

December 1, 2021

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

Re: National Grid Kingsley Avenue Site Rome, New York 2021 3<sup>rd</sup> Quarter OM&M Report

Dear Mr. Starr:

Enclosed for your review is the 2021 3<sup>rd</sup> Quarter Operation, Maintenance, and Monitoring (OM&M) Report for the National Grid Rome (Kingsley Avenue) Site. OM&M is being conducted in accordance with the Site Management Plan (SMP). National Grid submitted the SMP and Final Engineering Report (FER) on November 30, 2019. The NYSDEC approved the SMP and FER on May 8, 2020.

The completed quarterly OM&M activities included:

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

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

Mr. Justin Starr, PG December 1, 2021 Page 2 of 2

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

Very truly yours,

for SPS

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

**Enclosures** 

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

National Grid

# 2021 3<sup>rd</sup> Quarter Operations, Maintenance, and Monitoring Report



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

December 2021

Version 1





## 2021 3<sup>rd</sup> Quarter OM&M Report

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

Prepared for: National Grid 300 Erie Boulevard West, C-1 Syracuse, NY 13202

Prepared by: Groundwater & Environmental Services, Inc. 6780 Northern Boulevard, Suite 100 East Syracuse, NY 13057 TEL: 800-220-3069

GES Project: 0603275.134400.221

www.gesonline.com

Date:

December 1, 2021

Devin T. Shay, PG Program Manager / Principal Hydrogeologist



## **Table of Contents**

1	In	troduction	1
	1.1	Overview	1
	1.2	Site Description	1
	1.3	Site History	2
2	Ο	peration, Maintenance, and Monitoring Activities	5
	2.1	Quarterly Site Inspection	5
	2.2	Quarterly Static Water Level Measurements	5
	2.3	Quarterly Groundwater Monitoring Event	5
	2.4	Quarterly Light Non-Aqueous Phase Liquid and Dense Non-Aqueous Phase Liquid Monitoring/Collection Event	
	2.5	Quarterly Groundwater Extraction System Discharge Sampling Event	7
	2.6	Groundwater Extraction System Discharge Flow and Operation, Maintenance, an Monitoring	
	2.7	Vegetation Management and Snow Removal	8
3	C	onclusions, Recommendations, and Certifications	9
	3.1	Conclusions	9
	3.2	Recommendations	9
	3.3	Certifications1	0



## **Figures**

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Site Map – West

Figure 4 – Site Map – East

Figure 5 – Barrier Wall Profile

## **Tables**

Table 1 – Groundwater Extraction System Discharge Flow

Table 2 – Site Monitoring Wells

Table 3 – Historical Groundwater Data

Table 4 – Groundwater Analytical Data

Table 5 – Discharge Analytical Data

## **Appendices**

Appendix A – Field Inspection Report

Appendix B - Quarterly Gauging Data

Appendix C - Well Sampling Field Data

Appendix D - Data Usability Summary Report and Analytical Data



## 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,	POTW	Publically Owned Treatment Works
OLO	Inc.	QA/QC	Quality Assurance / Quality Control
gpm	Gallons per Minute	ROD	Record of Decision
IRM	Interim Remedial Measures	SMP	Site Management Plan
LNAPL	Light Non-Aqueous Phase Liquid	USEPA	United States Environmental Protection
MGP	Manufactured Gas Plant		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 2021 3<sup>rd</sup> Quarter Operations, Maintenance, and Monitoring Report (OM&M) on behalf of National Grid. This report compiles the OM&M activities completed in the 3<sup>rd</sup> quarter of 2021 at the Former Kingsley Avenue Manufactured Gas Plant (MGP) Site (the Site), located in Rome, New York. The Site has been classified as a Class 2 inactive hazardous waste disposal site by the New York State Department of Environmental Conservation (NYSDEC) and is identified as Site No. 633043.

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

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

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

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

This OM&M Quarterly Report covers OM&M activities conducted during April, May, and June 2021.

## 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 2021 3<sup>rd</sup> quarter site inspection on September 23, 2021. 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 September 22 and 23, 2021. **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 435 (**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 2021 3<sup>rd</sup> quarter groundwater monitoring event was conducted on September 22 and 23, 2021. 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 zinc above the New York State regulatory maximum allowable limits. A summary of laboratory analytical results is provided in **Table 4**. Zinc levels above the guidance value provided in NYSDEC's Technical and Operational Guidance Series section 1.1.1. were only observed at LTMW-S03. Of the 16 wells sampled, three (3) wells (LTMW-D01, LTMW-S01, and LTMW-D03) had BTEX concentrations above the New York State Groundwater Ambient Water Quality Standards (AWQS) and four (4) wells (LTMW-D01, LTMW-S01, LTMW-D03, and LTMW-S10) had semi-volatile organic compound detections above the AWQS. Cyanide concentrations were detected above the AWQS in LTMW-S04 only. Results indicated no detections of any compound for LTMW-D05, LTMW-D06, LTMW-S07, and LTMW-S09.

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 September 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 two site wells: MW-OU2-1 and MW-OU2-4.



As part of the NAPL monitoring/collection event, a total of 12.5 gallons of DNAPL were collected (5.0 gallons from MW-OU2-1, 2.0 gallons from MW-OU2-2, and 5.5 gallons from MW-OU2-4) during this quarter.

Since the start of the NAPL monitoring/collection program, a total of approximately 590 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 September 23, 2021, and analyzed by Pace for the permit-specified parameters. No detections above permit limits were noted. **Table 5** provides the analytical results compared to the permit limits.

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

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

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

A mechanical flow meter is located within the Site building and serves as the recording device for the effluent water. During this reporting period, 3,430,816 gallons (average flow ~ 25.9 gpm) were discharged. Since the groundwater extraction system was installed, approximately 178.9 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	13,710,857
2021 1 <sup>st</sup> Quarter	3,337,395
2021 2 <sup>nd</sup> Quarter	3,105,148
2021 3 <sup>rd</sup> Quarter	3,430,816
TOTAL	178,938,401

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 3<sup>rd</sup> quarter 2021 as needed.



## 3 Conclusions, Recommendations, and Certifications

#### 3.1 Conclusions

Based on data collected from the 2021 3<sup>rd</sup> 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 3<sup>rd</sup> quarter 2021.
- Quarterly static water level measurements were collected at ten groundwater monitoring wells
  upgradient of the steel sheeting barrier within the gravel extraction trench. The static water
  levels of the upgradient wells (ranging between 425 to 429 feet above sea level) did not
  overtop the barrier wall (top of wall ranges between 435 to 437 feet above sea level).
- Site groundwater contained detectable concentrations of BTEX, acenaphthene, benzo(a)anthracene, chrysene, cyanide, and fluorene above the New York State regulatory maximum allowable limits. Additionally, analytical results for well LTMW-S03 indicated zinc above the NYSDEC AWQS guidance values. Six (6) of the 16 wells (LTMW-D01, LTMW-S01, LTMW-D03, LTMW-S03, LTMW-S04, 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 (12.5 gallons) was removed from two wells (MW-OU2-1 and MW-OU2-4). Approximately 590 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 25.9 gpm, and a quarterly total of 3,430,816 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 178.9 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.

Name: Gerald H. Cresap, P.E. Title: Director of Engineering

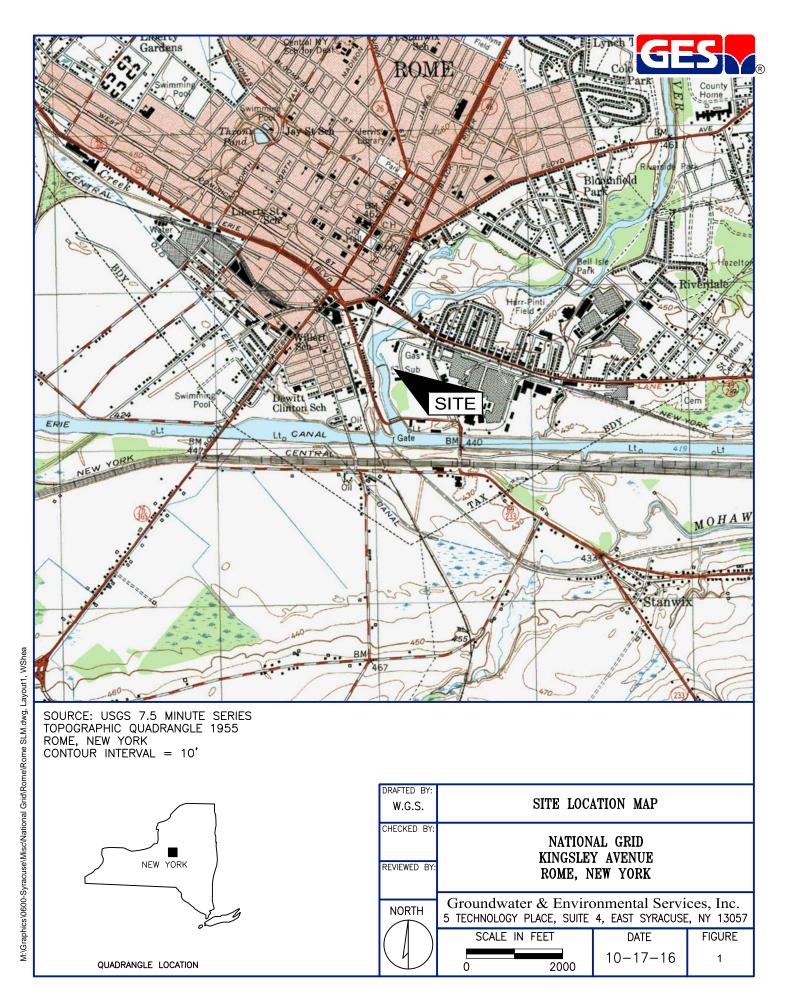
Company: Groundwater & Environmental Service

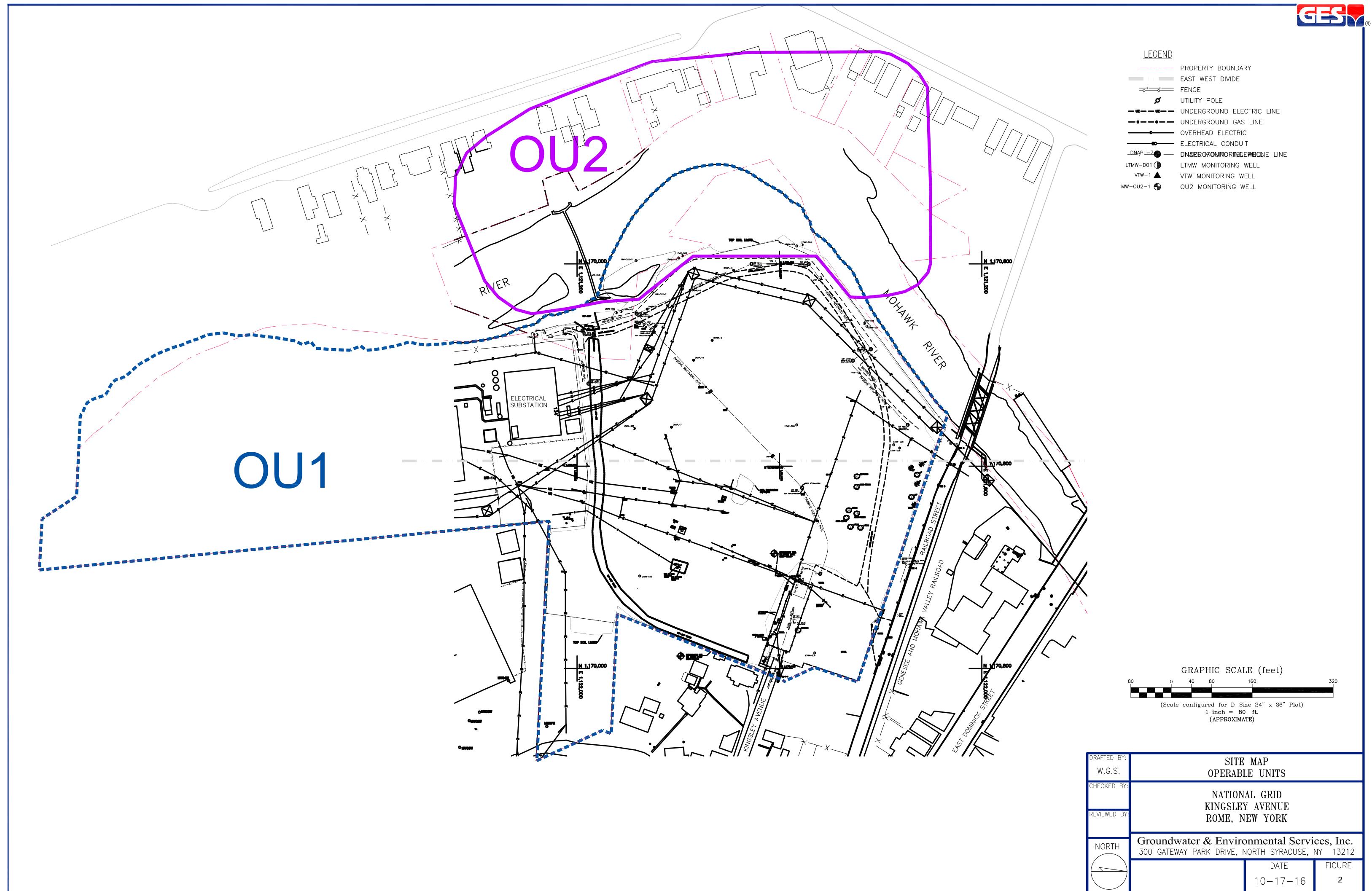
12-1-2021

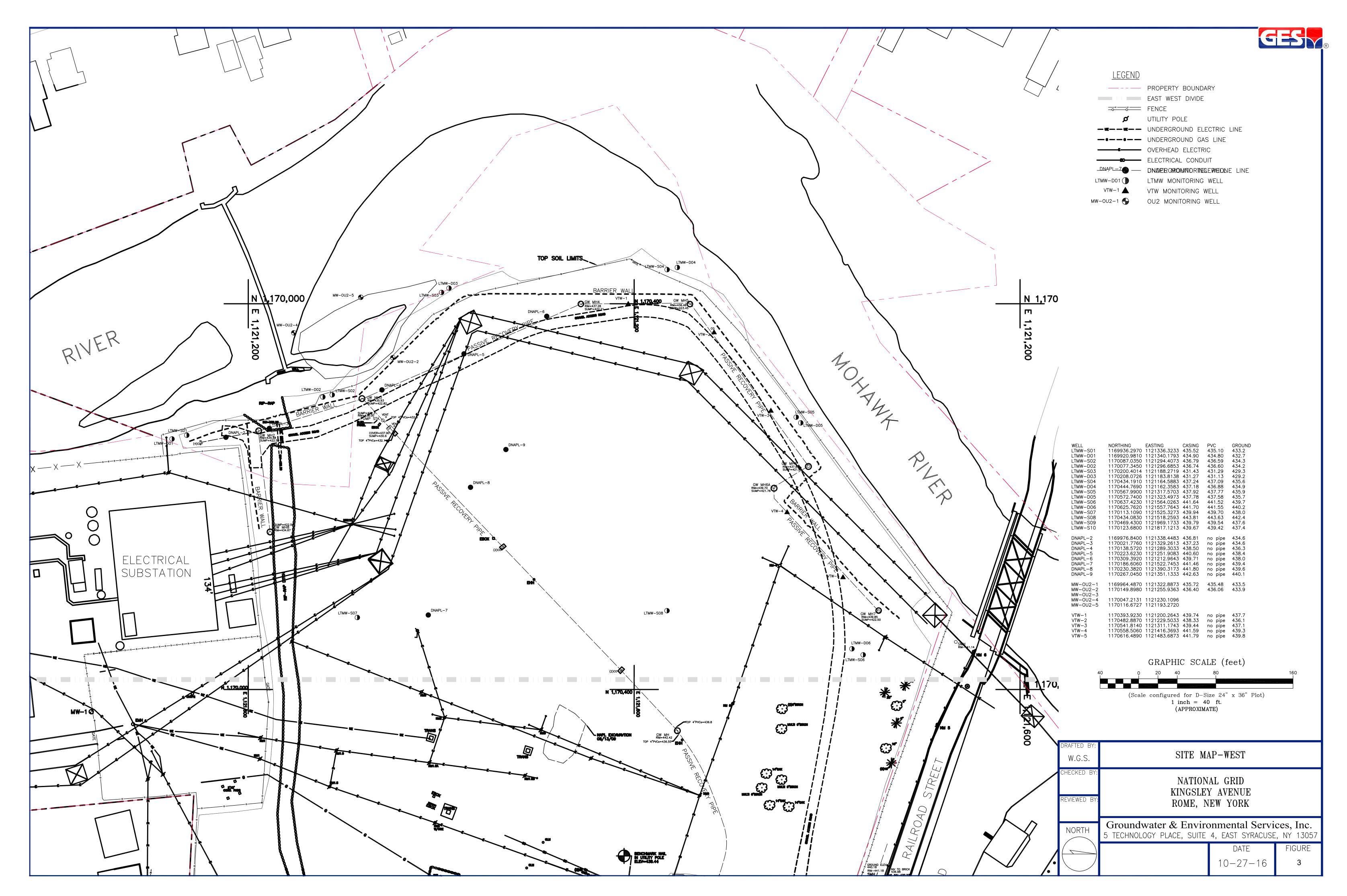
2021 3<sup>rd</sup> Quarter OM&M Report National Grid Rome Former MGP Site 233 Kingsley Avenue, Rome, NY 13440



