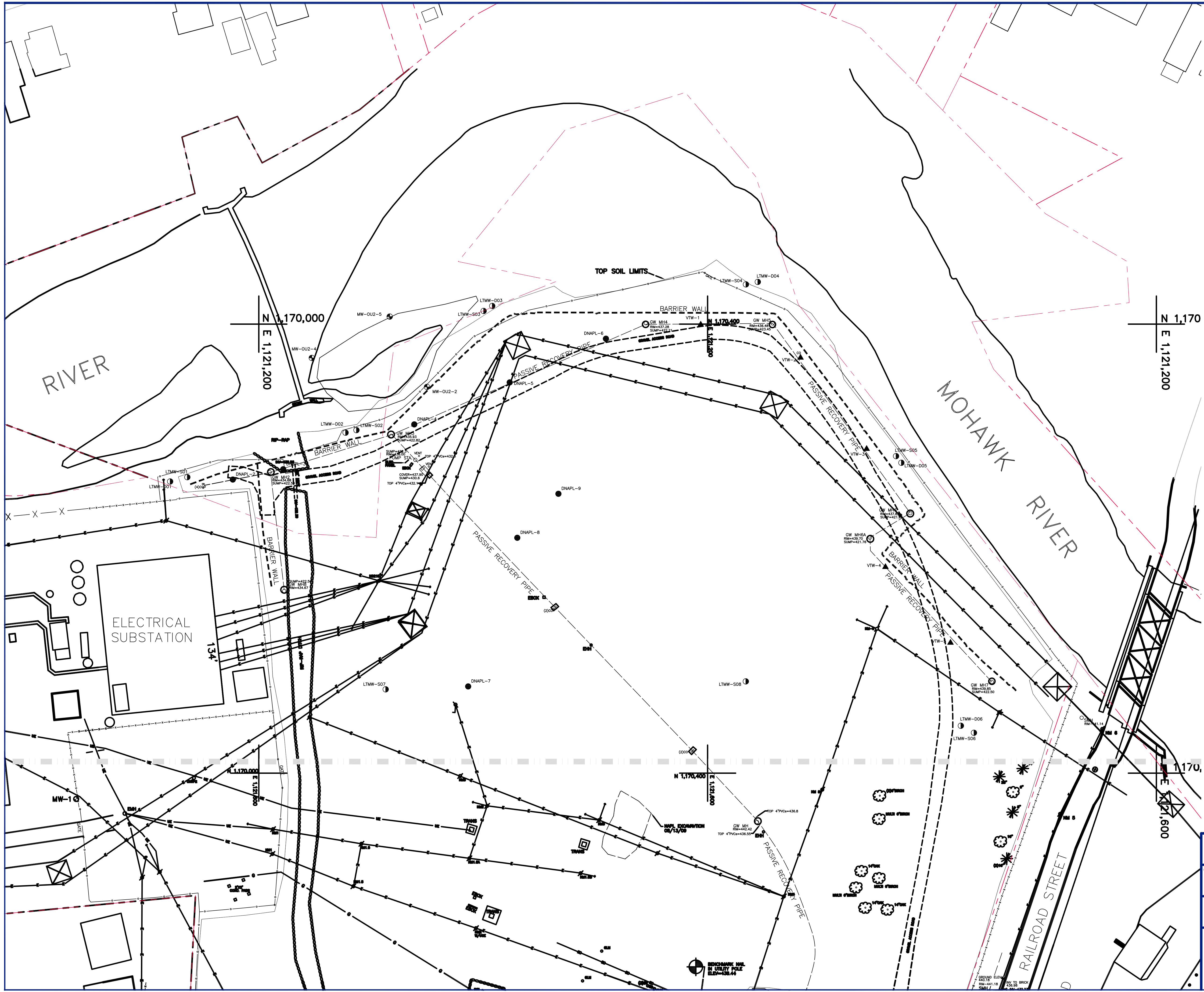
SOURCE: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE 1955
ROME, NEW YORK
CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION

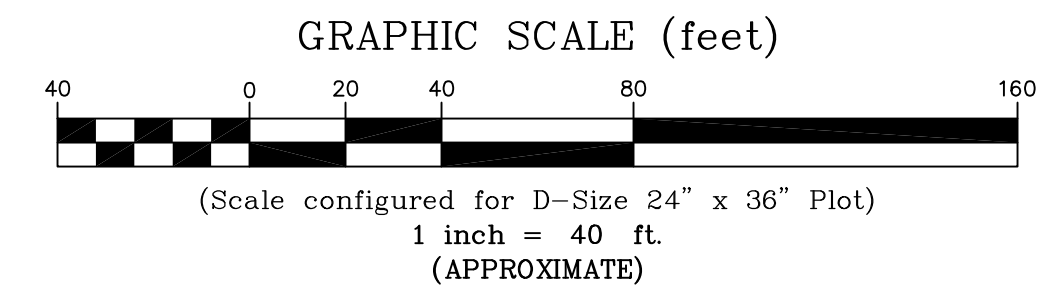
DRAFTED BY: W.G.S.	SITE LOCATION MAP		
CHECKED BY:	NATIONAL GRID KINGSLEY AVENUE ROME, NEW YORK		
REVIEWED BY:			
 NORTH	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057		
	SCALE IN FEET 0 2000	DATE 10-17-16	FIGURE 1