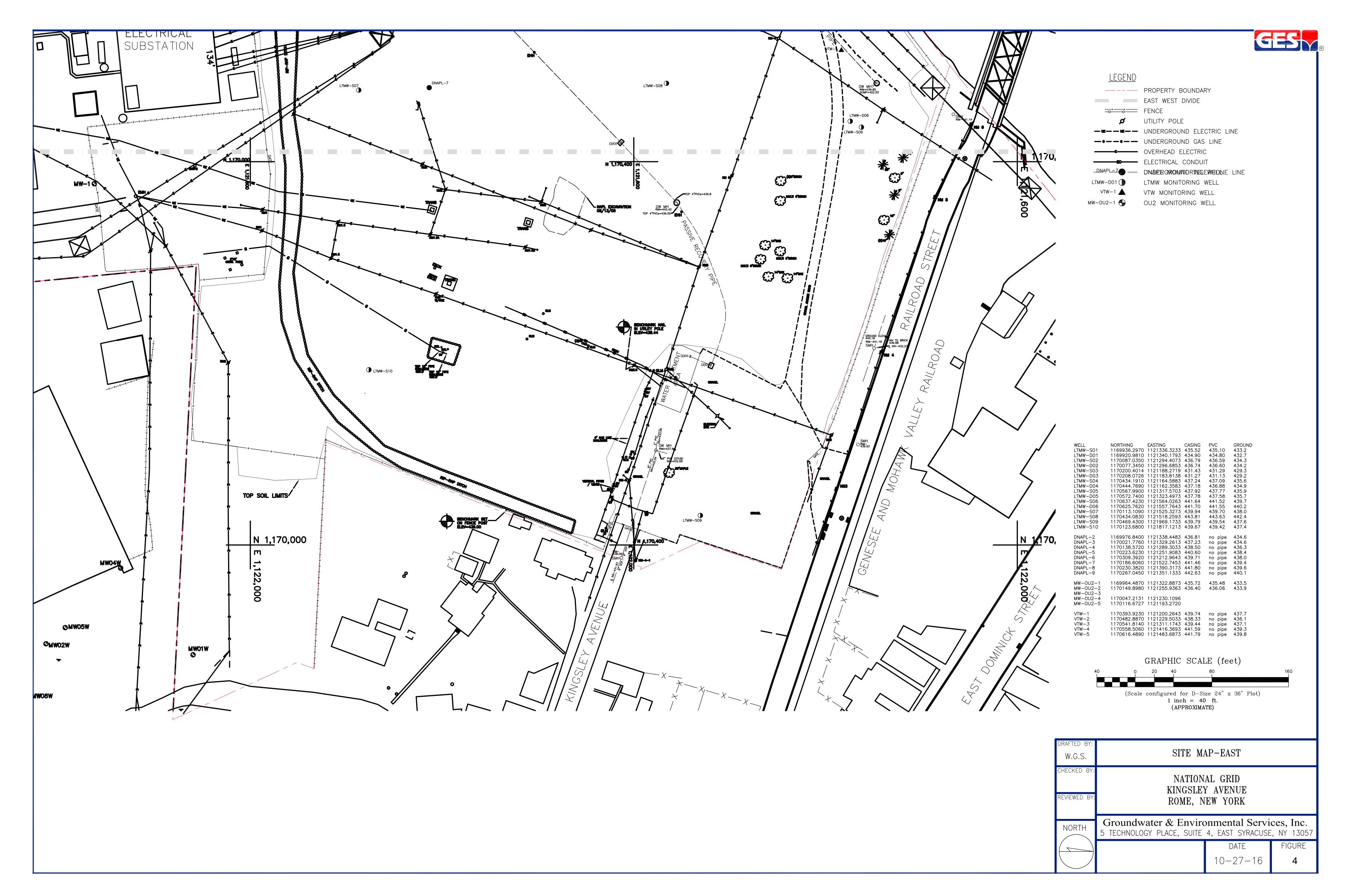
# **Figures**





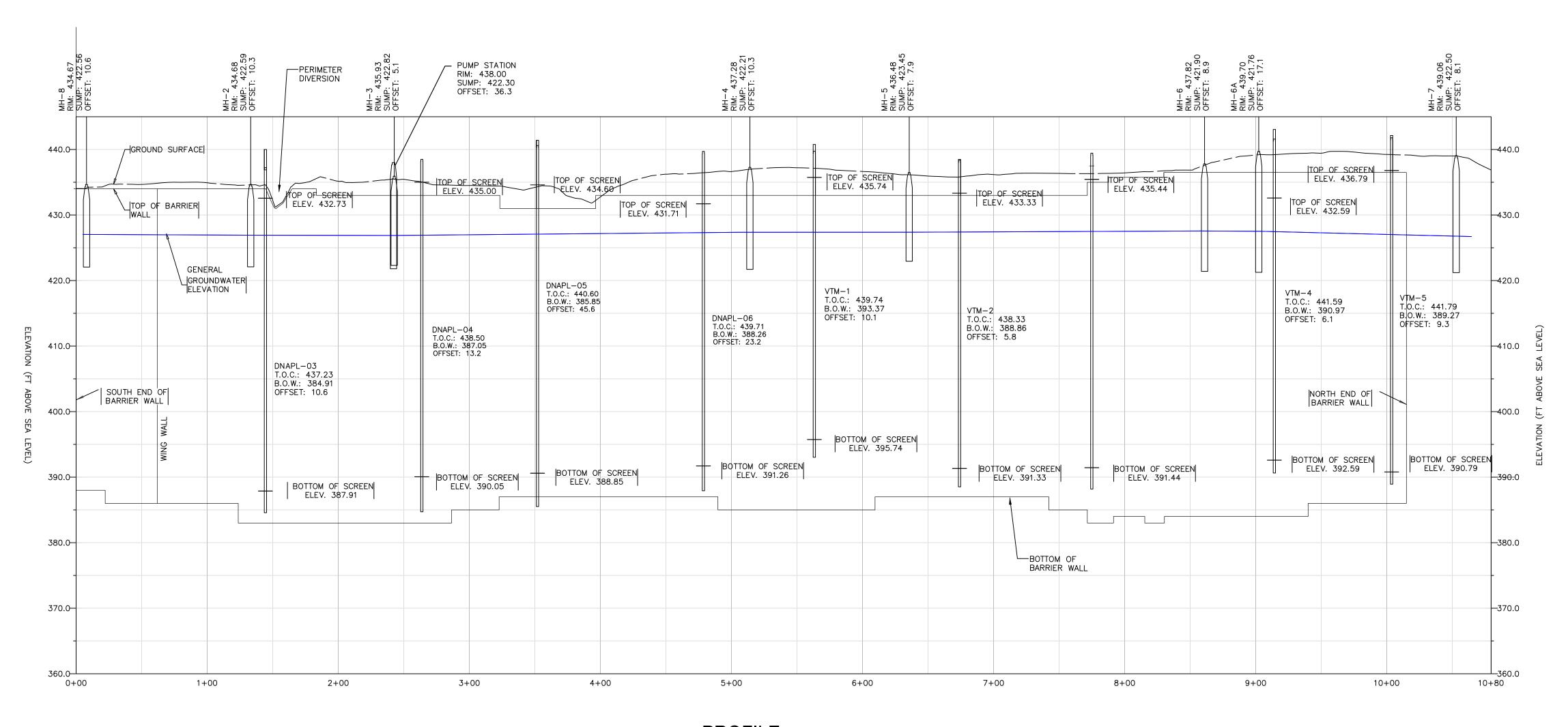


Graphics\0600-Syracuse\Wisc\National Grid\Rome\Rome SM.dwg, D-40-W, WShea



M:\Graphics\0600-Syracuse\Misc\National Grid\Rome\Rome SM.dwg, D-40-E, WSF





PROFILE

HORIZONTAL: 1" = 50'

VERTICAL: 1" = 10'

LEGEND

T.O.C. TOP OF CASING

B.O.W. BOTTOM OF WELL

TOP OF WALL

GROUNDWATER ELEVATION (JUNE 2012)

NOTES

1. THE DEPTH OF THE BARRIER WALL IS APPROXIMATELY 50 FEET.

2. GROUNDWATER ELEVATION MEASUREMENTS TAKEN JUNE 2012.

DRAFTED BY: W.G.S.	BARRIER WA	ALL PROFILE	
CHECKED BY:  REVIEWED BY:	KINGSLE	AL GRID Y AVENUE IEW YORK	
NORTH	Groundwater & Environment 500 GATEWAY PARK DRIVE, N		,
		DATE 10-17-16	FIGURE <b>5</b>

M:\Graphics\0600-Syracuse\Wisc\National Grid\Rome\Rome Profile.dwg, D., WShea

2021 3<sup>rd</sup> Quarter OM&M Report National Grid Rome Former MGP Site 233 Kingsley Avenue, Rome, NY 13440



# **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 Leve Measurement
															Quarterly Inspection; Quarterly Static Water Leve
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	Measurement Quarterly Inspection; Quarterly Static Water Leve
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	Measurement (Surveyed in January 2014) Quarterly Inspection; Quarterly Static Water Leve
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	Measurement (Surveyed in January 2014) Quarterly Inspection; Quarterly Static Water Leve
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	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
DIVILE OF	117002117700	1121020.2010	404.0	407.20		Ü		0.0	02.02	004.01	4.0	402.70	40.0	001.01	Quarterly Inspection; Quarterly Static Water Level
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	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
															Quarterly Inspection; Quarterly Static Water Level
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	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 Quarterly Inspection; Quarterly Static Water Leve
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	Measurement Quarterly Inspection; Quarterly Static Water Leve
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	Measurement Quarterly Inspection; Quarterly Static Water Leve
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	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 Leve 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 Leve 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 Leve Measurement; Quarterly Sampling Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling  Quarterly Inspection; Quarterly Static Water Leve
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	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 Leve 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 Leve 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 Leve 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 Leve 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 Leve 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 Leve 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 Leve Measurement; Quarterly Sampling
															Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling Quarterly Inspection; Quarterly Static Water Leve
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	Measurement; Quarterly Sampling

- Notes:

  1) Shallow monitoring wells were sampled with a low flow peristaltic pump with battery pa
  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 ca



Table 3

Historical Groundwater Data
Operable Unit 2 Wells

Well	MW-	OU2-1	Well	MW-	OU2-2	Well	MW	'-OU2-3	Well	MW	/-OU2-4	Well	MW	-OU2-5
	TOC =	435.72		TOC =	436.40		TOC =	432.96		TOC =	432.88		TOC =	433.46
Date	DTW	Water El.												
09/22/21	4.35	431.37	09/22/21	10.25	426.15	09/22/21	6.92	426.04	09/22/21	6.89	425.99	09/22/21	7.62	425.84
06/09/21	10.34	425.38	06/09/21	9.45	426.95	06/09/21	7.03	425.93	06/09/21	6.98	425.90	06/09/21	7.89	425.57
03/18/21	9.29	426.43	03/18/21	10.16	426.24	03/18/21	6.87	426.09	03/18/21	6.81	426.07	03/18/21	7.53	425.93
12/03/20	9.40	426.32	12/03/20	10.29	426.11	12/03/20	6.91	426.05	12/03/20	6.88	426.00	12/03/20	7.59	425.87
09/11/20	9.66	426.06	09/11/20	10.62	425.78	09/11/20	7.25	425.71	09/11/20	7.20	425.68	09/11/20	7.91	425.55
06/11/20	10.06	425.66	06/11/20	10.82	425.58	06/11/20	7.10	425.86	06/11/20	7.10	425.78	06/11/20	7.75	425.71
03/20/20	8.10	427.62	03/20/20	9.25	427.15	03/20/20	6.40	426.56	03/20/20	5.40	427.48	03/20/20	6.05	427.41
12/05/19	9.20	426.52	12/05/19	10.10	426.30	12/05/19	6.70	426.26	12/05/19	6.68	426.20	12/05/19	7.37	426.09
09/19/19	9.54	426.18	09/19/19	10.90	425.50	09/19/19	6.95	426.01	09/19/19	6.90	425.98	09/19/19	7.60	425.86
06/06/19	8.90	426.82	06/06/19	9.60	426.80	06/06/19	6.18	426.78	06/06/19	6.05	426.83	06/06/19	6.23	427.23
03/21/19	8.65	427.07	03/21/19	9.80	426.60	03/21/19	6.00	426.96	03/21/19	5.90	426.98	03/21/19	6.50	426.96
12/05/18	8.90	426.82	12/05/18	9.05	427.35	12/05/18	5.69	427.27	12/05/18	5.60	427.28	12/05/18	6.25	427.21
09/13/18	9.58	426.14	09/13/18	10.40	426.00	09/13/18	7.02	425.94	09/13/18	7.06	425.82	09/13/18	7.72	425.74
06/07/18	9.53	426.19	06/07/18	10.25	426.15	06/07/18	7.90	425.06	06/07/18	6.90	425.98	06/07/18	7.56	425.90
03/22/18	9.15	426.57	03/22/18	9.85	426.55	03/22/18	6.60	426.36	03/22/18	6.55	426.33	03/22/18	7.20	426.26
12/06/17	9.37	426.35	12/06/17	9.96	426.44	12/06/17	6.60	426.36	12/06/17	6.50	426.38	12/06/17	7.20	426.26
09/01/17	9.53	426.19	09/01/17	10.35	426.05	09/01/17	NM	-	09/01/17	6.98	425.90	09/01/17	7.73	425.73
06/23/17	9.35	426.37	06/23/17	10.02	426.38	06/23/17	7.10	425.86	06/23/17	6.70	426.18	06/23/17	7.15	426.31
03/08/17	8.68	427.04	03/08/17	5.94	430.46	03/08/17	5.93	427.03	03/08/17	5.94	426.94	03/08/17	6.62	426.84
12/15/16	8.91	426.81	12/15/16	9.80	426.60	12/15/16	6.42	426.54	12/15/16	6.35	426.53	12/15/16	7.02	426.44
09/19/16	9.58	426.14	09/19/16	10.52	425.88	09/19/16	7.29	425.67	09/19/16	7.15	425.73	09/19/16	7.84	425.62
06/07/16	9.45	426.27	06/07/16	10.28	426.12	06/07/16	6.95	426.01	06/07/16	6.87	426.01	06/07/16	7.57	425.89
03/07/16	8.45	427.27	03/07/16	9.28	427.12	03/07/16	5.91	427.05	03/07/16	5.82	427.06	03/07/16	6.49	426.97
12/02/15	9.30	426.42	12/02/15	10.19	426.21	12/02/15	6.85	426.11	12/02/15	6.77	426.11	12/02/15	7.44	426.02
09/16/15	9.66	426.06	09/16/15	10.47	425.93	09/16/15	7.15	425.81	09/16/15	7.05	425.83	09/16/15	7.74	425.72
06/03/15	9.34	426.38	06/03/15	9.73	426.67	06/03/15	6.41	426.55	06/03/15	6.34	426.54	06/03/15	6.95	426.51
04/08/15	8.63	427.09	04/08/15	9.29	427.11	04/08/15	6.14	426.82	04/08/15	5.96	426.92	04/08/15	6.98	426.48
12/01/14	9.32	426.40	12/01/14	9.84	426.56	12/01/14	6.49	426.47	12/01/14	6.41	426.47	12/01/14	7.08	426.38
09/10/14	9.49	426.23	09/10/14	9.89	426.51	09/10/14	7.02	425.94	09/10/14	6.95	425.93	09/10/14	7.63	425.83
06/12/14	9.58	426.14	06/12/14	10.33	426.07	06/12/14	6.99	425.97	06/12/14	6.94	425.94	06/12/14	7.63	425.83
03/25/14	9.12	426.60	03/25/14	10.22	426.18	03/25/14	6.75	426.21	03/25/14	6.85	426.03	03/25/14	7.24	426.22
12/12/13	8.47	427.25	12/12/13	9.35	427.05	12/12/13	5.92	427.04	12/12/13	5.84	427.04	12/12/13	6.51	426.95
09/23/13	9.52	426.20	09/23/13	10.32	426.08	09/23/13	7.08	425.88	09/23/13	6.98	425.90	09/23/13	7.63	425.83
06/10/13	8.46	427.26	06/10/13	9.32	427.08	06/10/13	5.78	427.18	06/10/13	5.68	427.20	06/10/13	5.35	428.11
03/27/13	9.30	426.42	03/27/13	10.11	426.29	03/27/13	6.78	426.18	03/27/13	6.95	425.93	03/27/13	7.42	426.04
12/03/12	9.49	426.23	12/03/12	10.33	426.07	12/03/12	7.02	425.94	12/03/12	6.93	425.95	12/03/12	7.70	425.76
09/12/12	9.75	425.97	09/12/12	10.63	425.77	09/12/12	7.32	425.64	09/12/12	7.25	425.63	09/12/12	8.02	425.44
06/18/12	9.51	426.21	06/18/12	10.36	426.04	06/18/12	7.05	425.91	06/18/12	6.95	425.93	06/18/12	7.69	425.77
03/19/12	8.88	426.84	03/19/12	9.79	426.61	03/19/12	6.46	426.50	03/19/12	6.32	426.56	03/19/12	7.13	426.33
12/05/11	9.10	426.62	12/05/11	9.84	426.56	12/05/11	6.72	426.24	12/05/11	6.73	426.15	12/05/11	7.50	425.96
09/26/11	9.31	426.41	09/26/11	10.11	426.29	09/26/11	6.64	426.32	09/26/11	6.68	426.20	09/26/11	7.35	426.11
06/13/11	9.29	426.43	06/13/11	10.07	426.33	06/13/11	6.71	426.25	06/13/11	7.87	425.01	06/13/11	7.33	426.13
03/29/11	8.64	427.08	03/29/11	9.43	426.97	03/29/11	6.04	426.92	03/29/11	5.93	426.95	03/29/11	6.68	426.78

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



Table 3

Historical Groundwater Data

DNAPL Wells

Well	DN.	APL-02	Well	DN	APL-03	Well	DN	APL-04	Well	DN	APL-05
	TOC =	436.81		TOC =	437.23		TOC =	438.50		TOC =	440.60
Date	DTW	Water El.									
09/22/21	9.69	427.12	09/22/21	9.06	428.17	09/22/21	11.23	427.27	09/22/21	13.36	427.24
06/09/21	9.43	427.38	06/09/21	9.72	427.51	06/09/21	10.98	427.52	06/09/21	13.12	427.48
03/18/21	9.32	427.49	03/18/21	9.54	427.69	03/18/21	10.77	427.73	03/18/21	13.96	426.64
12/03/20	9.40	427.41	12/03/20	9.76	427.47	12/03/20	10.90	427.60	12/03/20	13.05	427.55
09/11/20	7.95	428.86	09/11/20	9.35	427.88	09/11/20	11.65	426.85	09/11/20	13.13	427.47
06/11/20	10.06	426.75	06/11/20	10.29	426.94	06/11/20	11.67	426.83	06/11/20	13.76	426.84
03/20/20	8.10	428.71	03/20/20	8.55	428.68	03/20/20	9.70	428.80	03/20/20	11.32	429.28
12/05/19	9.20	427.61	12/05/19	9.60	427.63	12/05/19	10.85	427.65	12/05/19	12.92	427.68
09/19/19	9.54	427.27	09/19/19	8.85	428.38	09/19/19	11.14	427.36	09/19/19	13.20	427.40
06/06/19	9.10	427.71	06/06/19	9.25	427.98	06/06/19	10.60	427.90	06/06/19	12.70	427.90
03/21/19	8.20	428.61	03/21/19	8.45	428.78	03/21/19	9.70	428.80	03/21/19	11.80	428.80
12/05/18	8.10	428.71	12/05/18	8.70	428.53	12/05/18	9.65	428.85	12/05/18	11.75	428.85
09/13/18	9.60	427.21	09/13/18	9.70	427.53	09/13/18	11.00	427.50	09/13/18	13.08	427.52
06/07/18	9.70	427.11	06/07/18	10.00	427.23	06/07/18	11.26	427.24	06/07/18	13.34	427.26
03/22/18	9.35	427.46	03/22/18	9.60	427.63	03/22/18	10.90	427.60	03/22/18	12.99	427.61
12/06/17			12/06/17	9.31	427.92	12/06/17	10.59	427.91	12/06/17	12.65	427.95
09/01/17			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



Table 3

Historical Groundwater Data

DNAPL Wells

Well	DN.	APL-06	Well	DN	APL-07	Well	DN	APL-08	Well	l DN	APL-09
	TOC =	439.71		TOC =	441.46		TOC =	441.80		TOC =	442.63
Date	DTW	Water El.									
09/22/21	12.47	427.24	09/22/21	12.86	428.60	09/22/21	13.39	428.41	09/22/21	14.33	428.30
06/09/21	12.24	427.47	06/09/21	12.78	428.68	06/09/21	13.29	428.51	06/09/21	14.19	428.44
03/18/21	12.06	427.65	03/18/21	12.56	428.90	03/18/21	13.04	428.76	03/18/21	13.95	428.68
12/03/20	12.16	427.55	12/03/20	12.91	428.55	12/03/20	13.28	428.52	12/03/20	14.19	428.44
09/11/20	12.80	426.91	09/11/20	13.57	427.89	09/11/20	14.02	427.78	09/11/20	14.82	427.81
06/11/20	12.73	426.98	06/11/20	13.36	428.10	06/11/20	13.85	427.95	06/11/20	14.73	427.90
03/20/20	10.90	428.81	03/20/20	11.80	429.66	03/20/20	12.10	429.70	03/20/20	13.05	429.58
12/05/19	11.96	427.75	12/05/19	12.81	428.65	12/05/19	13.25	428.55	12/05/19	14.15	428.48
09/19/19	12.27	427.44	09/19/19	13.14	428.32	09/19/19	13.58	428.22	09/19/19	14.50	428.13
06/06/19	6.23	433.48	06/06/19	12.25	429.21	06/06/19	12.75	429.05	06/06/19	13.70	428.93
03/21/19	10.90	428.81	03/21/19	11.50	429.96	03/21/19	12.00	429.80	03/21/19	12.90	429.73
12/05/18	10.70	429.01	12/05/18	11.70	429.76	12/05/18	12.10	429.70	12/05/18	13.00	429.63
09/13/18	12.15	427.56	09/13/18	13.20	428.26	09/13/18	13.65	428.15	09/13/18	14.50	428.13
06/07/18	12.33	427.38	06/07/18	13.18	428.28	06/07/18	13.61	428.19	06/07/18	14.50	428.13
03/22/18	12.00	427.71	03/22/18	12.67	428.79	03/22/18	13.16	428.64	03/22/18	14.06	428.57
12/06/17			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



Table 3
Historical Groundwater Data
Trench Wells

Well	V	TM-1	Well	V	TM-2	Well	V	TM-3	Well	V	TM-4	Well	V	TM-5
	TOC =	439.74		TOC =	438.33		TOC =	439.44		TOC =	441.59	110	TOC =	441.79
Date	DTW	Water El.												
09/22/21	12.28	427.46	09/22/21	10.73	427.60	09/22/21	11.8	427.64	09/22/21	13.64	427.95	09/22/21	13.74	428.05
06/09/21	12.10	427.64	06/09/21	10.57	427.76	06/09/21	11.74	427.70	06/09/21	13.54	428.05	06/09/21	13.68	428.11
03/18/21	11.71	428.03	03/18/21	10.11	428.22	03/18/21	11.27	428.17	03/18/21	13.24	428.35	03/18/21	13.39	428.40
12/03/20	12.02	427.72	12/03/20	10.54	427.79	12/03/20	11.70	427.74	12/03/20	13.54	428.05	12/03/20	13.62	428.17
09/11/20	12.73	427.01	09/11/20	11.18	427.15	09/11/20	12.22	427.22	09/11/20	14.07	427.52	09/11/20	14.26	427.53
06/11/20	10.06	429.68	06/11/20	10.85	427.48	06/11/20	11.97	427.47	06/11/20	13.85	427.74	06/11/20	14.00	427.79
03/20/20	8.10	431.64	03/20/20	9.10	429.23	03/20/20	10.20	429.24	03/20/20	12.05	429.54	03/20/20	12.15	429.64
12/05/19	9.20	430.54	12/05/19	10.22	428.11	12/05/19	11.39	428.05	12/05/19	13.44	428.15	12/05/19	13.61	428.18
09/19/19	9.54	430.20	09/19/19	10.69	427.64	09/19/19	11.86	427.58	09/19/19	13.68	427.91	09/19/19	13.88	427.91
06/06/19	11.60	428.14	06/06/19	10.00	428.33	06/06/19	11.20	428.24	06/06/19	13.00	428.59	06/06/19	6.23	435.56
03/21/19	10.60	429.14	03/21/19	9.00	429.33	03/21/19	10.20	429.24	03/21/19	12.50	429.09	03/21/19	12.25	429.54
12/05/18	10.55	429.19	12/05/18	8.95	429.38	12/05/18	10.05	429.39	12/05/18	12.00	429.59	12/05/18	12.15	429.64
09/13/18	12.20	427.54	09/13/18	10.65	427.68	09/13/18	11.80	427.64	09/13/18	13.70	427.89	09/13/18	13.85	427.94
06/07/18	12.14	427.60	03/22/18	10.46	427.87	03/22/18	11.62	427.82	06/07/18	13.61	427.98	03/22/18	13.75	428.04
03/22/18	11.86	427.88	03/22/18	10.41	427.92	03/22/18	11.36	428.08	03/22/18	13.31	428.28	03/22/18	13.45	428.34
12/06/17	11.65	428.09	12/06/17	10.07	428.26	12/06/17	11.22	428.22	12/06/17	13.17	428.42	12/06/17	13.32	428.47
09/01/17	12.10	427.64	09/01/17	10.40	427.93	09/01/17	10.55	428.89	09/01/17	13.60	427.99	09/01/17	13.77	428.02
06/23/17	11.80	427.94	06/23/17	10.10	428.23	06/23/17	11.21	428.23	06/23/17	13.15	428.44	06/23/17	13.29	428.50
03/08/17	11.24	428.50	03/08/17	9.52	428.81	03/08/17	10.65	428.79	03/08/17	12.58	429.01	03/08/17	12.76	429.03
12/15/16	10.99	428.75	12/15/16	9.33	429.00	12/15/16	10.49	428.95	12/15/16	12.49	429.10	12/15/16	12.54	429.25
09/19/16	12.23	427.51	09/19/16	10.56	427.77	09/19/16	11.71	427.73	09/19/16	13.65	427.94	09/19/16	13.82	427.97
06/07/16	11.98	427.76	06/07/16	10.29	428.04	06/07/16	11.43	428.01	06/07/16	13.44	428.15	06/07/16	13.61	428.18
03/07/16	10.98	428.76	03/07/16	9.25	429.08	03/07/16	10.36	429.08	03/07/16	12.32	429.27	03/07/16	12.49	429.30
12/02/15	12.12	427.62	12/02/15	10.53	427.80	12/02/15	11.68	427.76	12/02/15	13.58	428.01	12/02/15	13.74	428.05
09/16/15	12.55	427.19	09/16/15	10.75	427.58	09/16/15	11.85	427.59	09/16/15	13.73	427.86	09/16/15	14.67	427.12
06/03/15	11.21	428.53	06/03/15	9.55	428.78	06/03/15	10.72	428.72	06/03/15	12.68	428.91	06/03/15	12.86	428.93
04/08/15	11.06	428.68	04/08/15	9.49	428.84	04/08/15	11.65	427.79	04/08/15	12.65	428.94	04/08/15	12.81	428.98
12/01/14	11.55	428.19	12/01/14	9.79	428.54	12/01/14	10.92	428.52	12/01/14	12.91	428.68	12/01/14	13.09	428.70
09/10/14	11.62	428.12	09/10/14	9.91	428.42	09/10/14	11.10	428.34	09/10/14	13.14	428.45	09/10/14	13.31	428.48
06/12/14	11.94	427.80	06/12/14	10.28	428.05	06/12/14	11.45	427.99	06/12/14	13.48	428.11	06/12/14	13.63	428.16
03/25/14	11.69	428.05	03/25/14	10.01	428.32	03/25/14	11.17	428.27	03/25/14	13.32	428.27	03/25/14	13.35	428.44
12/12/13	10.91	428.83	12/12/13	9.31	429.02	12/12/13	10.46	428.98	12/12/13	12.51	429.08	12/12/13	12.56	429.23
09/23/13	12.19	427.55	09/23/13	10.63	427.70	09/23/13	11.79	427.65	09/23/13	15.75	425.84	09/23/13	13.91	427.88
06/10/13	10.45	429.29	06/10/13	8.75	429.58	06/10/13	9.98	429.46	06/10/13	12.08	429.51	06/10/13	13.16	428.63
03/27/13	11.83	427.91	03/27/13	10.82	427.51	03/27/13	11.48	427.96	03/27/13	13.51	428.08	03/27/13	13.69	428.10
12/03/12	12.31	427.43	12/03/12	10.82	427.51	12/03/12	11.98	427.46	12/03/12	13.84	427.75	12/03/12	14.06	427.73
06/18/12	12.01	427.73	06/18/12	10.46	427.87	06/18/12	11.66	427.78	06/18/12	13.70	427.89	06/18/12	13.89	427.90
03/19/12	11.49	428.25	03/19/12	9.91	428.42	03/19/12	11.11	428.33	03/19/12	13.16	428.43	03/19/12	13.33	428.46
12/05/11	12.01	427.73	12/05/11	10.48	427.85	12/05/11	11.62	427.82	12/05/11	13.61	427.98	12/05/11	13.81	427.98
09/26/11	11.95	427.79	09/26/11	10.41	427.92	09/26/11	11.61	427.83	09/26/11	13.66	427.93	09/26/11	13.82	427.97
06/13/11	11.74	428.00	06/13/11	10.15	428.18	06/13/11	11.32	428.12	06/13/11	13.39	428.20	06/13/11	13.59	428.20
03/29/11	11.02	428.72	03/29/11	9.48	428.85	03/29/11	10.65	428.79	03/29/11	12.81	428.78	03/29/11	12.97	428.82