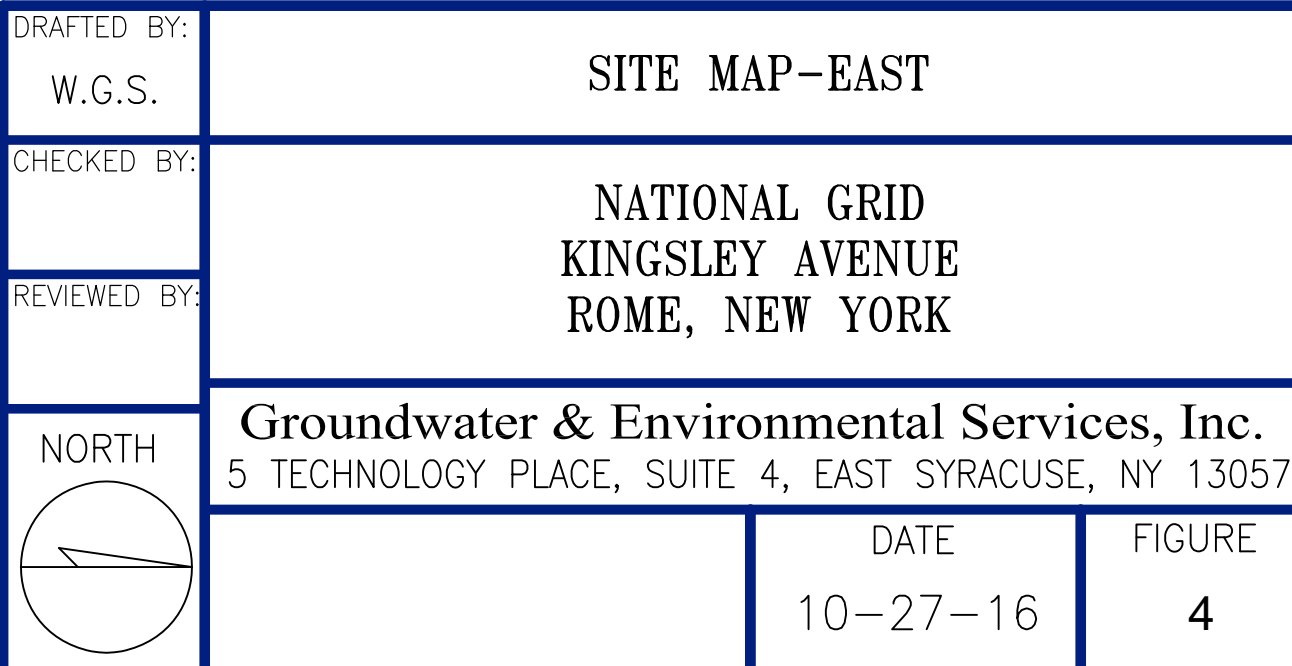


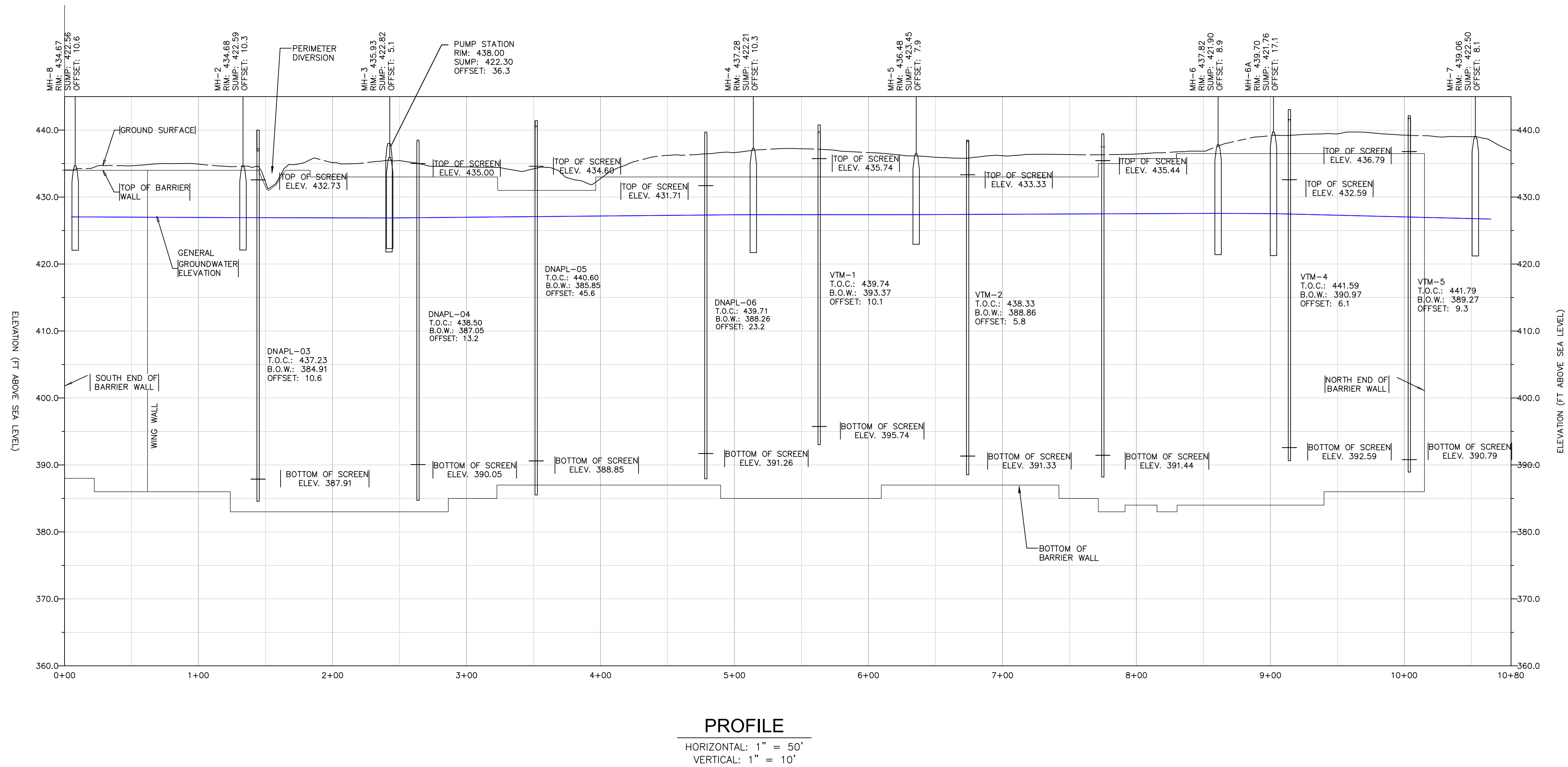
- LEGEND
- PROPERTY BOUNDARY
 - EAST WEST DIVIDE
 - FENCE
 - UTILITY POLE
 - UNDERGROUND ELECTRIC LINE
 - UNDERGROUND GAS LINE
 - OVERHEAD ELECTRIC
 - ELECTRICAL CONDUIT
 - UNDERGROUND WATER LINE
 - LTMW-D01
 - VTW-1
 - MW-OU2-1

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 pt
- 2) Deep monitoring wells were sampled with a low flow submersible pump with genera
- 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 MW-OU2-1 TOC = 435.72			Well MW-OU2-2 TOC = 436.40			Well MW-OU2-3 TOC = 432.96			Well MW-OU2-4 TOC = 432.88			Well MW-OU2-5 TOC = 433.46		
Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.
03/20/20	7.85	427.87	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	9.28	426.44	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	9.48	426.24	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

Well	DNAPL-02		Well	DNAPL-03		Well	DNAPL-04		Well	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.
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

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

Historical Groundwater Data

DNAPL Wells

Well	DNAPL-06		Well	DNAPL-07		Well	DNAPL-08		Well	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.
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

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	VTM-1 TOC = 439.74		Well	VTM-2 TOC = 438.33		Well	VTM-3 TOC = 439.44		Well	VTM-4 TOC = 441.59		Well	VTM-5 TOC = 441.79	
Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.	Date	DTW	Water El.
03/20/20	10.68	429.06	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	11.81	427.93	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	12.22	427.52	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.
03/20/20	7.50	427.40	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	8.42	426.48	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	8.63	426.27	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	43356.00	-42920.48	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 TOC = 437.78		LTMW-S05 TOC = 437.92		LTMW-D06 TOC = 441.70		LTMW-S06 TOC = 441.64		LTMW-S07 TOC = 439.70		LTMW-S08 TOC = 443.81		LTMW-S09 TOC = 439.79		LTMW-S10 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.
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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	540	5,100	1,700	1,500	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
Toluene	1,000	5	1	300	1,300	430	340	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
Ethylbenzene	700	5	1	26	84	53	54	82	ND	167	241	145	137	179	177	95.0	119	163	203	202	170	142	222	1,120
Xylene (total)	10,000	5	2	68	160	ND	ND	170	ND	176	254	206	201	157	187	135	155	164	214.5	339	229	134.8	180.8	277
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	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
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	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
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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	13	ND	ND	14	11	ND	ND	ND	10	ND	ND	15	ND	ND	ND	ND	14
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	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	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	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
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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	97.1	229	ND	ND	ND	7.2	94.6	0.44	0.83	170	381	8.3	ND	4.3	121
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	107	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	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	ND	6.8	9.1	ND	ND	ND	9.1	6.2	6.6
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	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	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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	1.9
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	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	1.2	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	ND
Acenaphthene	N/A	20	4.9	70	68	72	79 E	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
Acenaphthylene	N/A	NA	4.9	ND	4.7	ND	ND	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
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	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
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	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	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	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	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	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	ND
Cyanide	N/A	200	10	23	16	23	20	20	21	ND	13	55	18	12	15	11	17	19	14	14	16	18	18	25
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	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	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
Fluorene	N/A	0.002	4.9	18	26	25	23	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
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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	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
Phenanthrene	N/A	50	4.9	ND	9.4	ND	ND	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
Pyrene	N/A	50	4.9	ND	ND	ND	ND	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
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	ND
Lead	N/A	25	5	ND	8.9	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	28	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-D02

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	ND
Acenaphthene	N/A	20	4.9	5.8	ND	ND	ND	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
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	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
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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	130	110	16	ND	93	85	ND	150	200	ND	160	160	160	150	140	10	140	140	110	ND	130
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	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	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	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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	0.16	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	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	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	ND
Lead	N/A	25	5	ND	6	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	22	110	11	13	61	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
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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	ND
Acenaphthene	N/A	20	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	81	35	190	120	130	150	ND	130	75	73	110	90	60	59	110	10	57	71	70	73	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	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	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	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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	0.15	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	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	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	15	15	5.1	ND	7.7	ND	ND	7.6	ND	7.1	7.2	ND	ND	ND	5.1	6.3	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	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	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-D03

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	6.7	9.3	9.3	10	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
Toluene	1,000	5	1	2	3.4	2.2	ND	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
Ethylbenzene	700	5	1	73	100	87	76	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
Xylene (total)	10,000	5	2	15	22	16	16	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
Acenaphthene	N/A	20	4.9	10	14	16	12	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
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	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
Anthracene	N/A	NA	4.9	ND	5.6	5.4	ND	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
Benzo(a)anthracene	N/A	0.002	4.9	ND	ND	ND	ND	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
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	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	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	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	ND
Chrysene	N/A	0.002	4.9	ND	ND	ND	ND	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
Cyanide	N/A	200	10	64	67	78	71	75	93	77	79	84	76	66	78	64	66	62	62	65	72	60	53	67
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	ND
Fluoranthene	N/A	50	4.9	ND	6.7	6.6	5.6	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
Fluorene	N/A	0.002	4.9	6.8	11	10	9.3	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
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	9.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	N/A	10	4.9	14	47	29	24	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
Phenanthrene	N/A	50	4.9	17	28	30	25	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
Pyrene	N/A	50	4.9	6	8.9	8.6	7.2	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
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	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	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	ND

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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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
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	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	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	0.15	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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	0.16	0.17	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	0.11	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	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3	ND	ND	ND	ND	ND	ND	ND
Lead	N/A	25	5	15	30	5.9	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	5,600	7,300	5,500	4,400	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

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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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	13	15	14	11.5	10	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11
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	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	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	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	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	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	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	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	35.3	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	ND
Zinc	N/A	2,000	10	ND	ND	ND	490	490	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-S04

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	870	400	800	170	450	600	59	2,000	900	1,200	200	1,300	400	230	220	1,300	860	660	190	120	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	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	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	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	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	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	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	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	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	ND
Zinc	N/A	2,000	10	180	610	140	ND	510	340	23	618	358	108	128	472	472	267	179	230	242	184	156	156	44.4

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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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	ND	13	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	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	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	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	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	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	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	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	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	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	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-S05