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



Table 3

Historical Groundwater Data
Operable Unit 1 Wells

Well	LTN	1W-D01	L.TN	/W-S01	L-TM	IW-D02	L.T.N	/W-S02	L.TN	/W-D03	LTN	/W-S03	L.T.N	/IW-D04	LTN	1W-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.
09/22/21	8.63	426,27	8.82	426.70	10.83	425.91	10.62	426.17	5.28	425.99	4.57	426.86	10.54	426.64	10.13	427.11
06/09/21	8.58	426.32	8.68	426.84	10.67	426.07	9.59	427.20	7.33	423.94	4.27	427.16	9.94	427.24	9.64	427.60
03/18/21	8.55	426.35	8.58	426.94	10.57	426.17	10.31	426.48	5.03	426.24	4.13	427.30	9.81	427.37	9.54	427.70
12/03/20	8.80	426.10	8.60	426.92	10.60	426.14	10.38	426.41	5.15	426.12	4.15	427.28	9.75	427.43	9.44	427.80
09/11/20	8.85	426.05	8.85	426.67	10.77	425.97	10.45	426.34	6.46	424.81	4.30	427.13	10.25	426.93	9.68	427.56
06/11/20	10.06	424.84	8.88	426.64	11.69	425.05	10.46	426.33	5.23	426.04	4.28	427.15	10.05	427.13	9.70	427.54
03/20/20	8.10	426.80	8.30	427.22	8.90	427.84	8.20	428.59	3.50	427.77	1.80	429.63	8.25	428.93	7.10	430.14
12/05/19	9.20	425.70	8.47	427.05	10.50	426.24	10.17	426.62	4.93	426.34	3.95	427.48	9.65	427.53	9.39	427.85
09/19/19	9.54	425.36	8.70	426.82	10.60	426.14	10.45	426.34	5.20	426.07	4.20	427.23	9.90	427.28	9.55	427.69
06/06/19	7.80	427.10	8.00	427.52	9.70	427.04	9.33	427.46	4.25	427.02	2.90	428.53	6.23	430.95	8.12	429.12
									1		1					
03/21/19	8.00	426.90	8.20	427.32	10.15	426.59	9.77	427.02	4.45	426.82	3.63	427.80	9.35	427.83	8.90	428.34
12/05/18	7.54	427.36	7.54	427.98	9.29	427.45	8.95	427.84	5.75	425.52	2.40	429.03	8.64	428.54	7.78	429.46
09/13/18	8.81	426.09	8.67	426.85	10.60	426.14	10.36	426.43	5.48	425.79	4.18	427.25	10.02	427.16	9.35	427.89
06/07/18	8.55	426.35	8.70	426.82	10.35	426.39	10.32	426.47	4.32	426.95	4.11	427.32	9.78	427.40	9.48	427.76
03/22/18	8.22	426.68	9.41	426.11	10.21	426.53	9.98	426.81	5.65	425.62	3.60	427.83	9.35	427.83	9.05	428.19
12/06/17	8.17	426.73	8.16	427.36	10.07	426.67	9.61	427.18	4.76	426.51	3.30	428.13	9.35	427.83	8.35	428.89
09/01/17	8.75	426.15	8.74	426.78	10.64	426.10	10.31	426.48	5.23	426.04	4.15	427.28	9.99	427.19	9.50	427.74
06/23/17	8.30	426.60	8.53	426.99	10.45	426.29	10.27	426.52	4.91	426.36	4.05	427.38	9.58	427.60	9.45	427.79
									1		1					
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 3.52	426.16	4.05	427.38	9.84	427.34	9.52	427.72
06/10/13 03/27/13	7.17 8.27	427.73 426.63	7.52	428.00 426.88	9.09	427.65	8.73 9.98	428.06 426.81	3.52 4.84	427.75 426.43	2.18 3.87	429.25 427.56	7.99 9.61	429.19 427.57	6.99 9.36	430.25 427.88
12/03/12	8.65	426.63	8.64 8.60	426.88 426.92	10.28	426.46 426.32	9.98	426.81	5.08	426.43 426.19	3.87	427.56	9.61	427.33	9.36	427.88
09/12/12	8.84	426.25	8.91	426.92	10.42	425.98	10.35	426.69	5.39	425.88	4.17	427.03	10.20	426.98	9.91	427.62
06/18/12	8.35	426.55	8.61	426.91	10.76	426.39	10.33	426.53	5.10	425.66	4.17	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

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



Table 3

Historical Groundwater Data
Operable Unit 1 Wells

Well	LTN	/W-D05	L TA	/W-S05	LTM	1W-D06	LTN	/W-S06	LTN	/W-S07	LTN	1W-S08	LTN	/IW-S09	L TA	IW-S10
	TOC =	437.78	TOC =	437.92	TOC =	441.70	TOC =	441.64	TOC =	439.70	TOC =	443.81	TOC =	439.79	TOC =	439.67
Date	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.	DTW	Water El.
09/22/21	9.75	428.03	10.71	427.21	12.55	429.15	13,44	428,20	11.13	428.57	15.78	428.03	9.29	430.50	10.37	429.30
06/09/21	9.58	428.20	9.90	428.02	12.44	429.26	13.22	428.42	10.88	428.82	15.59	428.22	9.55	430.24	9.75	429.92
03/18/21	9.07	428.71	9.85	428.07	12.25	429.45	13.00	428.64	11.04	428.66	15.27	428.54	9.37	430.42	9.95	429.72
12/03/20	9.60	428.18	10.79	427.13	12.45	429.25	13.20	428.44	10.97	428.73	15.58	428.23	9.82	429.97	10.30	429.37
09/11/20	10.82	426.96	9.95	427.97	12.90	428.80	13.65	427.99	11.70	428.00	16.60	427.21	10.55	429.24	11.07	428.60
06/11/20	9.67	428.11	9.93	427.99	12.61	429.09	13.51	428.13	11.43	428.27	15.95	427.86	10.12	429.67	10.86	428.81
03/20/20	7.50	430.28	7.80	430.12	11.00	430.70	11.70	429.94	9.75	429.95	14.15	429.66	9.00	430.79	9.60	430.07
12/05/19	9.30	428.48	9.73	428.19	12.29	429.41	13.12	428.52	10.80	428.90	15.45	428.36	9.73	430.06	10.29	429.38
09/19/19	9.44	428.34	9.86	428.06	11.45	430.25	13.40	428.24	11.20	428.50	15.80	428.01	10.03	429.76	10.70	428.97
06/06/19	8.35	429.43	8.65	429.27	11.60	430.10	12.55	429.09	10.15	429.55	14.94	428.87	9.26	430.53	9.74	429.93
03/21/19	8.92	428.86	9.38	428.54	11.80	429.90	12.50	429.14	10.08	429.62	14.08	429.73	9.15	430.64	9.52	430.15
12/05/18	8.18	429.60	7.30	430.62	11.10	430.60	11.55	430.09	8.55	431.15	13.90	429.91	8.70	431.09	9.20	430.47
09/13/18	9.67	428.11	9.68	428.24	12.70	429.00	13.35	428.29	11.55	428.15	15.80	428.01	10.23	429.56	10.75	428.92
06/07/18	9.47	428.31	9.64	428.28	12.42	429.28	13.26	428.38	11.06	428.64	15.70	428.11	10.10	429.69	10.64	429.03
03/22/18	8.95	428.83	8.80	429.12	12.10	429.60	12.92	428.72	10.40	429.30	15.30	428.51	9.50	430.29	10.15	429.52
12/06/17	9.02	428.76	9.16	428.76	12.00	429.70	12.25	429.39	10.67	429.03	15.10	428.71	9.58	430.21	10.10	429.57
09/01/17	9.51	428.27	9.60	428.32	12.62	429.08	13.50	428.14	12.60	427.10	15.78	428.03	10.38	429.41	10.96	428.71
06/23/17	9.14	428.64	9.60	428.32	12.02	429.63	12.88	428.76	10.73	428.97	15.70	428.59	12.88			429.49
					1									426.91	10.18	
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 09/12/12	9.51 9.76	428.27 428.02	9.48 9.64	428.44 428.28	13.43 12.81	428.27 428.89	12.78 13.69	428.86 427.95	11.59 11.97	428.11 427.73	15.72 15.95	428.09 427.86	10.25 10.58	429.54 429.21	10.91 11.27	428.76 428.40
09/12/12	9.76	428.02 428.52	9.64	428.28 428.41	12.81	428.89	13.69	427.95 428.41	11.97	427.73	15.95	427.86	9.81	429.21	10.56	428.40 429.11
03/19/12	8.79	428.99	9.51	428.88	12.41	429.29	12.99	428.65	11.05	428.65	15.40	428.62	9.73	429.96	10.56	429.11
12/05/11	9.02	428.76	9.04	428.84	12.12	429.38	13.04	428.60	10.97	428.73	15.19	428.62	9.73	430.00	10.43	429.33
09/26/11	9.02	428.46	9.53	428.39	12.40	429.40	13.04	428.44	11.01	428.69	15.19	428.60	9.55	430.21	10.34	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	430.24	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
												.==		,		

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



Table 4 Groundwater Analytical Data LTMW-D01

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/10/21	09/23/21
Benzene	5	1	1	5,310	8,990	5,800	5,290	2,470	4,250	5,460	3,440	3,900	1,410	7,360	6,290	2,370	3,400	4,310	2,060	1,600	3,400	4,780	2,720	4,670
Toluene	1,000	5	1	1,090	2,080	1,320	1,470	809	1,230	1,140	992	1,080	1,740	2,200	1,410	630	876	183	392	202	247	727	172	532
Ethylbenzene	700	5	1	167	241	145	137	179	177	95.0	119	163	203	202	170	142	222	1,120	96.3	101	179	195	106	247
Xylene (total)	10,000	5	2	176	254	206	201	157	187	135	155	164	214.5	339	229	134.8	180.8	277	134	109	152	209	135	205
Acenaphthene	N/A	20	4.9	0.59	0.43	0.19	0.10	0.19	0.35	0.18	0.19	0.14	0.40	0.48	0.23	0.21	0.33	0.47	0.16	0.22	0.36	0.44	0.30	0.51
Acenaphthylene	N/A	NA	4.9	5.0	6.2	0.31	0.11	0.36	7.1	3.1	1.1	1.9	7.1	8.6	2.3	0.51	2.8	5.9	0.17	1.5	4.4	3.9	1.4	2.4
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	14	11	ND	ND	ND	10	ND	ND	15	ND	ND	ND	ND	14	ND	ND	12	5.65	ND	ND
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	0.51	0.35	0.15	ND	ND	0.41	0.17	0.14	0.10	0.30	0.55	0.16	ND	0.20	0.47	0.11	0.12	0.24	0.28	0.17	0.23
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	97.1	229	ND	ND	ND	7.2	94.6	0.44	0.83	170	381	8.3	ND	4.3	121	ND	0.17	20.6	14.9	ND	ND
Phenanthrene	N/A	50	4.9	ND	ND	ND	ND	ND	107	ND														
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND	ND	ND	ND	ND	6.9	ND	6.8	9.1	ND	ND	ND	9.1	6.2	6.6	9.7	8.1	8.6	6.6	10.6	10.5
Lead	N/A	25	5	ND																				
Zinc	N/A	2.000	10	ND																				

EPA = Environmental Protection Agency

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards

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

Bolded



ND

ND

ND

2.9

ND

ND

11.5

ND

0.16

0.16

5.7

ND

ND

ND

ND

0.3

0.17

6.1

ND

ND

ND

ND

0.29

0.17

4.3

ND

ND

ND

ND

0.28

0.14

5.2

ND

ND

ND

ND

0.20

0.13

6.2

ND

ND

ND

#### Table 4 **Groundwater Analytical Data** LTMW-S01

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/10/21	09/23/21
Benzene	5	1	1	ND	1.9	ND	1.9	ND	ND	1.2	ND	ND	2.3											
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND	1.2	ND																		
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	125	91.2	69.4	56.4	105	75.1	56.5	68.1	101	64.4	53.1	70.6	69.0	74.5	63.7	46.9	88.3	108.0	95.3	102	98.1
Acenaphthylene	N/A	NA	4.9	4.1	3	3.2	2.5	3.6	2.7	2.2	3.3	4.4	2.6	2	2.7	3.2	3.3	2.3	1.7	3.3	4.3	3.5	4.0	4.0
Anthracene	N/A	NA	4.9	0.44	0.38	0.52	0.28	0.40	0.34	0.27	0.37	0.47	0.35	0.25	0.47	0.41	0.44	0.24	0.17	0.4	0.4	0.34	0.35	0.41
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	13	55	18	12	15	11	17	19	14	14	16	18	18	25	25	26	19	11.6	14	24
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	4.9	4	3.6	2.8	4.8	3.5	2.4	3.7	6.1	3.6	2.6	3.8	5.4	5.0	2.8	2.7	5.4	5.7	3.9	5.0	6.0
Fluorene	N/A	0.002	4.9	34.1	27.6	19.9	12.6	28.5	19.2	15.4	18.1	28.3	15.6	13.6	18	22.9	19.6	14.3	12.7	26.1	29.7	26.6	28.6	30.4

EPA = Environmental Protection Agency

N/A

N/A

N/A N/A

N/A

N/A

N/A

NYSDEC = New York State Department of Environmental Conservation

50

10

50

50

25

25

2,000

4.9

4.9

4.9

4.9

10

10

ND

0.38

0.74

4.2

ND

ND

ND

ND

0.2

0.25

5.0

ND

ND

ND

ND

0.4

1.7

3.6

ND

ND

ND

ND

0.15

ND

2.7

ND

ND

ND

ND

0.31

0.20

3.7

ND

ND

ND

ND

0.24

0.14

4.9

ND

ND

ND

ND

ND

0.26

2.5

ND

ND

ND

ND

0.23

0.13

3.8

ND

ND

ND

ND

ND

0.20

6.6

ND

ND

ND

ND

0.31

0.16

4.4

ND

ND

ND

ND

0.15

0.11

2.7

ND

ND

ND

ND

0.26

0.41

3.9

ND

ND

ND

ND

0.23

0.13

5.7

ND

ND

ND

ND

0.27

0.17

5.3

ND

ND

ND

ND

0.25

0.13

3.0

ND

ND

ND

AWQS = Ambient Water Quality Standards

= Micrograms per Liter

Indeno(1,2,3-cd)pyrene

Naphthalene

Phenanthrene

Pyrene

Arsenic

Lead

Zinc

μg/L ND H = Not detected above laboratory reporting limits = Quantitated using peak height rather than peak area = Estimated Concentration Value

= 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)	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	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							
Acenaphthylene	N/A	NA	4.9	0.8	0.43	0.39	ND	0.48	0.22	0.29	0.31	0.24	ND											
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	150	200	ND	160	160	160	150	140	10	140	140	110	ND	130	11	ND	140	82.7	12	26
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	0.16	ND																			
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND																				

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards

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



#### Table 4

#### **Groundwater Analytical Data** LTMW-S02

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND	0.13	ND																		
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	130	75	73	110	90	60	59	110	10	57	71	70	73	76	64	94	96	46.4	82	68
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	0.15	ND																			
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	5.1	ND	7.7	ND	ND	7.6	ND	7.1	7.2	ND	ND	ND	5.1	6.3	ND	9.1	7.2	7.5	ND	ND	ND
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND																				

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards

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



Table 4

## Groundwater Analytical Data LTMW-D03

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/10/21	09/23/21
Benzene	5	1	1	15.9	27.1	10.2	8.5	8.9	9.5	4.7	6.4	5.4	8.4	6.2	9.6	6.2	2.5	3.3	4.6	2.5	5.0	3.0	4.4	4.7
Toluene	1,000	5	1	13.9	55	5.9	1.9	1.9	5.4	ND	1.2	2.0	3.9	18.2	5.6	2.0	ND	11.0	2.6	ND	ND	ND	3.1	1.2
Ethylbenzene	700	5	1	69.6	23.9	63.7	44	49.0	40.2	26.0	34.1	23.6	22.2	3	20.7	16.5	11.3	ND	11.8	10.4	10.4	8.2	6.0	6.6
Xylene (total)	10,000	5	2	30.1	25.7	13.5	5.6	7.5	8.4	4.0	4.4	5.5	6.2	7.1	8.4	1.4	ND	ND	3.4	ND	ND	ND	3.5	ND
Acenaphthene	N/A	20	4.9	411.9	ND	10.7	3.70	10.2	5.9	5.8	8.3	5.7	6.2	8.0	6.0	7.90	4.3	4.3	6.8	5.4	8.8	2.4	6.5	5.4
Acenaphthylene	N/A	NA	4.9	34.7	10.6	3.1	2.5	2.2	1.5	1.3	2.0	1.6	2.8	2.2	2.1	1.4	0.89	0.54	1.8	1.9	1.5	0.29	0.33	0.49
Anthracene	N/A	NA	4.9	5.2	ND	5.6	0.3	3.7	2.4	2.2	2.8	2.1	2	2.1	1.6	1.6	0.9	0.45	0.73	2.80	0.68	0.32	0.50	ND
Benzo(a)anthracene	N/A	0.002	4.9	0.43	ND	0.42	ND	0.40	0.26	0.30	0.34	0.29	0.28	0.4	0.38	0.41	0.26	0.23	0.31	3.6	0.45	0.29	0.30	0.29
Benzo(a)pyrene	N/A	ND	4.9	ND	2.4	ND	ND	ND	ND															
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	1.7	ND	ND	ND	ND															
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	0.8	ND	ND	ND	ND															
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	0.68	ND	ND	ND	ND															
Chrysene	N/A	0.002	4.9	0.21	ND	0.25	ND	0.24	0.18	0.17	0.19	0.18	0.16	0.21	0.23	0.25	0.17	0.15	0.18	2.10	0.24	0.19	0.18	0.17
Cyanide	N/A	200	10	77	79	84	76	66	78	64	66	62	62	65	72	60	53	67	62	63	58	55.7	50	49
Dibenzo(a,h)anthracene	N/A	50	4.9	ND	0.2	5.4	ND	ND	ND															
Fluoranthene	N/A	50	4.9	6.2	ND	6.1	2.9	5.9	3.7	4.1	4.7	4.0	3.5	5.1	4.2	5.4	3.2	3.4	4.2	12.3	5.6	3.9	4.2	3.7
Fluorene	N/A	0.002	4.9	11.5	ND	7.1	13.2	6.2	3.7	3.6	5.1	3.5	3.8	5.1	3.6	4.9	2.8	2.3	4.1	5.2	5.6	3.0	4.1	3.4
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	9.4	ND	0.68	ND	ND	ND	ND													
Naphthalene	N/A	10	4.9	556	284	32.2	0.15	10.0	16.5	3.9	3.7	6.9	12.7	9.8	10.6	3.5	0.5	0.3	13.2	2.5	8.1	ND	0.11	0.70
Phenanthrene	N/A	50	4.9	29.5	1.5	30.3	0.11	24.1	15.2	16.3	18.1	18.1	17.9	19.9	15.2	19.6	8.5	2.9	15.9	22.2	20.1	8.7	15.3	12.8
Pyrene	N/A	50	4.9	8.3	1.2	7.6	2.8	7.6	4.8	5.5	6.0	5.3	5.1	6.6	5.3	6.9	4	4.6	5.5	17.4	7.0	3.4	5.3	4.7
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND	17	ND	ND	ND	ND															

EPA = Environmental Protection Agency

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards

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



#### Table 4

# Groundwater Analytical Data LTMW-S03

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/10/21	09/23/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND	0.13	ND	0.14																	
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	10	ND	ND	ND	ND	ND	ND													
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND	ND	0.15	ND																	
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	0.16	0.17	ND	0.11	ND	0.23															
Phenanthrene	N/A	50	4.9	ND	ND	0.11	ND	0.12	ND	0.11														
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND	7.3	ND																		
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	4,300	4,600	5,330	4,250	3,740	3,620	4,070	3,660	3,060	5,620	4,040	3,740	3,710	4,160	3,840	3,550	3,160	3,640	4,180	3,580	3,470

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



### Table 4 **Groundwater Analytical Data**

LTMW-D04

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (μg/L)	Reporting Level (µg/L)	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20	03/18/21	06/10/21	09/23/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	10	ND	11	ND	ND	ND	ND	ND	19												
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND	ND	ND	35.3	ND	22.5	ND	ND	ND	ND											
Lead	N/A	25	5	ND	32	ND	ND	ND	ND	ND														
Zinc	N/A	2,000	10	ND																				

EPA = Environmental Protection Agency

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



Table 4

# Groundwater Analytical Data LTMW-S04

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/20/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20	03/18/21	06/10/21	09/23/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	59	2,000	900	1,200	200	1,300	400	230	220	1,300	860	660	190	120	1,700	440	470	1,700	801	570	620
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	23	618	358	108	128	472	472	267	179	230	242	184	156	156	44.4	122	113	384	222	217	45.8

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



Table 4

#### **Groundwater Analytical Data** LTMW-D05

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND																				
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND																				

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



Table 4

# Groundwater Analytical Data LTMW-S05

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (μg/L)	Reporting Level (µg/L)	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND	ND	5,800	ND																	
Toluene	1,000	5	1	ND	ND	1,320	ND																	
Ethylbenzene	700	5	1	ND	ND	145	ND																	
Xylene (total)	10,000	5	2	ND	ND	206	ND																	
Acenaphthene	N/A	20	4.9	ND	ND	0.19	ND																	
Acenaphthylene	N/A	NA	4.9	ND	ND	0.31	ND																	
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	16	830	510	570	270	380	430	120	89	260	120	230	65	170	150	110	110	76	44.8	94	110
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND	ND	0.15	ND																	
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND	ND	5.4	ND																	
Zinc	N/A	2,000	10	23	ND	27.5	ND	18.6	ND	ND														

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



Table 4 Groundwater Analytical Data LTMW-D06

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (μg/L)	Reporting Level (µg/L)	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	92	ND	11	ND																
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND	ND	8.1	ND																	
Arsenic	N/A	25	10	0.64	ND	ND	8.1	8.5	8.0	6.0	12.0	10.4	7.3	5.7	ND	9.2	8.8	9.6	7.1	7.5	8.8	8.1	ND	ND
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND																				

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



Table 4

# Groundwater Analytical Data LTMW-S06

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	31	ND	190	79	14	18	64	55	19	110	66	11	54	84	53	82	40	72	77.7	73	120
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND																				
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND	9	ND																		
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND																				

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



Table 4

## **Groundwater Analytical Data**

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

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



## Table 4

# Groundwater Analytical Data LTMW-S08

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (μg/L)	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND	0.19	ND																		
Benzo(a)pyrene	N/A	ND	4.9	ND	0.21	ND																		
Benzo(b)fluoranthene	N/A	0.002	4.9	ND	0.31	ND																		
Benzo(g,h,i)perylene	0.2	NA	4.9	ND	0.15	ND																		
Benzo(k)fluoranthene	N/A	0.002	4.9	ND	0.26	ND																		
Chrysene	N/A	0.002	4.9	ND	0.14	ND																		
Cyanide	N/A	200	10	120	140	240	16	140	16	200	150	80	250	30	10	62	180	380	110	110	180	ND	160	110
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND	0.51	ND	ND	ND	0.13	0.12	ND	ND	ND											
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND	0.12	ND																		
Naphthalene	N/A	10	4.9	ND	0.12	ND																		
Phenanthrene	N/A	50	4.9	ND	0.26	ND	ND	ND	ND	0.15	ND	ND	ND											
Pyrene	N/A	50	4.9	ND	0.46	ND	ND	ND	0.11	0.14	ND	ND	ND											
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND	12.5	ND																		

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



# Table 4 Groundwater Analytical Data LTMW-S09

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (μg/L)	Reporting Level (µg/L)	09/19/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	ND																				
Acenaphthylene	N/A	NA	4.9	ND																				
Anthracene	N/A	NA	4.9	ND																				
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND																				
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	ND																				
Fluorene	N/A	0.002	4.9	ND																				
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND																				
Phenanthrene	N/A	50	4.9	ND	0.11	ND																		
Pyrene	N/A	50	4.9	ND																				
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	13	23.2	97.6	24.4	ND	15.3	ND	ND	10.7	27.6	ND	14.3	10.1	ND	12.7	ND	ND	10.3	17.5	ND	ND

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



# Table 4 Groundwater Analytical Data LTMW-S10

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	09/21/16	12/07/16	03/08/17	06/07/17	09/21/17	12/06/17	03/21/18	06/07/18	09/13/18	12/05/18	03/21/19	06/06/19	09/19/19	12/05/19	03/18/20	06/11/20	09/10/20	12/03/20	03/18/21	06/09/21	09/22/21
Benzene	5	1	1	ND																				
Toluene	1,000	5	1	ND																				
Ethylbenzene	700	5	1	ND																				
Xylene (total)	10,000	5	2	ND																				
Acenaphthene	N/A	20	4.9	23	17.4	3.1	4.30	11.0	6.8	2.3	9.7	11.8	5.7	10.8	5.1	13.60	7.70	8.80	19.30	18.10	ND	0.12	12.5	10.0
Acenaphthylene	N/A	NA	4.9	0.9	0.96	0.2	0.23	0.73	0.54	0.20	0.51	0.61	0.39	0.74	0.42	0.67	0.63	0.38	0.63	0.64	ND	ND	0.28	0.35
Anthracene	N/A	NA	4.9	0.17	0.12	0.12	ND	0.11	ND	ND	ND	0.14	ND	0.13	0.11	0.15	0.13	ND	0.11	0.16	ND	ND	ND	ND
Benzo(a)anthracene	N/A	0.002	4.9	ND																				
Benzo(a)pyrene	N/A	ND	4.9	ND																				
Benzo(b)fluoranthene	N/A	0.002	4.9	ND																				
Benzo(g,h,i)perylene	0.2	NA	4.9	ND																				
Benzo(k)fluoranthene	N/A	0.002	4.9	ND																				
Chrysene	N/A	0.002	4.9	ND																				
Cyanide	N/A	200	10	ND	13	ND	ND	ND	ND	ND	ND													
Dibenzo(a,h)anthracene	N/A	50	4.9	ND																				
Fluoranthene	N/A	50	4.9	2.1	1.5	0.5	0.62	2.0	1.4	0.71	1.3	1.8	1.1	1.6	1.3	2.1	1.9	1.1	1.4	1.4	ND	ND	ND	ND
Fluorene	N/A	0.002	4.9	1.5	1.1	0.17	0.35	1.1	0.73	0.25	0.71	1.0	0.7	1.2	0.6	1.3	1.0	0.8	1.6	1.5	ND	ND	0.75	0.63
Indeno(1,2,3-cd)pyrene	N/A	50	4.9	ND																				
Naphthalene	N/A	10	4.9	ND	ND	0.2	0.17	ND	ND	0.20	9.1	ND	ND	1.5	0.37	0.13	ND	ND	1.9	ND	ND	ND	0.29	0.37
Phenanthrene	N/A	50	4.9	1.4	0.94	ND	0.22	0.73	0.43	0.12	0.32	0.76	0.32	0.62	0.26	0.86	0.53	0.39	0.76	0.58	ND	ND	0.15	ND
Pyrene	N/A	50	4.9	2.6	1.9	0.45	0.71	2.4	1.7	0.90	1.7	2.3	1.5	2	1.6	2.70	2.40	1.4	1.9	1.8	ND	ND	ND	ND
Arsenic	N/A	25	10	ND																				
Lead	N/A	25	5	ND																				
Zinc	N/A	2,000	10	ND	17.9	ND	ND																	

= Environmental Protection Agency EPA

NYSDEC = New York State Department of Environmental Conservation

AWQS = Ambient Water Quality Standards



#### Table 5

Discharge Analytical Data
Groundwater Extraction System Effluent Concentrations

Parameter	City of Rome WPCF Permit Max Daily Limit (mg/L)	09/21/17	12/06/17	03/27/18	06/07/18	09/13/18	12/06/18	03/21/19	06/06/19	09/19/19	12/05/19	03/19/20	06/11/20	09/10/20	12/04/20	03/18/21	06/09/21	09/23/21
Benzene	0.13	0.0360	0.0200	0.0274	0.0315	0.0239	0.0297	0.0618	0.0359	0.0423	0.0527	0.0315	0.034	0.0254	0.0499	0.0881	0.0761	0.0608
Ethylbenzene	1.59	0.0052	0.0019	0.0024	0.0040	0.0024	0.0024	0.0046	0.0047	0.0050	0.0065	0.0042	0.0052	0.0041	0.0056	0.0070	0.0081	0.0064
Toluene	1.35	ND (<0.001)	0.0017	0.0025	0.0025	0.0037	0.0026	0.0113	0.0058	0.0082	0.0079	0.0056	0.0036	0.002	0.0048	0.0217	0.0112	0.0084
Xylene	1.35	ND (<0.0030)	0.0042	0.0011	0.0011	0.0039	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	ND (<0.0030)	0.0058	0.0053	0.0036					
Total BTEX	2.87	0.0412	0.0236	0.0323	0.0380	0.0300	0.0347	0.0777	0.0475	0.0566	0.0710	0.0412	0.0428	0.0315	0.0602	0.1230	0.1007	0.0792
Arsenic	0.1	ND (<0.0050)	0.012	ND (<0.0050)	ND(<0.0050)	ND (<0.0050)	ND (<0.010)	ND (<0.010)										
Cadmium	0.11	ND (<0.0030)	0.0054	ND (<0.0030)	ND(<0.0030)	ND(<0.0030)	ND (<0.002)	ND (<0.0025)										
Chromium	2.77	ND (<0.0050)	ND(<0.0050)	ND(<0.0050)	ND (<0.010)	ND (<0.010)												
Copper	1.3	ND (<0.0050)	0.08	ND (<0.0050)	ND (<0.0050)	ND (<0.0050)	0.016	ND (<0.0050)	ND(<0.0050)	ND(<0.0050)	ND (<0.010)	ND (<0.025)						
Cyanide	1.2	0.056	0.074	0.069	0.070	0.059	0.086	0.067	0.097	0.083	0.098	0.11	0.079	0.076	0.078	0.0637	0.050	0.060
Lead	1.1	ND (<0.0050)	0.0071	ND (<0.0050)	ND(<0.0050)	ND(<0.0050)	ND (<0.005)	ND (<0.005)										
Mercury	0.2	ND (<0.00020)	ND(<0.00020)	ND(<0.00020)	ND (<0.00020)	ND (<0.00020)												
Nickel	1.9	ND (<0.010)	ND(<0.10)	ND(<0.10)	ND (<0.010)	ND (<0.040)												
Silver	0.43	ND (<0.0060)	ND(<0.0060)	ND(<0.0060)	ND (<0.005)	ND (<0.010)												
Zinc	2.6	ND (<0.010)	0.13	ND (<0.010)	ND (<0.010)	ND (<0.010)	0.015	ND (<0.010)	ND(<0.010)	ND(<0.010)	ND (<0.50)	ND (<0.020)						
pH	5.5 - 11.5 SU	6.8	6.8	6.8	6.7	6.9	7.1	6.9	6.9	6.9	7	6.9	6.7	6.9	6.8	7.7	6.9	6.9

Results in mg/L.