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	5,800	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	1,320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	1	ND	ND	ND	ND	ND	ND	ND	ND	145	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	206	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	0.19	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	0.31	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	140	190	220	160	450	250	16	830	510	570	270	380	430	120	89	260	120	230	65	170	150
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	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	ND
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	ND	ND	ND	ND	0.15	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	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	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	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	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	ND
Lead	N/A	25	5	11	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	75	ND	27	ND	ND	19	23	ND	27.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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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-D06

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	ND	ND	ND	ND	ND	ND	ND	92	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	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	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	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	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	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	ND
Pyrene	N/A	50	4.9	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	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
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	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	ND

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AWQS = Ambient Water Quality Standards
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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)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	ND
Cyanide	N/A	200	10	100	ND	32	19	32	66	31	ND	190	79	14	18	64	55	19	110	66	11	54	84	53
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	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	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	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	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	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	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	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	9	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	ND
Zinc	N/A	2,000	10	0.01	ND	ND	ND	18	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-S07

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16	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	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	ND
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8	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	24	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	96.8	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-S08

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	2.4	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	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	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	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	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	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	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	0.19	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	0.21	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	0.31	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	0.15	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	0.26	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	0.14	ND	ND
Cyanide	N/A	200	10	560	120	100	100	280	120	120	140	240	16	140	16	200	150	80	250	30	10	62	180	380
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	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	0.51	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	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	0.12	ND	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	0.12	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	0.26	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	0.46	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	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	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	12.5	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-S09

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	0.11	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	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	ND
Lead	N/A	25	5	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	N/A	2,000	10	22	17	45	ND	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

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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-S10

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	04/08/15	06/03/15	09/16/15	12/03/15	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
Benzene	5	1	1	ND	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	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	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	ND
Acenaphthene	N/A	20	4.9	21	17	36	29	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
Acenaphthylene	N/A	NA	4.9	ND	ND	ND	ND	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
Anthracene	N/A	NA	4.9	ND	ND	ND	ND	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
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	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	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	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	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	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	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	13
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	ND
Fluoranthene	N/A	50	4.9	ND	ND	ND	ND	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
Fluorene	N/A	0.002	4.9	ND	ND	ND	ND	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
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	ND
Naphthalene	N/A	10	4.9	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.17	ND	ND	0.20	9.1	ND	ND	1.5	0.37	0.13	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	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
Pyrene	N/A	50	4.9	ND	ND	ND	ND	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
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	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	ND
Zinc	N/A	2,000	10	0.011	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
Bolded = values indicate exceedance of the NYSDEC AWQS



Table 5
Discharge Analytical Data
Groundwater Extraction System Effluent Concentrations

Parameter	City of Rome WPCF Permit Max Daily Limit (mg/L)	09/14/15	12/03/15	03/07/16	06/06/16	09/12/16	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
Benzene	0.13	0.04	0.044	0.037	0.063	0.043	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
Ethylbenzene	1.59	0.0042	0.003	0.0021	0.0049	0.0042	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
Toluene	1.35	0.0013	0.0011	0.0038	0.0087	0.0021	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	0.0066
Xylene	1.35	ND (<0.001)	ND (<0.001)	ND (<0.001)	0.0011	ND (<0.001)	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)
Total BTEX	2.87	0.05	0.048	0.043	0.078	0.049	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
Arsenic	0.1	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.0050)	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)
Cadmium	0.11	0.0017	ND (<0.001)	ND (<0.001)	ND (<0.001)	ND (<0.0030)	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)
Chromium	2.77	ND (<0.0040)	ND (<0.0040)	ND (<0.0040)	ND (<0.0040)	ND (<0.0050)	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)
Copper	1.3	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.0050)	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)
Cyanide	1.2	0.075	0.075	0.11	0.11	0.062	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
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)	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)
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)	ND (<0.00020)	ND (<0.00020)
Nickel	1.9	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	ND (<0.010)	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)
Silver	0.43	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0060)	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)
Zinc	2.6	ND (<0.010)	0.018	0.018	0.018	ND (<0.010)	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)
Oil & Grease	100	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBOD5	250	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
pH	5.5 - 11.5 su	6.88	6.98	7.06	6.91	6.8	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

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: 3/20/2020
 Technician: PD

Time: 8:30
 Weather: Partly Cloudy

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	COMMENTS:

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	7.85	40.00	45.81	Removed 4 gallons of DNAPL
MW-OU2-2	9.25	46.00	47.53	
MW-OU2-3	6.40	NP	34.18	
MW-OU2-4	5.40	35.80	39.55	Removed 2.5 gallons of DNAPL
MW-OU2-5	6.05	NP	36.01	
DNAPL-02	8.10	NP	50.40	
DNAPL-03	8.55	51.50	52.32	
DNAPL-04	9.70	NP	51.45	
DNAPL-05	11.32	NP	54.75	
DNAPL-06	10.90	NP	51.45	
DNAPL-07	11.80	NP	53.60	
DNAPL-08	12.10	NP	58.01	
DNAPL-09	13.05	NP	57.58	
VTM-1	10.68	NP	46.37	
VTM-2	9.10	NP	49.47	
VTM-3	10.20	NP	50.91	
VTM-4	12.05	NP	50.62	
VTM-5	12.15	NP	52.52	
LTMW-D01	7.50	NP	46.84	
LTMW-S01	8.30	NP	16.92	
LTMW-D02	8.90	NP	40.29	
LTMW-S02	8.20	NP	17.98	
LTMW-D03	3.50	NP	40.73	
LTMW-S03	1.80	NP	13.70	
LTMW-D04	8.25	NP	46.36	
LTMW-S04	7.10	NP	17.26	
LTMW-D05	7.50	NP	46.53	
LTMW-S05	7.80	NP	16.83	
LTMW-D06	11.00	NP	52.22	
LTMW-S06	11.70	NP	17.60	
LTMW-S07	9.75	NP	17.82	
LTMW-S08	14.15	NP	17.39	
LTMW-S09	9.00	NP	16.92	
LTMW-S10	9.60	NP	17.18	

Containment

Well Id.	Elevation	DTW	Water Elevation	Positive Delta
DNAPL-02	436.81	8.10	428.71	5.13
Top Steel Sheet Wall	433.84			
DNAPL-03	437.23	8.55	428.68	2.53
Top Steel Sheet Wall	431.21			
DNAPL-04	438.50	9.70	428.80	4.02
Top Steel Sheet Wall	432.82			
DNAPL-05	440.60	11.32	429.28	0.92
Top Steel Sheet Wall	430.20			
DNAPL-06	439.71	10.90	428.81	4.74
Top Steel Sheet Wall	433.55			
VTM-1	439.74	10.68	429.06	2.76
Top Steel Sheet Wall	431.82			
VTM-2	438.33	9.10	429.23	3.47
Top Steel Sheet Wall	432.70			
VTM-3	439.44	10.20	429.24	7.68
Top Steel Sheet Wall	436.92			
VTM-4	441.59	12.05	429.54	4.00
Top Steel Sheet Wall	433.54			
VTM-5	441.79	12.15	429.64	6.36
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"	7.85	40.00	45.81	Removed 4.5 gallons of DNAPL
MW-OU2-2	No	4"	9.25	46.00	47.53	
MW-OU2-3	No	4"	6.40	NP	34.18	
MW-OU2-4	No	4"	5.40	35.80	39.55	Removed 2.5 gallons of DNAPL
MW-OU2-5	No	4"	6.05	NP	36.01	
DNAPL-02	No	6"	8.10	NP	50.40	
DNAPL-03	No	6"	8.55	51.50	52.32	
DNAPL-04	No	6"	9.70	NP	51.45	
DNAPL-05	No	6"	11.32	NP	54.75	
DNAPL-06	No	6"	10.90	NP	54.45	
DNAPL-07	No	6"	11.80	NP	53.60	
DNAPL-08	No	6"	12.10	NP	58.01	
DNAPL-09	No	6"	13.05	NP	57.58	
VTM-1	No	6"	10.68	NP	46.37	
VTM-2	No	6"	9.10	NP	49.47	
VTM-3	No	6"	10.20	NP	50.91	
VTM-4	No	6"	12.05	NP	50.62	
VTM-5	No	6"	12.15	NP	52.52	
LTMW-D01	Yes	2"	7.50	NP	46.84	
LTMW-S01	Yes	2"	8.30	NP	16.96	
LTMW-D02	Yes	2"	8.90	NP	40.29	
LTMW-S02	Yes	2"	8.20	NP	17.98	
LTMW-D03	Yes	2"	3.50	NP	40.73	
LTMW-S03	Yes	2"	1.80	NP	13.70	
LTMW-D04	Yes	2"	8.25	NP	46.36	
LTMW-S04	Yes	2"	7.10	NP	17.26	
LTMW-D05	Yes	2"	7.50	NP	46.53	
LTMW-S05	Yes	2"	7.80	NP	16.83	
LTMW-D06	Yes	2"	11.00	NP	52.22	
LTMW-S06	Yes	2"	11.70	NP	17.60	
LTMW-S07	Yes	2"	9.75	NP	17.82	
LTMW-S08	Yes	2"	14.15	NP	17.39	
LTMW-S09	Yes	2"	9.00	NP	16.92	DUP
LTMW-S10	Yes	2"	9.60	NP	17.18	MS/MSD

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

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-D01**

Date: 3/19

Weather: P.C

Time In: 0819 Time Out: 0859

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>7.50</u>	
Depth to Bottom:	(feet)	<u>46.84</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>39.34</u>	
Volume of Water in Well:	(gal)	<u>6.2</u>	
Three Well Volumes:	(gal)	<u>18.8</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
0822	9.0	8.80	7.34	-18	1469	3.3	9.32	.203
0827	10.60	8.94	8.49	-116	1404	3.2	8.78	.262
0832	12.60	8.96	9.28	-137	1396	3.2	8.67	.257
0837	13.21	8.90	10.00	-142	1414	3.3	8.71	.263
0842	15.80	8.87	10.10	-154	1426	3.6	8.88	.277
0847	17.20	8.83	10.39	-158	1434	3.1	9.45	.282
0852	18.20	8.79	10.51	-160	1439	3.0	9.27	.286

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

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

Sample ID: **LTMW-D01-0320** Duplicate? Yes ☐ No ☒
Sample Time: 0852 MS/MSD? Yes ☐ No ☒

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

Comments/Notes: NONE

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PO

Job Number: 0603123-134400-221

Well Id. **LTMW-S01**

Date: 3/19

Weather: rain

Time In: 0900

Time Out: 0944

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>8.30</u>	
Depth to Bottom:	(feet)	<u>16.92</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>8.62</u>	
Volume of Water in Well:	(gal)	<u>13</u>	
Three Well Volumes:	(gal)	<u>4.1</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) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 25 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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>0905</u>	<u>7.30</u>	<u>8.31</u>	<u>10.53</u>	<u>-114</u>	<u>751</u>	<u>22</u>	<u>8.81</u>	<u>1485</u>
<u>910</u>	<u>7.30</u>	<u>7.88</u>	<u>10.65</u>	<u>-105</u>	<u>869</u>	<u>15</u>	<u>8.65</u>	<u>1555</u>
<u>915</u>	<u>7.30</u>	<u>7.62</u>	<u>10.72</u>	<u>-103</u>	<u>869</u>	<u>12</u>	<u>8.70</u>	<u>1556</u>
<u>920</u>	<u>7.30</u>	<u>7.47</u>	<u>10.77</u>	<u>-102</u>	<u>870</u>	<u>9.1</u>	<u>8.71</u>	<u>1556</u>
<u>925</u>	<u>7.30</u>	<u>7.37</u>	<u>10.82</u>	<u>-101</u>	<u>869</u>	<u>8.1</u>	<u>8.71</u>	<u>1557</u>
<u>930</u>	<u>7.30</u>	<u>7.31</u>	<u>10.84</u>	<u>-101</u>	<u>870</u>	<u>6.1</u>	<u>8.69</u>	<u>1556</u>
<u>935</u>	<u>7.30</u>	<u>7.27</u>	<u>10.87</u>	<u>-101</u>	<u>868</u>	<u>5.1</u>	<u>8.68</u>	<u>1556</u>

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-S01-0320**

Sample Time: 0935

Duplicate? Yes ☐ No ☒
MS/MSD? Yes ☐ No ☒

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

Comments/Notes:

NONE

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-D02**

Date: 3/19

Weather: P.C.

Time In: 1026

Time Out: 1108

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>8.90</u>	
Depth to Bottom:	(feet)	<u>40.29</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>31.39</u>	
Volume of Water in Well:	(gal)	<u>5</u>	
Three Well Volumes:	(gal)	<u>15</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1030</u>	<u>10.00</u>	<u>6.57</u>	<u>10.95</u>	<u>-154</u>	<u>0.260</u>	<u>31</u>	<u>12.47</u>	<u>166</u>
<u>1035</u>	<u>12.00</u>	<u>7.05</u>	<u>10.51</u>	<u>-116</u>	<u>0.228</u>	<u>16</u>	<u>11.63</u>	<u>148</u>
<u>1040</u>	<u>12.50</u>	<u>7.33</u>	<u>10.22</u>	<u>-110</u>	<u>0.229</u>	<u>13</u>	<u>10.00</u>	<u>148</u>
<u>1045</u>	<u>13.00</u>	<u>7.53</u>	<u>10.10</u>	<u>-107</u>	<u>0.229</u>	<u>11.5</u>	<u>10.36</u>	<u>149</u>
<u>1050</u>	<u>13.00</u>	<u>7.67</u>	<u>10.05</u>	<u>-114</u>	<u>0.228</u>	<u>12</u>	<u>10.64</u>	<u>148</u>
<u>1055</u>	<u>1300</u>	<u>7.91</u>	<u>9.75</u>	<u>-129</u>	<u>0.330</u>	<u>8.7</u>	<u>10.31</u>	<u>223</u>
<u>1100</u>	<u>1300</u>	<u>8.06</u>	<u>9.70</u>	<u>-163</u>	<u>0.672</u>	<u>6.3</u>	<u>10.03</u>	<u>1230</u>

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-D02-0320**

Sample Time: 1100

Duplicate? Yes ☐ No ☒
MS/MSD? Yes ☐ No ☒

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

Comments/Notes: NONE

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PO

Job Number: 0603123-134400-221

Well Id. **LTMW-S02**

Date: 3/19

Weather: 1917

Time In: 0945

Time Out: 1025

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>8.20</u>	
Depth to Bottom:	(feet)	<u>17.98</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>9.78</u>	
Volume of Water in Well:	(gal)	<u>1.5</u>	
Three Well Volumes:	(gal)	<u>4.7</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)

1220

Duration of Pumping:

(min)

30

Total Volume Removed:

(gal)

2.5

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)
<u>0947</u>	<u>8.45</u>	<u>7.26</u>	<u>10.90</u>	<u>-89</u>	<u>1.534</u>	<u>500</u>	<u>12.37</u>	<u>1.338</u>
<u>0952</u>	<u>8.45</u>	<u>6.94</u>	<u>10.74</u>	<u>-67</u>	<u>1.435</u>	<u>76</u>	<u>11.75</u>	<u>1.282</u>
<u>0957</u>	<u>8.45</u>	<u>6.68</u>	<u>10.91</u>	<u>-76</u>	<u>1.428</u>	<u>43</u>	<u>11.16</u>	<u>1.278</u>
<u>1002</u>	<u>8.45</u>	<u>6.58</u>	<u>11.03</u>	<u>-82</u>	<u>1.423</u>	<u>14</u>	<u>10.83</u>	<u>1.275</u>
<u>1007</u>	<u>8.45</u>	<u>6.56</u>	<u>11.10</u>	<u>-88</u>	<u>1.420</u>	<u>10</u>	<u>10.50</u>	<u>1.272</u>
<u>1012</u>	<u>8.45</u>	<u>6.53</u>	<u>11.14</u>	<u>-98</u>	<u>1.416</u>	<u>8</u>	<u>10.25</u>	<u>1.271</u>
<u>1017</u>	<u>8.45</u>	<u>6.53</u>	<u>11.11</u>	<u>-123</u>	<u>1.421</u>	<u>4</u>	<u>10.07</u>	<u>1.274</u>

Sampling Information:

EPA SW-846 Method 8270

SVOC PAH's

2 - 1 liter ambers

Yes ☒

No ☐

EPA SW-846 Method 8260

VOC's BTEX

3 - 40 ml vials

Yes ☒

No ☐

EPA Method 335.4

Cyanide

1 - 250 ml plastic

Yes ☒

No ☐

EPA Method 200.7

Metals

1 - 250 ml plastic

Yes ☒

No ☐

Sample ID: **LTMW-S02-0320**

Duplicate? Yes ☐ No ☒

Shipped:

Pace Courier Pickup ☒

Sample Time: 1017

MS/MSD? Yes ☐ No ☒

Drop-off Albany Service Center ☐

Comments/Notes: NONE

Laboratory:

Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. LTMW-~~803~~ 003

Date: 3/18

Weather: P.C.