= Milligrams per Liter = Water Pollution Control Facility = Not Sampled

mg/L WPCF NS NA SU = Not Analyzed = Standard Units



# Appendix A – Field Inspection Report

# Field Inspection Report Former MGP Site Kingsley Avenue

Date:	9/23/2021	Rome, New York	Time:	13:30
Technician:	PL		Weather:	Rain 68

Site Controls										
Fence Condition	GOOD FAIR		DAMAGED	COMMENTS						
Kingsley Ave Gate	GOOD	FAIR		DAMAGED	COMMENTS:					
Padlock-NG/GES	OPERATION	NAL	NON-0	PERATIONAL	COMMENTS:					
Railroad Ave Gate	GOOD	FAIR		DAMAGED	COMMENTS:					
Padlock-NG/GES	OPERATIONAL		NON-OPERATIONAL		COMMENTS:					

Vegetation (Surface Cover System)									
Condition of Grass	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	UNOBSTRUC	CTED	OBSTRUCTED						
	Flow	NONE LITT		TLE	SIGNIFICANT	COMMENTS:				
	Outlet Channel	OPERATIO	NAL	NON-OPERATIONAL		COMMENTS:				

Miscellaneous									
Evidence of Trespassing	NO		YES		COMMENTS:				
Litter	NONE	MINOR		SIGNIFICANT	COMMENTS:				

# **General Comments:**

2021 3<sup>rd</sup> Quarter OM&M Report National Grid Rome Former MGP Site 233 Kingsley Avenue, Rome, NY 13440



# Appendix B – Quarterly Gauging and Containment Data

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

WELL ID.	DTW	DTP	DTB	Comments
MW-OU2-1	9.35	42.14	45.81	Removed 5 gallons of DNAPL
MW-OU2-2	10.25	46.35	47.53	Removed 2 gallons of DNAPL
MW-OU2-3	6.92	NP	34.18	
MW-OU2-4	6.89	34.64	39.55	Removed 5.5 gallons of DNAPL
MW-OU2-5	7.62	NP	36.01	
DNAPL-02	9.69	NP	50.40	trace on probe
DNAPL-03	9.06	NP	52.32	trace on probe
DNAPL-04	11.23	NP	51.45	
DNAPL-05	13.36	NP	54.75	
DNAPL-06	12.47	NP	51.45	
DNAPL-07	12.86	NP	53.60	
DNAPL-08	13.39	NP	58.01	
DNAPL-09	14.33	NP	57.58	
VTM-1	12.28	NP	46.37	
VTM-2	10.73	NP	49.47	
VTM-3	11.80	NP	50.91	
VTM-4	13.64	NP	50.62	
VTM-5	13.74	NP	52.52	
LTMW-D01	8.63	NP	46.84	
LTMW-S01	8.82	NP	16.92	
LTMW-D02	10.83	NP	40.29	
LTMW-S02	10.62	NP	17.98	
LTMW-D03	5.28	NP	40.73	
LTMW-S03	4.57	NP	13.70	
LTMW-D04	10.54	NP	46.36	
LTMW-S04	10.13	NP	17.26	
LTMW-D05	9.75	NP	46.53	
LTMW-S05	10.71	NP	16.83	
LTMW-D06	12.55	NP	52.22	
LTMW-S06	13.44	NP	17.60	
LTMW-S07	11.13	NP	17.82	
LTMW-S08	15.78	NP	17.39	
LTMW-S09	9.69	NP	16.92	
LTMW-S10	10.37	NP	17.18	

## Containment

Well Id.	Elevation	DTW	Water Elevation	Positive Delta
DNAPL-02	436.81	9.69	427.12	6.72
Top Steel Sheet Wall	433.84			0.72
DNAPL-03	437.23	9.06	428.17	3.04
Top Steel Sheet Wall	431.21			3.04
DNAPL-04	438.50	11.23	427.27	5.55
Top Steel Sheet Wall	432.82			3.33
DNAPL-05	440.60	13.36	427.24	2.96
Top Steel Sheet Wall	430.20			2.90
DNAPL-06	439.71	12.47	427.24	6.31
Top Steel Sheet Wall	433.55			0.31
VTM-1	439.74	12.28	427.46	4.36
Top Steel Sheet Wall	431.82			4.50
VTM-2	438.33	10.73	427.60	5.10
Top Steel Sheet Wall	432.70			3.10
VTM-3	439.44	11.80	427.64	9.28
Top Steel Sheet Wall	436.92			9.20
VTM-4	441.59	13.64	427.95	5.59
Top Steel Sheet Wall	433.54			3.59
VTM-5	441.79	13.74	428.05	7.95
Top Steel Sheet Wall	436.00			7.93



# Appendix C – Well Sampling Field Data

Kingsley Ave	enue, Rome, Ne	ew York						
Sampling Pe	rsonnel:	Peh/ 240-	-		Date: 0	123/21		
Job Number:	0603275-13	. ,				65 Cloud	N.	
Well Id.	LTMW-D01				Time In:		Time Out	: 0926
Well In	formation							The state of the s
		_	TOC	Other	Well Type:	Flu	shmount	Stick-Up
Depth to Wat		(feet)	8.63		Well Locke	ed:	Yes	No
Depth to Bott		(feet)	46.84			Point Marked:	Yes	No
Depth to Prod		(feet)			Well Mater			her:
Length of Wa		(feet)	38.21		Well Diam		' 2"\_Ot	her:
Three Well V		(gal)	18.34		Comments	i.		
Three wen v	olumes.	(gal)	10,39					
Purging I	nformation	30.0		November (180		10000000		
							Conversion I	Factors
Purging Meth	od:	Baile	r Peristalti	c Grund	fos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Tubing/Bailer		Teflor	Stainless S	t. Pol	yethylene	of		
Sampling Me		Baile		c Grund	fos Pump	water	0.04 0.16	
Average Pum		(ml/min)	200			1 gal	lon=3.785L=3785n	nL=1337cu. feet
Duration of Po		(min)	30	Did wall as day?	Vaa Na	77		
<del></del>		(gal)		Did well go dry?	Yes No	X		
Horiba U-52 V	Water Quality N	Meter Used?	Yes	s No				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)	7 3	(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
0845	9.67	18.40	7.09	124	.365	31.0	6.36	236
0850	11.10	16,03	2.59	-99	.381	7.5	0.29	.248
0855	12.64	15.40	7.84	-143	-384 -382	1.7	0.36	0250
0900	13.79	15,12	7.89	-150	,377	0,0	0.19	»248 »246
09/0	16.00	14.98	7.91	-156	>373		0.08	0243
9913	16.95	14.87	7.93	-164	0.371	0,0	0.00	1 ,242
4/10	12.13	27.01	7.70		0.071	UV	( 1 2 M)	*010
	_							
Sampling Inf	ormation:							
	16 Method 8270	SVOC F				2 - 100ml ambe		No
	46 Method 8260	VOC's E				3 - 40 ml vials		$\boldsymbol{\ominus}$
	ethod 335.4	Cyani				1 - 250 ml plas		
EPA M	ethod 200.7	Meta	ls			1 - 250 ml plas	tic Yes	No.
Sample ID:	LTMW-D01-	<b>0921</b> Duj	olicate?	Yes No X	Shi	pped: Pa	ace Courier Picku	ap 🔀
Sample Time:	0915			Yes No No			f Albany Service	Center
Comments/No	tes:				l	_aboratory:	Pace Ana	
							Greensbui	rg, PA

Kingsley Ave	enue, Rome, Ne	W York						
Sampling Pe	ersonnel:	Peter Lyon			Date: 7	/23/21		
Job Number:	240PM 080000PM 00 PM 08 - 47797 - AM2 PM				Weather:	68° Clone	ly	
Well Id.	LTMW-S01				Time In:		Time Out	: 1000
Well In	formation							5
	•	50 504 September 1	TOC	Other	Well Type		shmount	Stick-Up
Depth to Wat		(feet)	3.82		Well Lock		Yes Yes	No
Depth to Bott		(feet)	16.92		Well Mate	Point Marked: rial:		Nother:
Length of Wa		(feet)	8.1		Well Diam			her:
Volume of W		(gal)	1.29		Comments			
Three Well V	olumes:	(gal)	3.88					
<u> </u>	• •					***		
Purging I	Information						Carronion	F10
Purging Meth	and:	Baile	Peristaltio	Grund	Ifos Pump	1/6/	Conversion I	4" ID 6" ID
Tubing/Bailer		Teflor			lyethylene	gal/ft.	1 10 2 10	7 10 0 10
Sampling Me		Baile			fos Pump	water	0.04 0.16	0.66 1.47
Average Pum			200			1 gall	on=3.785L=3785r	
Duration of P		(min)	30					
Total Volume	Removed:	(gal)	2 [	Did well go dry?	Yes No	2		
Horiba U-52 \	Water Quality M	eter Used?	Yes	No No				
П т	T DTM I	T	T	T OPP	1 O alicenticate a	T	DO.	T TDC
Time	DTW (feet)	Temp (°C)	pН	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
0925	8.88	12.31	2.34	-53	o 755	44,4	2.44	0 485
0930	8.88	17.09	7.06	-58	.801	44.3	2.08	,514
0935	8.88	16.94	6.80	-55	.824	18:2	0.66	-528
0940	8.88	16.99	6.71	-55	.829	11.2	0,19	.531
0945	8.88	16.96	6.45	-56	.831	2.9	0.67	5532
0950	8.88	16.99	6,62	-57	<i>≥83</i> 2	6.7	0.00	1532
0955	8,86	16.99	6,60	~57	-833	0.0	0,00	<sub>2</sub> 533
							2000	
		#77.00.co						
		- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10			2 000000			
Sampling Inf	ormation:							
EPA SW-84	46 Method 8270	SVOC P	'AH's			2 - 100ml ambe	ers Yes	No _
	46 Method 8260	VOC's B				3 - 40 ml vials		
	ethod 335.4	Cyanio				1 - 250 ml plast		
EPA M	ethod 200.7	Metal	S			1 - 250 ml plast	ic Yes	No
Sample ID:	LTMW-S01-0	921 Dur	olicate?	Yes No X	Shi	pped: Pa	ce Courier Pick	up 🔀
Sample Time:	0955			Yes No			Albany Service	
Comments/No	otes:				ı	_aboratory:	Pace Ana	alytical
					II II		Greensbu	DA

Sampling Pe	ersonnel:	eter you			Date: 9	122 h		*
Job Number					Weather:	68 Cloud	N	
Well Id.	LTMW-D02				Time In:	15-17	1	t: <i>1555</i>
						10 11		7033
Well In	formation	_	TOC	Other	Well Type		a home a cont	Stick-Up
Depth to Wa	ter:	(feet)	10.83	Other	Well Lock		shmount Yes	No No
Depth to Bott		(feet)	40.29			Point Marked:	Yes	No
Depth to Pro		(feet)			Well Mate			ther:
Length of Wa			29.46		Well Diam			ther:
Volume of W		(gal)	4.71		Comments			
Three Well V	olumes:	(gal)	14.14					
Purging	Information	_						
							Conversion	Factors
Purging Meth		Bailer	Peristalti	Grund	fos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Tubing/Bailer		Teflon	Stainless St	Pol	yethylene	of		
Sampling Me		Bailer	Peristaltion	Grund	fos Pump	water	0.04 0.16	0.66 1.47
Average Pum		(ml/min)	200			1 gall	on=3.785L=3785r	nL=1337cu. feet
Duration of P		(min)	30			-71		
Total Volume	Removed:	(gal)	_2	Did well go dry?	Yes No	X		
Horiba U-52 \	Water Quality N	/leter Used?	Yes	No No				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1520	12.33	17.52	7.24	-87	- 18i	5.6	0.73	-118
1525	13.19	17.07	2.23	-95	.167	0,4	0.55	0109
1530	13.69	16,83	7.25	-101	0164	4.9	0.38	-108
1535	13.93	16.42	7.31	-109	1163	0.0	6.07	.106
1540	14.06	16.09	7.35	-115	0162	0,2	0,62	-105
1575	14.05	13.83	7.43	-127	-159	0.0	0.41	104
1550	14.03	15.49	7.46	-139	.139	0.0	0.50	104
								- M
Ц					1			
Campling Int	io uno oti a n							
Sampling Inf	ormation:							
		01100 =						
200	46 Method 8270	SVOC P				2 - 100ml ambe		
FEMALE STATE AND ADDRESS OF THE STATE OF THE	46 Method 8260	VOC's B				3 - 40 ml vials		
	ethod 335.4	Cyanid				1 - 250 ml plas		
EPA M	ethod 200.7	Metals	S			1 - 250 ml plas	tic Yes	No
Sample ID:	LTMW-D02-	0021 Dun	licate?	Yes No X	CL:	nnod:	noo Courier Diel	up 🔽
Sample Time:	1557			Yes No No	Shi		ice Courier Pick f Albany Service	
			: עטטועו			DIOP-OII	Mually Service	, Center
Comments/No	otes:				l L	_aboratory:	Pace Ana	
					- 11		Greenshu	Ira PA

Kingsley Ave	enue, Rome, Ne	W TOIK						
Sampling Pe	ersonnel: Ru	w Lyon			Date:	1/22/21		
Job Number:					Weather:	68 191	it Rin	
Well Id.	LTMW-S02				Time In:			
Well In	nformation	_		22002				
Depth to Wa	tor	(feet)	TOC	Other	Well Type Well Locke		shmount Yes	Stick-Up No
Depth to Bott		(feet)	17.98			eu. Point Marked:	Yes	No
Depth to Pro		(feet)	77.00		Well Mater			ther:
Length of Wa		(feet)	7.36		Well Diam			ther:
Volume of W	ater in Well:	(gal)	1.17		Comments	S:		
Three Well V	'olumes:	(gal)	3.53					
Purging	Information							
- r drging	IIIOIIIIauoii	-					Conversion I	Factors
Purging Meth	nod:	Bailer	Peristalti	c Grund	lfos Pump	gal/ft.	1" ID 2" ID	
Tubing/Bailer		Teflon			lyethylene .	of		
Sampling Me		Bailer		c Grund	fos Pump	water	0.04 0.16	
Average Pum			200			1 gall	on=3.785L=3785r	nL=1337cu. feet
Duration of P		(min)	30	District so desC	S S S S S S S S S S S S S S S S S S S	23		
Total Volume		(gal)		Did well go dry?	Yes No	LX.		
Horiba U-52 \	Water Quality N	/leter Used?	Yes	s No				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1605	10.82	18.99	6.53	-27	.672	916	1.27	, 431
1610	10,85	17,11	6,47	-40	.687	7/1	0.00	.440
1615	10.86	18.94	6,45	-45	.695	253	2.67	. 444
1625	10:88	17.09	6.43	-49	.716	249	1.31	.458
1630	10.89	17.32	6.42	-50	-709	137	.48	-454
1635	10.89	17.00	6,42	-51	.709	108	0.00	,459
Sampling Inf	formation:					2000		
EDA CIALO	40 M-4 1 0070	61400 D				0 400 1		
	46 Method 8270 46 Method 8260	SVOC P. VOC's B				2 - 100ml ambe 3 - 40 ml vials		$\mapsto$
	lethod 335.4	Cyanic				1 - 250 ml plas	The second second	
	lethod 200.7	Metal				1 - 250 ml plas	N. 1947.19	
Sample ID:	LTMW-S02-	0021 Dur	olicate?	Yes No X	Shi	pped: Pa	ice Courier Picki	
Sample Time:	163			Yes No No	5111	* * * * * * * * * * * * * * * * * * *	Albany Service	
Comments/No	otes:					_aboratory:	Pace Ana Greensbu	