Time In: 1140

Time Out: 1224

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>3.50</u>	
Depth to Bottom:	(feet)	<u>13.70 4073</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>37.23</u>	
Volume of Water in Well:	(gal)	<u>5.9</u>	
Three Well Volumes:	(gal)	<u>17.8</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) 420
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1144</u>	<u>5.10</u>	<u>12.29</u>	<u>9.04</u>	<u>-105</u>	<u>.937</u>	<u>6.2</u>	<u>10.80</u>	<u>.604</u>
<u>1149</u>	<u>6.40</u>	<u>11.91</u>	<u>9.88</u>	<u>-117</u>	<u>1.04</u>	<u>5.5</u>	<u>10.44</u>	<u>.662</u>
<u>1154</u>	<u>6.80</u>	<u>12.14</u>	<u>9.68</u>	<u>-121</u>	<u>1.02</u>	<u>3.6</u>	<u>9.63</u>	<u>.655</u>
<u>1159</u>	<u>7.00</u>	<u>11.94</u>	<u>9.66</u>	<u>-121</u>	<u>1.03</u>	<u>3.5</u>	<u>9.54</u>	<u>.660</u>
<u>1204</u>	<u>7.30</u>	<u>12.18</u>	<u>9.20</u>	<u>-123</u>	<u>.860</u>	<u>3.2</u>	<u>9.23</u>	<u>.545</u>
<u>1209</u>	<u>7.50</u>	<u>12.56</u>	<u>9.05</u>	<u>-123</u>	<u>.790</u>	<u>3.1</u>	<u>8.94</u>	<u>.506</u>
<u>1214</u>	<u>7.70</u>	<u>12.84</u>	<u>8.96</u>	<u>-125</u>	<u>.821</u>	<u>2.5</u>	<u>8.65</u>	<u>.526</u>

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

2 - 1 liter ambers

3 - 40 ml vials

1 - 250 ml plastic

1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: LTMW-~~803~~ 0320

Sample Time: 1214

Duplicate? Yes ☐ No ☒

MS/MSD? Yes ☐ No ☒

Shipped: Pace Courier Pickup ☒

Drop-off Albany Service Center ☐

Comments/Notes: _____

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. LTMW-003-503

Date: 3/18

Weather: P.C.

Time In: 1225

Time Out: 1309

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>1.80</u>	
Depth to Bottom:	(feet)	<u>40.73/37.70</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>38.43</u>	<u>11.90</u>
Volume of Water in Well:	(gal)	<u>6.2</u>	<u>1.9</u>
Three Well Volumes:	(gal)	<u>18.6</u>	<u>5.7</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) 220
Duration of Pumping: (min) 70
Total Volume Removed: (gal) 2.5

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)	DO (g/L)
1228	1.80	11.35	7.97	-82	469	12.4	1305	9.88
1233	1.80	11.20	7.80	-83	470	9.9	1306	8.16
1238	1.80	11.20	7.75	-85	473	7.9	1307	7.91
1243	1.80	11.03	7.66	-83	478	6.8	1310	7.73
1248	1.80	11.14	7.70	-91	484	5.9	1314	7.68
1253	1.80	11.12	7.70	-92	482	6.0	1313	7.65
1258	1.80	11.16	7.71	-92	480	5.5	1312	7.57

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: LTMW-003-0320

Sample Time: 1258

Duplicate? Yes ☐ No ☒
MS/MSD? Yes ☐ No ☒

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

Comments/Notes:

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-S04**

Date: 3/18

Weather: PIC

Time In: 1010

Time Out: 1050

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>7.10</u>	
Depth to Bottom:	(feet)	<u>17.26</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>10.16</u>	
Volume of Water in Well:	(gal)	<u>1.6</u>	
Three Well Volumes:	(gal)	<u>4.8</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) 2.5 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)
1012	7.20	7.37	7.09	264	1382	7.1	12.16	245
1017	7.30	7.07	7.20	214	1330	2.6	11.72	215
1022	7.35	6.86	7.15	197	1334	2.7	11.76	217
1027	7.35	6.89	7.16	257	1334	2.5	11.61	217
1032	7.35	6.91	7.20	272	1334	2.5	11.55	218
1037	7.35	6.95	7.35	297	1335	2.7	11.50	218
1042	7.35	6.92	7.37	297	1336	2.5	11.51	218

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-S04-0320**

Sample Time: 1042

Duplicate? ☐

MS/MSD? ☐

Yes ☐ No ☒

Yes ☐ No ☒

Shipped: Pace Courier Pickup ☒

Drop-off Albany Service Center ☐

Comments/Notes: None

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-D04**

Date: 3/18

Weather: PC

Time In: 10:51

Time Out: 11:35

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>8.25</u>	
Depth to Bottom:	(feet)	<u>46.36</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>38.11</u>	
Volume of Water in Well:	(gal)	<u>6</u>	
Three Well Volumes:	(gal)	<u>18</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 ☒
Tubing/Bailer Material: Teflon ☐ Stainless St. ☐
Sampling Method: Bailer ☐ Peristaltic ☒
Average Pumping Rate: (ml/min) 1220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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)
1054	9.20	9.20	7.19	263	1540	3.2	11.17	1346
1059	9.40	9.52	7.30	111	1582	3.0	10.15	1400
1104	9.50	9.79	7.53	-16	1631	2.5	9.88	1404
1109	9.50	9.95	7.89	-27	1612	2.4	9.62	1392
1114	9.50	10.13	8.06	-41	1629	2.9	9.23	1403
1119	9.50	10.06	8.15	-53	1632	2.3	9.14	1404
1124	9.50	10.13	8.19	-55	1633	2.1	9.04	1405

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

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

Sample ID: **LTMW-D04-0320**

Duplicate? Yes ☐ No ☒

Sample Time: 1124

MS/MSD? Yes ☐ No ☒

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

Comments/Notes: NONE

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-S05**

Date: 3/18

Weather: PL

Time In: 1349

Time Out: 1435

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>7.50</u>	
Depth to Bottom:	(feet)	<u>16.83</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>9.33</u>	
Volume of Water in Well:	(gal)	<u>1.5</u>	
Three Well Volumes:	(gal)	<u>4.5</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1350</u>	<u>7.50</u>	<u>12.69</u>	<u>10.01</u>	<u>25</u>	<u>1252</u>	<u>9.9</u>	<u>7.76</u>	<u>1228</u>
<u>1355</u>	<u>7.50</u>	<u>13.09</u>	<u>9.38</u>	<u>89</u>	<u>1330</u>	<u>6.3</u>	<u>7.50</u>	<u>1214</u>
<u>1400</u>	<u>7.50</u>	<u>12.68</u>	<u>8.99</u>	<u>117</u>	<u>1326</u>	<u>6.2</u>	<u>7.70</u>	<u>1212</u>
<u>1405</u>	<u>7.50</u>	<u>12.24</u>	<u>8.91</u>	<u>144</u>	<u>1288</u>	<u>4.7</u>	<u>8.48</u>	<u>1186</u>
<u>1410</u>	<u>7.50</u>	<u>11.95</u>	<u>8.89</u>	<u>159</u>	<u>1277</u>	<u>3.4</u>	<u>8.62</u>	<u>1180</u>
<u>1415</u>	<u>7.50</u>	<u>11.44</u>	<u>8.89</u>	<u>175</u>	<u>1275</u>	<u>3.2</u>	<u>8.70</u>	<u>1179</u>
<u>1420</u>	<u>7.50</u>	<u>11.57</u>	<u>8.89</u>	<u>182</u>	<u>1275</u>	<u>3.3</u>	<u>8.74</u>	<u>1178</u>

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-S05-0320**

Duplicate? Yes ☐ No ☒

Shipped: Pace Courier Pickup ☒

Sample Time: 1420

MS/MSD? Yes ☐ No ☒

Drop-off Albany Service Center ☐

Comments/Notes: _____

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD
Job Number: 0603123-134400-221
Well Id. LTMW-D05

Date: 3/18
Weather: P.C
Time In: 1310 Time Out: 1348

Well Information		TOC	Other
Depth to Water:	(feet)	<u>7.80</u>	
Depth to Bottom:	(feet)	<u>46.53</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>38.73</u>	
Volume of Water in Well:	(gal)	<u>6.1</u>	
Three Well Volumes:	(gal)	<u>18.5</u>	

Well Type:	Flushmount	<input 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		Conversion Factors	
Purging Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" 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"/>		0.04 0.16 0.66 1.47
Sampling Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/>		1 gallon=3.785L=3785mL=1337cu. feet
Average Pumping Rate:	(ml/min) <u>~220</u>		
Duration of Pumping:	(min) <u>30</u>		
Total Volume Removed:	(gal) <u>2.5</u>		
Horiba U-52 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)
1313	8.90	11.83	7.35	-82	1366	5.1	7.67	1236
1318	10.30	12.10	8.00	-91	1342	4.8	7.50	1227
1323	12.0	12.91	8.54	-93	1337	3.5	7.10	1219
1328	13.40	13.17	9.14	-74	1336	2.4	6.98	1218
1333	14.30	13.40	9.47	-61	1335	2.0	6.88	1218
1338	15	13.52	9.49	-57	1333	2.0	6.79	1217
1343	19.40	13.69	9.51	-45	1332	2.1	6.76	1216

Sampling Information:		2 - 1 liter ambers		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8270	SVOC PAH's	3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
EPA SW-846 Method 8260	VOC's BTEX	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
EPA Method 335.4	Cyanide	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
EPA Method 200.7	Metals			
Sample ID: <u>LTMW-D05-0320</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup	<input checked="" type="checkbox"/>	
Sample Time: <u>1343</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Drop-off Albany Service Center	<input type="checkbox"/>	
Comments/Notes: <u>none</u>		Laboratory: Pace Analytical	Greensburg, PA	

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-D06**

Date: 3/19

Weather: P.C

Time In: 1:52

Time Out: 12:45

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>11.00</u>	
Depth to Bottom:	(feet)	<u>52.22</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>41.22</u>	
Volume of Water in Well:	(gal)	<u>6.5</u>	
Three Well Volumes:	(gal)	<u>19.7</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>11:55</u>	<u>11.60</u>	<u>9.29</u>	<u>9.63</u>	<u>-40</u>	<u>1633</u>	<u>4</u>	<u>10.95</u>	<u>1.391</u>
<u>12:00</u>	<u>12.10</u>	<u>10.48</u>	<u>10.11</u>	<u>-92</u>	<u>1437</u>	<u>2.3</u>	<u>10.01</u>	<u>1.284</u>
<u>12:05</u>	<u>12.20</u>	<u>10.67</u>	<u>10.20</u>	<u>-79</u>	<u>1444</u>	<u>2.1</u>	<u>9.51</u>	<u>1.289</u>
<u>12:10</u>	<u>12.20</u>	<u>10.78</u>	<u>10.13</u>	<u>-68</u>	<u>1469</u>	<u>2.1</u>	<u>9.17</u>	<u>1.305</u>
<u>12:15</u>	<u>12.20</u>	<u>10.86</u>	<u>10.11</u>	<u>-62</u>	<u>1489</u>	<u>2.0</u>	<u>8.82</u>	<u>1.318</u>
<u>12:20</u>	<u>12.20</u>	<u>10.91</u>	<u>10.10</u>	<u>-60</u>	<u>1494</u>	<u>2</u>	<u>8.62</u>	<u>1.322</u>
<u>12:25</u>	<u>12.20</u>	<u>10.95</u>	<u>10.06</u>	<u>-59</u>	<u>1506</u>	<u>2</u>	<u>8.45</u>	<u>1.324</u>

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-D06-0320**

Duplicate? Yes ☐ No ☒

Shipped: Pace Courier Pickup ☒

Sample Time: 12:25

MS/MSD? Yes ☐ No ☒

Drop-off Albany Service Center ☐

Comments/Notes: NONE

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-S06**

Date: 3/19

Weather: P.C.

Time In: 1110

Time Out: 1151

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>11.70</u>	
Depth to Bottom:	(feet)	<u>17.60</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>5.9</u>	
Volume of Water in Well:	(gal)	<u>1.9</u>	
Three Well Volumes:	(gal)	<u>2.8</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-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=1337cu. feet

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1113</u>	<u>11.70</u>	<u>8.60</u>	<u>10.06</u>	<u>-61</u>	<u>1.20</u>	<u>300</u>	<u>7.74</u>	<u>773</u>
<u>1118</u>	<u>11.70</u>	<u>8.54</u>	<u>9.85</u>	<u>-46</u>	<u>1.21</u>	<u>23</u>	<u>7.55</u>	<u>776</u>
<u>1123</u>	<u>11.70</u>	<u>8.55</u>	<u>9.87</u>	<u>-48</u>	<u>1.21</u>	<u>8</u>	<u>7.61</u>	<u>775</u>
<u>1128</u>	<u>11.70</u>	<u>8.55</u>	<u>9.81</u>	<u>-46</u>	<u>1.21</u>	<u>5</u>	<u>7.74</u>	<u>773</u>
<u>1133</u>	<u>11.70</u>	<u>8.57</u>	<u>9.76</u>	<u>-42</u>	<u>1.20</u>	<u>3.5</u>	<u>7.70</u>	<u>770</u>
<u>1138</u>	<u>11.70</u>	<u>8.58</u>	<u>9.78</u>	<u>-44</u>	<u>1.19</u>	<u>3.6</u>	<u>8.33</u>	<u>764</u>
<u>1143</u>	<u>11.70</u>	<u>8.58</u>	<u>9.76</u>	<u>-43</u>	<u>1.19</u>	<u>3.3</u>	<u>8.49</u>	<u>762</u>

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 - 1 liter ambers

Yes

No

3 - 40 ml vials

Yes

No

1 - 250 ml plastic

Yes

No

1 - 250 ml plastic

Yes

No

Sample ID: **LTMW-S06-0320**

Duplicate?

Yes

No

Sample Time: 1143

MS/MSD?

Yes

No

Shipped:

Pace Courier Pickup

Drop-off Albany Service Center

Comments/Notes:

Laboratory:

Pace Analytical

Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-S07**

Date: 3/18

Weather: Pic.

Time In: 0840

Time Out: 0920

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>9.75</u>	
Depth to Bottom:	(feet)	<u>17.82</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>8.57</u>	
Volume of Water in Well:	(gal)	<u>1.2</u>	
Three Well Volumes:	(gal)	<u>3.8</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) 6220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.15 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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
0842	10.70	7.51	8.73	-35	1698	11.8	10.94	1.442
0847	11.30	7.43	8.50	-11	1637	9.2	11.08	1.406
0852	11.30	7.45	8.38	-6	1637	7.7	10.81	1.408
0857	11.35	7.54	8.26	-14	1650	7.7	11.39	1.416
0902	11.45	7.69	8.30	-22	1657	4.9	11.20	1.421
0907	11.50	7.82	8.29	-22	1664	5	11.12	1.425
0912	11.55	7.93	8.31	-24	1664	5	11.00	1.425

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-S07-0320**

Duplicate? Yes ☐ No ☒

Sample Time: 0912

MS/MSD? Yes ☐ No ☒

Shipped:

Pace Courier Pickup ☒

Drop-off Albany Service Center ☐

Comments/Notes:

NONE

Laboratory:

Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PO

Job Number: 0603123-134400-221

Well Id. **LTMW-S08**

Date: 3/18

Weather: P.C.

Time In: 0923

Time Out: 1008

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>14.15</u>	
Depth to Bottom:	(feet)	<u>17.39</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>3.24</u>	
Volume of Water in Well:	(gal)	<u>48</u>	
Three Well Volumes:	(gal)	<u>1.5</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) ~200
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5
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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>0925</u>	<u>14.20</u>	<u>8.66</u>	<u>7.98</u>	<u>0</u>	<u>.559</u>	<u>1.0</u>	<u>12.05</u>	<u>.348</u>
<u>0930</u>	<u>14.20</u>	<u>8.63</u>	<u>7.73</u>	<u>50</u>	<u>.540</u>	<u>4.9</u>	<u>12.72</u>	<u>.345</u>
<u>0935</u>	<u>14.20</u>	<u>8.69</u>	<u>7.26</u>	<u>206</u>	<u>.540</u>	<u>3.5</u>	<u>13.39</u>	<u>.345</u>
<u>0940</u>	<u>14.20</u>	<u>8.75</u>	<u>7.20</u>	<u>231</u>	<u>.544</u>	<u>3.1</u>	<u>13.18</u>	<u>.349</u>
<u>0945</u>	<u>14.20</u>	<u>9.16</u>	<u>7.12</u>	<u>244</u>	<u>.542</u>	<u>2.8</u>	<u>11.89</u>	<u>.347</u>
<u>0950</u>	<u>14.20</u>	<u>9.37</u>	<u>7.03</u>	<u>252</u>	<u>.552</u>	<u>2.7</u>	<u>12.21</u>	<u>.354</u>
<u>0955</u>	<u>14.20</u>	<u>9.40</u>	<u>7.0</u>	<u>296</u>	<u>.550</u>	<u>2.8</u>	<u>12.15</u>	<u>.357</u>

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

2 - 1 liter ambers
3 - 40 ml vials
1 - 250 ml plastic
1 - 250 ml plastic

Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐
Yes ☒ No ☐

Sample ID: **LTMW-S08-0320**

Sample Time: 0955

Duplicate? Yes ☐ No ☒
MS/MSD? Yes ☐ No ☒

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

Comments/Notes: _____

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-S09**

Date: 3/19/20

Weather: rain

Time In: 0720 Time Out: 0815

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>9.00</u>	
Depth to Bottom:	(feet)	<u>16.92</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>7.96</u>	
Volume of Water in Well:	(gal)	<u>1.2</u>	
Three Well Volumes:	(gal)	<u>3.8</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) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2.5 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=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
0730	9.0	12.11	7.63	182	1597	3.8	13.04	383
0735	9.0	11.09	7.41	191	1672	4.7	11.57	431
0740	9.0	10.79	7.31	195	1694	3.6	11.85	444
0745	9.0	10.44	7.24	198	1716	3.3	11.66	458
0750	9.0	10.24	7.22	199	1753	2.9	11.35	483
0755	9.0	10.01	7.18	200	1749	2.9	11.25	480
0800	9.0	9.88	7.20	198	1753	3.2	11.18	483

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's 2 - 1 liter ambers Yes ☒ No ☐
EPA SW-846 Method 8260 VOC's BTEX 3 - 40 ml vials Yes ☒ No ☐
EPA Method 335.4 Cyanide 1 - 250 ml plastic Yes ☒ No ☐
EPA Method 200.7 Metals 1 - 250 ml plastic Yes ☒ No ☐

Field Duplicate 0320

Sample ID: **LTMW-S09-0320** Duplicate? Yes ☒ No ☐
Sample Time: 0800 MS/MSD? Yes ☐ No ☒
Shipped: Pace Courier Pickup ☒
Drop-off Albany Service Center ☐