Sampling Pe	rsonnel:	Peter Lyon	)		Date:	9/23/21		
Job Number:		34400-221			Weath		neh litt	Rain
Well Id.	LTMW-D03				Time I		Time Out:	4
						1010	11110 0	1000
Well In	nformation						3400.1301	
			TOC	Other	Well T	ype: Flu	shmount	Stick-Up
Depth to Wat	ter:	(feet)	5,28		Well Lo		Yes	No
Depth to Bott		(feet)	40.73			ing Point Marked:	Yes	No
Depth to Prod		(feet)			Well M			her:
Length of Wa		(feet)	35,45			iameter: 1'	" 2"Otl	her:
Volume of Wa		(gal)	5.67		Comme	ents:		
Three Well V	olumes:	(gal)	12.01					
					Maria de Maria			
Durging I	I-farmation							
Purging i	Information	_					Oanalan I	
Purging Meth		Bailer	Peristaltic	Cum			Conversion F	-actors 4" ID 6" ID
Tubing/Bailer		Teflon			Ifos Pump lyethylene	gal/ft.	1" ID 2" ID	4 10 6 10
Sampling Met		Bailer			Ifos Pump	of water	0.04 0.16	0.66 1.47
Average Pum			200	Grund	ios Pump	-	on=3.785L=3785m	
Duration of Po		(min)	30			I gan	ON-3.765L-576511	1L=1337 Cu. 1661
Total Volume		(gal)		Did well go dry?	Yes	No.X		
				No.	,	No		
Horida U-52 v	Water Quality N	Meter Usea?	Y es	s No				
Time	T DTM	T	T11	T 000	T a livetive	- Liuis,		1 -00
Time	DTW (feet)	Temp	рН	ORP (m)()	Conductivi		DO (mg/L)	TDS
10/5	(feet) 7,29	(°C)	7 - 5	(mV)	(mS/cm)		(mg/L)	(g/L)
1020	7.56	18.71	7.02		1.06	6,0	6.68	1678
	7.77	18.90	7.06	-100	1.06		6049	124
1036	7.92	19.00	2.13	-106	1.06	0.0	5.86	-678
1035	8,10	19.05	7.18	-111	.882	0,0	5.49	,563
10:10	818	19.19	7,20	-1/2	.867		5.16	
1045	8:23	19.12	7,21	-111	.883		4.92	-555
	prov	1100	TVAI	- ///	,000	0.0	7, 10	7064
				1				
Sampling Info	ormation:							
EPA SW-84	16 Method 8270	SVOC P	'AH's			2 - 100ml ambe	ers Yes	No
	46 Method 8260					3 - 40 ml vials		No
	ethod 335.4	Cyanic				1 - 250 ml plasi		$\Theta$ $\square$
EPA Me	ethod 200.7	Metals				1 - 250 ml plast		No
Sample ID:	LTMW-D03-	.0921 Dup	olicate?	Yes No X	I	Shipped: Pa	ace Courier Picku	nb 🔀
Sample Time:	1045	MS/	/MSD?	Yes No		Drop-off	f Albany Service	Center
Comments/No	ites.					Laboratory:	Pace Ana	lutical
	100.					Laboratory.	Greensbur	
					- 11			9, , , ,

Kingsley Ave	enue, Rome, N	ew York						
Sampling Per	rsonnel:	Peter 45	1		Date: 9	123/21		
Job Number:					Weather:		dy	
Well Id.	LTMW-S03				Time In:	n57		: 1130
1701110.					711110 1111.	NJA	7 11110 000	
Well In	formation						×5	
			TOC	Other	Well Type		shmount	Stick-Up
Depth to Wat		(feet)	4.57		Well Lock		Yes	No
Depth to Bott		(feet)	13.70		150	Point Marked:	Yes	No
Depth to Proc Length of Wa		(feet)	9.13		Well Mate Well Diam			her:
Volume of Wa		(feet) (gal)	9.13		Comment			her:
Three Well V		(gal)	4.38		Comment	J.		
		(0)					O SECTION AND A	
Purging I	Information	_						
						-	Conversion I	
Purging Meth		Baile			fos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Tubing/Bailer Sampling Met		Teflor			yethylene	of	0.04 0.16	0.66 1.47
Average Pum	100	Baile (ml/min)	Peristaltid	c Grund	fos Pump	water	on=3.785L=3785r	
Duration of Pu	<u> </u>	(min)	30			I gail	011-3.763L-37631	IIL-1337cu. leet
Total Volume		(gal)		Did well go dry?	Yes No	7		
Horiba U-52 V	Nater Quality N			S No No				
Tionba o oz i			100					
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1055	4.59	19.56	7,05	-39	.636	13.6	2.02	-405
1106	4.58	17.65	6.67	-40	0559	6.5	0.00	.357
1105	4.58	19,25	6.51	-42	0563	1.6	0,00	-360
1110	4.58	17.33	6,45	-43	-564	0.0	0,00	»361
1115	4.58	11.33	6.39	-45	.562	0,0	0,00	.360
1125	4,58	20,02	6.37	-46	,562	0,0 0,0	0,00	·359
1123	7100	20,00	0,57	12	1000	0,0	CVOO	
No viter All						to the second se		
Sampling Info	ormation:							
EDA 614/ 04	10 M-+ 0070	01/00 5	DALU-			0 100 1	V	
	16 Method 8270 46 Method 8260	SVOC F VOC's E				2 - 100ml ambe 3 - 40 ml vials		
	ethod 335.4	Cyani				1 - 250 ml plas		
	ethod 200.7	Metal				1 - 250 ml plas		No No
						,		
Sample ID:	LTMW-S03-		plicate?	Yes No X	Shi	ipped: Pa	ce Courier Picki	ир 🔀
Sample Time: _	1/25	MS	MSD?	Yes No 🔀		Drop-of	Albany Service	Center
Comments/No	tes:					Laboratory:	Pace Ana	llytical
						•	Greensbu	(5)

Date: 4 3   A  Weather: 6003275-134400-221   Weather: 70 Part Sury   Time In: 1/3   Time Out: 2 15	Kingsley Avenue, Rome,	New TOIK						
Wedl Information	Sampling Personnel:	Pets 40-			Date:	9/23/21		
Well Information					Weather:	70° Part	Sury	
Depth to Water:	Well Id. LTMW-D04	ı			Time In:	1139	Time Out	: 1215
Depth to Water:	Well Information				1030	1000		
Depth to Bottom:	D			Other				
Depth to Product:							$\leftarrow$	
Length of Water Column:			40.30					
Volume of Water in Well:			35.82					
Purging Information			5.23					
Purging Method:	Three Well Volumes:		12.19					
Purging Method:	Purging Information							
Tubing/Bailer Material:   Teflon   Stainless St.   Polyethylene   Grundfos Pump   Average Pumping Rate:   (m/min)   20   (min)   30   (min)   (min								
Sampling Method:   Bailer   Peristatic   Grundfos Pump     water   0.04   0.16   0.66   1.47     Average Pumping Rate:   (milmin)   30       Did well go dry?   Yes   No       Horiba U-52 Water Quality Meter Used?   Yes   No       Time   DTW   Temp   pH   ORP   Conductivity   Turbidity   DO   TDS     Time   DTW   Temp   pH   ORP   Conductivity   Turbidity   (g/L)   (g/L)     JIMO   JIMO   20.77   6.72   -35   -36.7   138   July   (g/L)     JIMO   JIMO   20.77   6.73   -38.7   -38.7     JIMO			<del></del>		· (—)		1" ID   2" ID	4" ID   6" ID
Average Pumping Rate:						1 70	0.04   0.16	0.66   1.47
Duration of Pumping:				Gruna	fos Pump			
Total Volume Removed:			200			1 yan	011-3.700L-0100H	NL-133700. 1661
Horiba U-52 Water Quality Meter Used?   Yes   No			William Co.	Did well go dry?	Yes No	$\alpha$		
Time				200	· - L	Z.		
(feet) ('C)								
11.40	Time DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
1/45								
Sampling Information:    Sampling Information:			+	-38				· 38Z
1/55				-44				
1200   112   1619   172   -25   1650   174   0   15   174   120		18.30	7.69	-21			0.83	3385
Sampling Information:	The second secon		231		1920			116
Sampling Information:    EPA SW-846 Method 8270   SVOC PAH's   2 - 100ml ambers   Yes   No   PA SW-846 Method 8260   VOC's BTEX   3 - 40 ml vials   Yes   No   PA Method 335.4   Cyanide   1 - 250 ml plastic   Yes   No   PA Method 200.7   Metals   1 - 250 ml plastic   Yes   No   No   Pample Time:   Duplicate?   Yes   No   No   Pace Courier Pickup   Drop-off Albany Service Center   Comments/Notes:   Laboratory:   Pace Analytical   Pace Analy		- 10	400					
Sampling Information:  EPA SW-846 Method 8270 SVOC PAH's  EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: 12/0 MS/MSD? Yes No Drop-off Albany Service Center  Comments/Notes: Laboratory: Pace Analytical			<del></del>					
EPA SW-846 Method 8270 SVOC PAH's  EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: 12/0 MS/MSD? Yes No Comments/Notes:  Laboratory: Pace Analytical	1010 11.12	13.71	4,00	J +	1677	Cr. O	0,00	"""
EPA SW-846 Method 8270 SVOC PAH's  EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: 12/0 MS/MSD? Yes No Comments/Notes:  Laboratory: Pace Analytical								
EPA SW-846 Method 8270 SVOC PAH's  EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: 12/0 MS/MSD? Yes No Comments/Notes:  Laboratory: Pace Analytical								
EPA SW-846 Method 8270 SVOC PAH's  EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: 12/0 MS/MSD? Yes No Comments/Notes:  Laboratory: Pace Analytical								
EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: MS/MSD? Yes No Drop-off Albany Service Center  Comments/Notes: Laboratory: Pace Analytical	Sampling Information:		-					
EPA SW-846 Method 8260 VOC's BTEX  EPA Method 335.4 Cyanide  EPA Method 200.7 Metals  Sample ID: LTMW-D04-0921 Duplicate? Yes No Sample Time: MS/MSD? Yes No Drop-off Albany Service Center  Comments/Notes: Laboratory: Pace Analytical	Out of our H   100		414. <u>989</u> 2					
EPA Method 335.4 Cyanide 1 - 250 ml plastic Yes No 1 - 250 ml plastic Yes No 1 - 250 ml plastic Yes No Sample ID: LTMW-D04-0921 Duplicate? Yes No Drop-off Albany Service Center Comments/Notes: Laboratory: Pace Analytical							A 100 A	
Sample ID: LTMW-D04-0921 Duplicate? Yes No Shipped: Pace Courier Pickup Drop-off Albany Service Center Comments/Notes:  Laboratory: Pace Analytical								$\mapsto$
Sample ID: LTMW-D04-0921 Duplicate? Yes No Shipped: Pace Courier Pickup Drop-off Albany Service Center Comments/Notes:  Laboratory: Pace Analytical		351				950		
Sample Time: 12/0 MS/MSD? Yes No Drop-off Albany Service Center Laboratory: Pace Analytical	TO THE STATE OF TH	77.77 (A)				510 sections to the section of the s		
Comments/Notes: Laboratory: Pace Analytical		<b>)4-0921</b> Dur	olicate?	Yes No No	Shir	pped: Pa	ace Courier Pick	up 🔀
	Sample Time: 12/0	<u> MS</u>	/MSD?	Yes No No		Drop-of	f Albany Service	Center
	Comments/Notes:				L	_aboratory:		15

Kingsiey Avenue, Rome, New	TOIK						
Sampling Personnel:	Peter Li	61		Date: 9	123/21		
Job Number: 0603275-1344				Weather:		dy	
Well ld. LTMW-S04			ă,	Time In:	1215	Time Out:	1255
Well Information							
		TOC	Other	Well Type		shmount	Stick-Up
Depth to Water:	(feet)	10-13		Well Lock		Yes	No
Depth to Bottom:  Depth to Product:	(feet)	17.26		Measuring Well Mate	Point Marked:	Yes X Oth	No
Length of Water Column:	(feet)	7.13		Well Diam			
Volume of Water in Well:	(gal)	1.14		Comments			
Three Well Volumes:	(gal)	3.4		-	4 10 10 10 10 10 10 10 10 10 10 10 10 10		
Purging Information							
	_		_			Conversion F	actors
Purging Method:	Bailer			fos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Tubing/Bailer Material:	Teflon			yethylene	of	0.04	0.00 4.47
Sampling Method:	Bailer		Grund	fos Pump	water	0.04 0.16	0.66 1.47
Average Pumping Rate:  Duration of Pumping:	(ml/min) (min)	30			i gaii	on=3.785L=3785m	1L=1337cu. leet
Total Volume Removed:	(gal)		Did well go dry?	Yes No	<b>Y</b>		
Horiba U-52 Water Quality Met			No No	1			
Tromba & oz water addity met					m=		
Time DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
	16.12	6.24	45	244	0,0	a43	4423
1225 10.57	15.84	6.09	59	• 75 7 • 755	00	0.00	-483
1230 15,61	15.54	6.01	72	2748	0,6	6,00	.479
1240 10.64	5,44	5.99	23	,742	0,0	0,00	.475
	5,40	5,98	78	.736	0,0	0.00	-471
1250 10:64 1	5.44	5.97	80	,729	0,0	0,00	.467
						-	
Sampling Information:							
EPA SW-846 Method 8270	SVOC P				2 - 100ml ambe	50 to 100	No No
EPA SW-846 Method 8260 EPA Method 335.4	VOC's B Cyanio				3 - 40 ml vials 1 - 250 ml plas	100	$\Theta$ $\square$
EPA Method 200.7	Metal				1 - 250 ml plas		No H
Sample ID: LTMW-S04-092	<b>21</b> Dup	olicate?	Yes No	Shi	pped: Pa	ce Courier Pick	ap 🔀
Sample Time: 1250	MS/	MSD?	Yes No X		Drop-off	Albany Service	Center
Comments/Notes:					_aboratory:	Pace Ana	lytical

Sampling Pe	ersonnel:	Peter Ly	0		Date:	7/22/21		
Job Number					Weather:	680 Clos	Air	
Well Id.	LTMW-D05				Time In:		Time Out	1430
				- (A)		1330	Time Out	1-130
Well Ir	nformation							
			TOC	Other	Well Type	: Flu	shmount	Stick-Up
Depth to Wa		(feet)	9.75		Well Lock	ed: '	Yes	No
Depth to Bot		(feet)	46.53		Measuring	Point Marked:	Yes	No
Depth to Pro		(feet)			Well Mate			ther:
	ater Column:	(feet)	36,78		Well Diam		' 2"\_Ot	her:
	/ater in Well:	(gal)	5.88		Comments	S:		
Three Well \	/olumes:	(gal)	17.65		-		100	
		<del></del>						
Purging	Information		170 - 1744	The Address of the Ad				
- ruiging	Information	<b>-</b>					0	F4
Purging Meth	od.	Baile	Peristalt	io Cruno	fos Pump		Conversion 1" ID 2" ID	4" ID 6" ID
Tubing/Bailer		Teflor			yethylene	gal/ft.	1 10 2 10	4 10 6 10
Sampling Me		Baile			fos Pump	of water	0.04 0.16	0.66 1.47
Average Pun		(ml/min)	20	Ordina	los i ump		on=3.785L=3785r	
Duration of P		(min)	30			_ i gain	011-0.700L-07001	IIL-1337ca. leet
Total Volume		(gal)		Did well go dry?	Yes No	2		
Horiba II-52	Water Quality N			s No No				
Tionba o oz	vvator Quanty i	wieter Osed:		\$ 140				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1355	11.99	18.74	2.53	-88	.313	0.0	0.50	-204
1400	13.42	18.36	7.63	-91	.312	0,0	0,00	-202
1405	14.20	18,30	7.68	-92	.311	0.0	0,00	1202
1410	15.01	18.28	2.71	-93	-312	0,0	0.00	.203
1715	15.71	18.24	7.73	-96	,310	0,0	0,00	,201
1420	16.24	18.30	7.75	-99	-307	0,0	0000	-199
1425	16.71	18.54	2.7.7	-102	-306	0,0	0,00	199
	L							
Sampling Inf	ormation:							
Sampling in	offiation.							
EDA SM/-8/	16 Method 8270	SVOC P	Alle			0.400		
	46 Method 8260	VOC's B				2 - 100ml ambe	201000	$\ominus$
	ethod 335.4	Cyanic				3 - 40 ml vials	1	
	ethod 333.4 ethod 200.7	Metal				1 - 250 ml plast		$\Theta$ $\square$
F1 /1 (VII	56104 Z00.7	ivietal	o			1 - 250 ml plast	ic Yes	X No L
Sample ID:	LTMW-D05-	0921 Dur	olicate?	Yes No	Shir	ped: Pa	ce Courier Pickı	ın 🔽
Sample Time:	1425			Yes No	Silip	*:	Albany Service	· (C)
Comments/No	ites:				∥ L	aboratory:	Pace Ana	8
							Greensbu	rg, PA