Comments/Notes: ☐

Laboratory: Pace Analytical
Greensburg, PA

National Grid
Kingsley Avenue, Rome, New York

Sampling Personnel: PD

Job Number: 0603123-134400-221

Well Id. **LTMW-S10**

Date: 3/18

Weather: P.C

Time In: 740

Time Out: 838

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>9.60</u>	
Depth to Bottom:	(feet)	<u>17.18</u>	
Depth to Product:	(feet)	<u>NP</u>	
Length of Water Column:	(feet)	<u>7.98</u>	
Volume of Water in Well:	(gal)	<u>112</u>	
Three Well Volumes:	(gal)	<u>3.6</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: _____
Tubing/Bailer Material: _____
Sampling Method: _____
Average Pumping Rate: (ml/min) ~220
Duration of Pumping: (min) 30
Total Volume Removed: (gal) ~265
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)
0745	9.70	8.20	6.62	10	1.08	129	12.47	1692
750	9.70	8.17	6.62	-6	1.09	70	12.06	1695
755	9.70	8.12	6.85	-17	1.09	36	11.66	1699
800	9.70	8.10	7.22	-31	1.10	18	11.08	1703
805	9.90	8.11	7.61	-41	1.10	13	10.87	1704
810	9.90	8.13	8.08	-42	1.10	8	10.63	1704
815	9.90	8.20	8.10	-43	1.10	5	10.44	1703

Sampling Information:

EPA SW-846 Method 8270

EPA SW-846 Method 8260

EPA Method 335.4

EPA Method 200.7

LTMW-S10-MS-0320

SVOC PAH's

VOC's BTEX

Cyanide

Metals

LTMW-S10-MSD-0320

Sample ID: **LTMW-S10-0320**

Sample Time: 0815

Duplicate? Yes ☐ No ☒

MS/MSD? Yes ☒ No ☐

2 - 1 liter ambers

3 - 40 ml vials

1 - 250 ml plastic

1 - 250 ml plastic

Yes ☒ No ☐

Yes ☒ No ☐

Yes ☒ No ☐

Yes ☒ No ☐

Shipped: Pace Courier Pickup ☒

Drop-off Albany Service Center ☐

Comments/Notes: NONE

Laboratory: Pace Analytical
Greensburg, PA



30355667

Section A

Required Client Information:

Company: GES - Syracuse
Address: 5 Technology Place, Suite 4
East Syracuse, New York 13057
Email To: dshay@gesonline.com
Phone: 800.220.3069 Fax: None
x4051
Requested Due Date/TAT: Standard

Section B

Required Project Information:

Report To: Devin Shay (GES)
dshay@gesonline.com
Report To: Tim Beaumont (GES)
tbeaumont@gesonline.com
Purchase Order No.:
Project Name: National Grid - Rome
Kingsley Ave. Site, Rome, NY
Project Number:
0603123-134400-221-1106

Section C

Invoice Information:

Attention: Accounts Payable via email at ges-invoices@gesonline.com
Company Name: Groundwater & Environmental Services, Inc.
Address: 5 Technology Place, Suite 4, East Syracuse, NY 13057
Pace Quote Reference:
Pace Project Manager: Rachel Christner

Page: 1 of 2

Quarterly GWS

ITEM #	Section D Required Client Information		Valid Matrix Codes		MATRIX CODE	SAMPLE TYPE	G/GRAB C/COMP	COLLECTED				SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives										Requested Analysis:	<div>PTX (0000C) SVOCs (044B)(02700) Cyanide Total (035A) Metals Total (As, Pb, Zn) (0007)</div>										Pace Project Number Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	SAMPLE ID	One Character per box. (A-Z, 0-9 / .)	Samples IDs MUST BE UNIQUE	MATRIX				COMPOSITE START						GRAB				Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ SO ₄													Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
				DRINKING WATER				WATER	WASTEWATER	PRODUCT	SOL/SOLID			OIL	WPC	AIR	OTHER																					TISUE	DW	WT	WW	P	SL	OL	WP	AR	OT	TO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Additional Comments:

SAMPLES WILL ARRIVE IN

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COOLERS.

Please send reports to: dshay@gesonline.com, tbeaumont@gesonline.com

NERegion@gesonline.com, ges@equisonline.com

SPECIFIC EDD NAME:

NGRome-labnumber.28351.EQEDD.zip

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Pat D. Douglas	3/19	1430	Ben Beaumont	3/19	1430	YN	YN	YN	YN
						YN	YN	YN	YN
						YN	YN	YN	YN
SAMPLER NAME AND SIGNATURE						Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
PRINT Name of SAMPLER Pat D. Douglas									
SIGNATURE OF SAMPLER						DATE Signed (MM/DD/YY)			
						3/19/20			

CHAIN-OF-CUSTODY / Analytical Request Document

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

30355667

Page: 2 of 2

Section A

Required Client Information:

Company: GES - Syracuse
Address: 5 Technology Place, Suite 4
East Syracuse, New York 13057
Email To: dshay@gesonline.com
Phone: 800.220.3069 Fax: None
x4051
Requested Due Date/TAT: Standard

Section B

Required Project Information:

Report To: Devin Shay (GES)
dshay@gesonline.com
Report To: Tim Beaumont (GES)
tbeaumont@gesonline.com
Purchase Order No.:
Project Name: National Grid - Rome Kingsley
Ave. Site, Rome, NY
Project Number:
0603123-134400-221-1106

Section C

Invoice Information:

Attention: Accounts Payable via email at ges-invoices@gesonline.com
Company Name: Groundwater & Environmental Services, Inc.
Address: 5 Technology Place, Suite 4, East Syracuse, NY 13057
Pace Quote Reference:
Pace Project Manager: Rachel Christner

Quarterly GWS

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ THER _____

SITE

☐ SA ☐ L ☐ J ☐ HER _____

LOCATION

☐ CH ☐ IC ☐ JI ☐ HER _____

Filtered (Y/N)

Requested Analysis:

ITEM #	Section D Required Client Information		Valid Matrix Codes MATRIX DRINKING WATER WATER WASTE WATER PRODUCT SOLID/SLUD OIL WIRE AIR OTHER TOSSE	CODE OW WT WW P SL OL/WP AR OT TS	MATRIX CODE	SAMPLE TYPE	G-GRAB	C-COMP	COLLECTED				SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives										Requested Analysis:	Paco Project Number Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Additional Comments:

SAMPLES WILL ARRIVE IN

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COOLERS.

Please send reports to: dshay@gesonline.com, tbeaumont@gesonline.com

NERegion@gesonline.com, ges@equisonline.com

SPECIFIC EDD NAME:

GRome-labnumber.28351.EQEDD.zip

Page 45 of 46

RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS											
Pat D. GES		3/19	1430	[Signature]		3/19	1430		Y/N	Y/N	Y/N								
[Signature]		3-18	1700	[Signature]		3-20-2020	0955	9LW	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> Y								
									Y/N	Y/N	Y/N								
									Y/N	Y/N	Y/N								
SAMPLER NAME AND SIGNATURE								Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact								
												PRINT Name of SAMPLER							
												SIGNATURE of SAMPLER: [Signature]							
												DATE Signed (MM / DD / YY) 3/19/20							



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

April 15, 2020

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. 30355680, 30355667

Groundwater & Environmental Services, Inc. (GES) reviewed two data packages (Laboratory Project Number 30355680, 30355667) from Pace Analytical Services, Inc., for the analysis of an effluent sample and trip blank as well as groundwater samples collected March 19, 2020 from monitoring wells located at the National Grid: Rome Kingsley Avenue Site. Sixteen aqueous samples and a field duplicate were analyzed for BTEX, PAHs, arsenic, lead, zinc pH, and total cyanide. The effluent system sample was processed for TCL volatiles, eight metals, mercury and total cyanide. Methodologies utilized are those of the USEPA 200.7, 245.1 and 335.4, SM 4500H+B, the USEPA SW846 methods 7470/8260B/8270C 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	Analyzed after holding time
LTMW-S04 LTMW-S08 LTMW-S05	J: detects UJ: non- detects	All PAHs	Samples were dechlorinated before analysis
LTMW-S05	J-	Cyanide	Low MS/MSD recovery
LTMW-S10	Acenaphthene	J+	High MS/MSD recovery
LTMW-D04 LTMW-S04	J: detects UJ: non- detects	All PAHs	Low surrogate recoveries
LTMW-S09	R	Zinc	Not confirmed in duplicate sample

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.

Custody Documentation

- The timestamp on the sample LTMW-S10 differed from the recorded time on the COC – sample analyses were reported with the COC time. The data was not affected.
- Three bottles broke in transit to the laboratory, LTMW-D05, LTMW-D06, LTMW-S09. There was enough volume to run all analytical tests and the data was not affected.
- All samples arrived within the EPA acceptable range of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

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 QC samples. Bromomethane recovered low in the continuing calibration, but bromomethane spike recoveries passed criteria in the LCS and MS/MSD pair. The low calibration standard does not indicate an issue with the data.

Matrix spike and matrix spike recoveries were within laboratory specified criteria.

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 blind field duplicate correlations of LTMW-S09 fall within guidance limits. 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, with the exception that the recovery for acenaphthene was high, out-of-specification for the MS/MSD associated with LTM-S10. This resulted in uncertainty in the positive detection reported for LTMW-S10, with acenaphthene results qualified as estimated detect, with a possible high bias.

Three samples required dechlorination before analysis, resulting in a possible low bias in the sample. The PAH data is qualified as estimated for all compounds. Qualifications are detailed in Table 1.

Metals by EPA 200.7/EPA 245.3/NYSDEC ASP

The matrix spikes show acceptable accuracy and precision. The blind field duplicate correlations of LTMW-S09 fall within guidance limits, with the exception that the zinc concentration above the reporting limit in LTMW-S09 was not confirmed in the duplicate sample. Unconfirmed data cannot be considered representative of the sampling location and is qualified as unreliable, and is rejected “R”. Qualifications are noted in Table 1.

Instrument performance is compliant, and blanks show no contamination above the reporting limit. The detection of zinc above the reporting limit in LTMW-S09 was not confirmed in the duplicate sample. The data cannot be considered reliable, and is rejected “R”. Qualifications are noted in Table 1.

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 low bias for cyanide in LTMW-S05 noted by low recovery in the MSD. Cyanide is qualified as estimated non-detect in that sample. Calibration standard responses are compliant. Blanks show no detections above the reporting limits.

The post digestion spike associated with mercury in the effluent was high, but the sample reported non-detect and the high bias does not affect data quality.

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

All other matrix spikes and/or laboratory duplicates of total cyanide show acceptable 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,

A handwritten signature in blue ink that reads 'B Janowiak'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Bonnie Janowiak, Ph.D.
Senior Chemist

SAMPLE SUMMARY

Project: National Grid - Rome Kingsley

Pace Project No.: 30355667

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30355667001	LTMW-D01-0320	Water	03/19/20 08:52	03/20/20 09:55
30355667002	LTMW-S01-0320	Water	03/19/20 09:35	03/20/20 09:55
30355667003	LTMW-D02-0320	Water	03/19/20 11:00	03/20/20 09:55
30355667004	LTMW-S02-0320	Water	03/19/20 10:17	03/20/20 09:55
30355667005	LTMW-D03-0320	Water	03/18/20 12:14	03/20/20 09:55
30355667006	LTMW-S03-0320	Water	03/18/20 12:58	03/20/20 09:55
30355667007	LTMW-D04-0320	Water	03/18/20 11:24	03/20/20 09:55
30355667008	LTMW-S04-0320	Water	03/18/20 10:42	03/20/20 09:55
30355667009	LTMW-D05-0320	Water	03/18/20 13:43	03/20/20 09:55
30355667010	LTMW-S05-0320	Water	03/18/20 14:20	03/20/20 09:55
30355667011	LTMW-D06-0320	Water	03/19/20 12:25	03/20/20 09:55
30355667012	LTMW-S06-0320	Water	03/19/20 11:43	03/20/20 09:55
30355667013	LTMW-S07-0320	Water	03/18/20 09:12	03/20/20 09:55
30355667014	LTMW-S08-0320	Water	03/18/20 09:55	03/20/20 09:55
30355667015	LTMW-S09-0320	Water	03/19/20 08:00	03/20/20 09:55
30355667016	LTMW-S10-0320	Water	03/18/20 08:15	03/20/20 09:55
30355667017	Field Duplicate-0320	Water	03/18/20 00:01	03/20/20 09:55
30355667018	Trip Blank	Water	03/18/20 00:01	03/20/20 09:55

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355667

Method: 200.7 Rev4.4, 1994

Description: 200.7 Metals, Total

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

Date: March 30, 2020

General Information:

17 samples were analyzed for 200.7 Rev4.4, 1994. 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 200.7 Rev4.4, 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.: 30355667

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

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

Date: March 30, 2020

General Information:

17 samples were analyzed for EPA 8270D by SIM. 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.

ip: Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. Whereas sample results included are reported as individual isomers, the lab and the customer must recognize them as an isomeric pair.

- LTMW-D03-0320 (Lab ID: 30355667005)

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.

QC Batch: 389614

S5: Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

- LTMW-D04-0320 (Lab ID: 30355667007)
 - Terphenyl-d14 (S)
- LTMW-S04-0320 (Lab ID: 30355667008)
 - Terphenyl-d14 (S)

SR: Surrogate recovery was below laboratory control limits. Results may be biased low.

- LTMW-D04-0320 (Lab ID: 30355667007)
 - Terphenyl-d14 (S)
- LTMW-S04-0320 (Lab ID: 30355667008)
 - Terphenyl-d14 (S)

Method Blank:

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

Laboratory Control Spike:

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

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355667

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

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

Date: March 30, 2020

Matrix Spikes:

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

QC Batch: 389614

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30355667016

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

- MSD (Lab ID: 1887162)
- Acenaphthene

Additional Comments:

Analyte Comments:

QC Batch: 389614

1c: Sample was dechlorinated prior to extraction.

- LTMW-S04-0320 (Lab ID: 30355667008)
 - 2-Methylnaphthalene
 - Acenaphthene
 - Acenaphthylene
 - Anthracene
 - Benzo(k)fluoranthene
 - Benzo(g,h,i)perylene
 - Benzo(a)anthracene
 - Benzo(b)fluoranthene
 - Benzo(a)pyrene
 - Chrysene
 - Dibenzo(a,h)anthracene
 - Fluorene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Naphthalene
 - Phenanthrene
 - Pyrene
- LTMW-S05-0320 (Lab ID: 30355667010)
 - 2-Methylnaphthalene
 - Acenaphthene
 - Acenaphthylene
 - Anthracene
 - Benzo(k)fluoranthene
 - Benzo(g,h,i)perylene
 - Benzo(a)anthracene
 - Benzo(b)fluoranthene
 - Benzo(a)pyrene
 - Chrysene
 - Dibenzo(a,h)anthracene
 - Fluorene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355667

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

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

Date: March 30, 2020

Analyte Comments:

QC Batch: 389614

1c: Sample was dechlorinated prior to extraction.

- LTMW-S05-0320 (Lab ID: 30355667010)

- Fluoranthene
- Indeno(1,2,3-cd)pyrene
- Naphthalene
- Phenanthrene
- Pyrene

- LTMW-S08-0320 (Lab ID: 30355667014)

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

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355667

Method: EPA 8260C

Description: 8260C MSV

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

Date: March 30, 2020

General Information:

18 samples were analyzed for EPA 8260C. 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: 389268

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

- BLANK (Lab ID: 1885832)
 - Bromomethane
- LCS (Lab ID: 1885833)
 - Bromomethane
- MS (Lab ID: 1886124)
 - Bromomethane
- MSD (Lab ID: 1886125)
 - Bromomethane
- Trip Blank (Lab ID: 30355667018)
 - 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.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355667

Method: EPA 335.4

Description: 335.4 Cyanide, Total

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

Date: March 30, 2020

General Information:

17 samples were analyzed for EPA 335.4. 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: 389225

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30355667010,30355667016

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

- MS (Lab ID: 1885667)
- 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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SAMPLE SUMMARY

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30355680001	Effluent System 0320	Water	03/19/20 13:00	03/20/20 09:55
30355680002	Trip Blank	Water	03/19/20 00:01	03/20/20 09:55

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Method: 200.7 Rev4.4, 1994

Description: 200.7 Metals, Total

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

Date: March 27, 2020

General Information:

1 sample was analyzed for 200.7 Rev4.4, 1994. 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 200.7 Rev4.4, 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:

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Method: 245.1 Rev. 3.0, 1994

Description: 245.1 Mercury

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

Date: March 27, 2020

General Information:

1 sample was analyzed for 245.1 Rev. 3.0, 1994. 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 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: 389759

1c: The PDS recovery was outside of the laboratory control limits. Result may be biased high

- Effluent System 0320 (Lab ID: 30355680001)
 - Mercury

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

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

Date: March 27, 2020

General Information:

1 sample was analyzed for EPA 8270D by SIM. 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: 389614

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30355667016

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

- MSD (Lab ID: 1887162)
- Acenaphthene

Additional Comments:

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Method: EPA 8260C

Description: 8260C MSV

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

Date: March 27, 2020

General Information:

2 samples were analyzed for EPA 8260C. 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.

QC Batch: 389188

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30354046003

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

- MS (Lab ID: 1885542)
 - Acetone
- MSD (Lab ID: 1885543)
 - Acetone

Additional Comments:

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Method: SM 4500H+B-2011

Description: 4500H+ pH, Electrometric

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

Date: March 27, 2020

General Information:

1 sample was analyzed for SM 4500H+B-2011. 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 0320 (Lab ID: 30355680001)

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

- Effluent System 0320 (Lab ID: 30355680001)

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:

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PROJECT NARRATIVE

Project: National Grid - Rome Kingsley

Pace Project No.: 30355680

Method: EPA 335.4

Description: 335.4 Cyanide, Total

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

Date: March 27, 2020

General Information:

1 sample was analyzed for EPA 335.4. 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: 389225

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30355667010,30355667016

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

- MS (Lab ID: 1885667)
- Cyanide

Additional Comments:

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

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