			The same of the same					
Sampling Pe	ersonnel:	exer Lyon			Date: G	1/22/21		
Job Number		34400-221			Weather:	1.8° Clou	rdy	
Well Id.	LTMW-S05				Time In:	1431	Time Ou	1510
					711110 1111.	1151	Time ou	
Well In	nformation							
		_	TOC	Other	Well Type	e: Flu	ushmount	Stick-Up
Depth to Wa		(feet)	10.71		Well Lock		Yes	No
Depth to Bot		(feet)	16.83		Measuring	Point Marked:	Yes	No
Depth to Pro		(feet)	2700		Well Mate	rial: PV0	c ss o	ther:
***************************************	ater Column:	(feet)	6.12		Well Diam		" <u> </u>	ther:
Three Well \	/ater in Well:	(gal)	97		Comment	s:		
Three well v	volumes:	(gal)	2,93					
Purging	Information		-					
- Targing	Intornation	_				F	0	
Purging Meth	od.	Baile	Peristalti	Current	dfos Pump		Conversion 1" ID 2" ID	
Tubing/Bailer		Teflor			lyethylene	gal/ft.	1 10 2 10	4" ID 6" ID
Sampling Me		Baile			dfos Pump	of water	0.04 0.16	0.66 1.47
Average Pum	nping Rate:	(ml/min)	200	- January Committee	2100 T GITIP		lon=3.785L=3785r	
Duration of P		(min)	30					
Total Volume	Removed:	(gal)	The state of the s	Did well go dry	? Yes No	1		
Horiba U-52	Water Quality I	Meter Used?	Yes	No No		<del></del>		
¥4								
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1435	11.01	17.92	6.62	15	.828	0,0	4.18	,53/
1440	11.16	17.23	6:36	33	-890	0.0	6.25	0571
1445	11.26	17,00	6.23	41	-940	0,0	6.08	-602
1450	11.29	16.83	6.17	47	0967	0,0	5.73	.619
1455	11.30	16.82	6.16	49	. 975	0.0	5.61	.624
1500	11.32	16.77	6,14	52	. 987	0.0	5.26	-629
1503	11.32	16.74	6.13	52	,992	0.0	5.08	-635
Compline Inf								
Sampling Inf	ormation:							
EDA SIM OA	16 Method 8270	0,400 D						
	46 Method 8260	SVOC P				2 - 100ml ambe		$\boldsymbol{\boxminus}$
	ethod 335.4	VOC's B				3 - 40 ml vials		$\rightarrow$
	ethod 333.4 ethod 200.7	Cyanic Metals				1 - 250 ml plast		
LI A ME	UTIOU 200.1	ivietais	>			1 - 250 ml plast	ic Yes	No
Sample ID:	LTMW-S05-	0921 Dun	licate?	Yes No X	Chi-	ned: D-	oo Courier Dist	
Sample Time:	1505			res No No	Suit	Annual An	ce Courier Picku	. [
		100/					Albany Service	Center
Comments/No	tes:				L	aboratory:	Pace Ana	ytical
					- 11		Greensbur	- DA

Tangsley 74ver	nac, Rome, N	SW TOIK						
Sampling Per	rsonnel:	etel you			Date: 0	1/22/21		
Job Number:					Weather:	Cloudy	680	
Well Id.	LTMW-D06				Time In:	1223	Time Out	: 1200
						TON-		. 1.50
Well Inf	formation	_						
			TOC	Other	Well Type		shmount	Stick-Up
Depth to Water		(feet)	12.55		Well Lock		Yes	No
Depth to Botto Depth to Prod		(feet)	52.22		Measuring I Well Mate	Point Marked:	Yes X Ot	No her:
Length of Wat		(feet)	39.67		Well Diam			her:
Volume of Wa		(gal)	6.34		Comments			
Three Well Vo	olumes:	(gal)	19.04		Miles de la constante de la co			
						7.00		
Purging Ir	nformation	-						
Purging Metho		— Deil	Davistali.	. 🔽			Conversion I	
Tubing/Bailer I		Baile Teflo	$\vdash$		Ifos Pump Iyethylene	gal/ft.	1" ID   2" ID	4" ID 6" ID
Sampling Meth		Baile	$\vdash$		Ifos Pump	of water	0.04 0.16	0.66 1.47
Average Pump		(ml/min)	230	0.0	10s 1 dilip		on=3.785L=3785n	
Duration of Pu	ımping:	(min)	30					
Total Volume I	Removed:	(gal)	The state of the s	Did well go dry?	Yes No	X		
Horiba U-52 W	/ater Quality M	leter Used?	Ye	s No				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS I
1 11110	(feet)	(°C)	Pi	(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1225	13.30	15,39	7.39	13	.469	0,0	2.06	,307
1230	13.36	13.97	7.49	-11	. 468	0.0	0853	304
1235	13.40	13.68	7.54	-39	.441	0.0	0.27	286
1240	13.38	13.67	7.57	-47	.444	0,0	0.16	.289
1245	13.38	13.55	7.54	-50	,455	0.0	0.17	,296
1250	13.39	13.47	7.53	-51	0476	0.0	0.13	310
1000	12.51	10.00	T. Ja	-52	0498	0.0	0.12	,325
		To the second se						
Sampling Info	rmation:							
	6 Method 8270	SVOC F				2 - 100ml ambe		No
	6 Method 8260	VOC's E				3 - 40 ml vials	K	$\ominus$
	thod 335.4	Cyanio				1 - 250 ml plast	K	$\rightarrow$ $\rightarrow$
	thod 200.7	Metal	S			1 - 250 ml plast	ic Yes	No
EPA Met								
	LTMW-D06-0	921 Dur	alicate?	Ves No No	Shir	ned: Pa	ce Courier Pieku	
Sample ID: _	LTMW-D06-0		50 CO	Yes No No	Ship	1000	ce Courier Picku	
Sample ID: Sample Time: Comments/Note	1255			Yes No No No		1000	ce Courier Picku Albany Service Pace Anal	Center

Sampling Pe	ersonnel: R	tu Lyon			Date: 0	122/21		
Job Number		1			Weather:	(05° Close	u	
Well Id.	LTMW-S06				Time In:		1	t: 1340
Well In	nformation							57
Depth to Wa	łan.	(5: -4)	TOC	Other	Well Type		shmount	Stick-Up
Depth to Wa		(feet)	13.44		Well Lock		Yes	No
Depth to Pro		(feet)	- 17.00		Well Mate	Point Marked: rial: PVC	Yes X Of	No ther:
Length of Wa		(feet)	4.16		Well Diam			ther:
Volume of W		(gal)	066		Comments			
Three Well V	olumes:	(gal)	1-99					
Division	1 - ( (							
Purging	Information	-						
Purging Meth	and:	Baile	er Peristaltic	Cruze	·· - D ·· - [		Conversion	
Tubing/Bailer		Teflor			Ifos Pump lyethylene	gal/ft.	1" ID 2" ID	4" ID 6" ID
Sampling Me		Bailer	$\vdash$		Ifos Pump	of water	0.04 0.16	0.66 1.47
Average Pum			200	, Orang	los Fullip		on=3.785L=3785r	
Duration of P		(min)	30			1 5	011 0.1 00L 01 00.	112-100704.1001
Total Volume	Removed:	(gal)		Did well go dry?	Yes No	X		
Horiba U-52 \	Water Quality N	Meter Used?	The State of the S	No No				
	•		1.c					
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1305	13.63	15.91	6.40	18	.935	10.8	1.56	.604
1310	13.60	15.04	6.15	29	1.01	0.0	0.29	.644
13/5	13.61	15.05	6.12	29	1,01	0.0	0.12	0644
1320	13.59	15.11	6.09	36	1,00	0.0	0.17	.643
1325	13.59	15.16	6:07	29		0.0	0.07	1639
1335	13.59	15,10	6.06	29	.996 .994	0.0	0.17	.638
1000	13.51	10110	6.06	W. 1	3777	0,6	6,00	.636
						1.00000		
Sampling Info	ormation:							
	16 Method 8270	SVOC P				2 - 100ml ambe		No
	46 Method 8260	VOC's B				3 - 40 ml vials	Yes	No
	ethod 335.4	Cyanic				1 - 250 ml plast		No
EPA Me	ethod 200.7	Metals	S			1 - 250 ml plast	ic Yes	No No
Sample ID:	LTMW-S06-0	nna4 Dur	-lianta0 \		Chi.			
Sample ID	1335			Yes No No	Shib		ce Courier Picku	
		10101	IVIOU:	Yes No No		Drop-on	Albany Service	Center
Comments/No	tes:				L	aboratory:	Pace Anal	2
					- 11		Greensbur	a PA

,								
Sampling Pe	ersonnel:	Peter Lyon			Date: C	122/21		
Job Number					Weather:	65 C15	sady	
Well Id.	LTMW-S07			MC400	Time In:		Time Out	:: 1130
								1100-
Well In	nformation	_						
D - 41- 1- 1/4-	* 14-9900		TOC	Other	Well Type		ıshmount	Stick-Up
Depth to War		(feet)	17.13		Well Lock		Yes	No
Depth to Bott		(feet)	17.82		Measuring Well Mate	Point Marked: erial: PVC	Yes Ot	No
Length of Wa		(feet)	6.69		Well Diam			ther:
Volume of W		(gal)	1.07		Comments			1161.
Three Well V	/olumes:	(gal)	3,21		(American)			
							1	
Purging	Information	_						
Direction Math	200204 2				2000 0000		Conversion I	
Purging Meth Tubing/Bailer		Baile	$\vdash$		Ifos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Sampling Me		Teflor Baile			lyethylene Ifos Pump	of water	0.04 0.16	0.66 1.47
Average Pum		(ml/min)	Peristaltic	Giuna	tos Pultip		on=3.785L=3785n	
Duration of P		(min)	00				011-0.700L 07001	IIL-1007Cu. ICCL
Total Volume		(gal)	Character Control Control	Did well go dry?	Yes No	X		
Horiba U-52 \	Water Quality M	/leter Used?	Yes	No No				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1050	12.00	17.84	6.81	-31	0727	0.0	1.00	- 466
1055	12.54	16.91	6.63	-31 -36	.738 .738	0.0	0,00	. 473
1105	12.57	17.11	6.56	-38	.734	0,0	0.14	-469
1//0	12.56	17.12	6.54	-38	733	0.0	0.12	.469
1115	12.59	17.04	6.53	-38	o 733	0.0	0,10	. 469
1/20	12.62	17.07	6,57	-39	. 734	0.0	0.10	s 469
Sampling Inf	formation:							
, ,								
EPA SW-84	46 Method 8270	SVOC P	'AH's			2 - 100ml ambe	ers Yes	No
EPA SW-84	46 Method 8260	VOC's B	3TEX			3 - 40 ml vials		
EPA M	ethod 335.4	Cyanic	de			1 - 250 ml plast	tic Yes	No
EPA Me	ethod 200.7	Metal	S			1 - 250 ml plast	tic Yes	No
Sample ID:	LTMW-S07-0	0 <b>921</b> Dur	plicate? Y	Yes No No	Shir	pped: Pa	ce Courier Picku	
Sample Time:	1120			Yes No No			Albany Service	
Comments/No	otes:				L	_aboratory:	Pace Ana	lytical
							Greensbu	ra PA

Sampling Pe	ersonnel:	Peter Lyon			Date: 9	122 (21		
Job Number					Weather:	65° 016	udy	
Well Id.	LTMW-S08				Time In:		Time Out	12.15
								10-4-5
Well Ir	nformation	_0						
			TOC	Other	Well Type	: Flu	ıshmount	Stick-Up
Depth to Wa		(feet)	15.78		Well Lock	ed:	Yes	No
Depth to Bot		(feet)	17.39		(7)	Point Marked:	Yes	No
Depth to Pro		(feet)	61/1		Well Mate			her:
Length of Wa		(feet)	81.61		Well Diam		' 2"Ot	her:
Three Well V		(gal)	·25		Comments	S:		
THICO VION V	Olumes,	(yai)	074					
Author States of Auto-								
Purging	Information							
		-					Conversion I	Factors
Purging Meth	nod:	Bailer	r Peristaltic	Grund	lfos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Tubing/Bailer	r Material:	Teflon	<del></del>	$\sim$	lyethylene	of		
Sampling Me		Bailer	r Peristaltic		lfos Pump	water	0.04 0.16	0.66 1.47
Average Pum		(ml/min)	200		· <del></del>	1 gall	on=3.785L=3785n	nL=1337cu. feet
Duration of P		(min)	30					
Total Volume	Removed:	(gal)	2 0	Did well go dry?	Yes No	X		
Horiba U-52 \	Water Quality M	Лeter Used?	Yes	No				
Time	DTW	Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
	(feet)	(°C)		(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
1140	16.02	17.02	6.38	10	0955	18.0	0.56	,612
1145	16.01	17.39	6.39	18	3958	0.0	6.21	6613
1150	16.01	17.32	6.40	27	. 952	0,0	0.16	.609
1155	16,03	16.98	6.41	33	0948	0.0	0.00	6607
1200	16.04	17.08	6.41	38	0748	0.0	0.00	-606
1205	16.05	16.95	6.42	43	.946	0.0	0.00	-605
1220	16.05	17.08	6.42	46	.945	0.0	0:00	-605
					-			
Sampling Inf	ormation:							
Oumping in	omaton.		••					
FPA SW-84	46 Method 8270	SVOC PA	л Ц' <sub>С</sub>			2 - 100ml ambe	Voc	No
	46 Method 8260	VOC's B				3 - 40 ml vials		No H
	ethod 335.4	Cyanid				1 - 250 ml plast		$\ominus$
	ethod 200.7	Metals				1 - 250 ml plast	į.	No H
	Striod 200	HOLL	3			1 - 200 IIII piasi	10 1 Co	
Sample ID:	LTMW-S08-0	<b>0921</b> Dup	olicate? Y	Yes No	Shir	oped: Pa	ce Courier Picku	ın 🔀
Sample Time:	1210			Yes No	O		Albany Service	
Comments/No	etos:				<del></del> 1 .			
Commentarivo	les.					.aboratory:	Pace Anal	
					- 11		Greensbur	G, PA

Sampling Personnel:	Pela yr	)		Date:	9/22/21		
Job Number: 0603	275-134400-221			Weather:	Cloudy	650	
Well Id. LTMW-	S09			Time In:			: 0940
					-100		
Well Information	n						
		TOC	Other	Well Type		shmount	Stick-Up
Depth to Water:	(feet)	7.69		Well Lock		Yes	No
Depth to Bottom:  Depth to Product:	(feet)	16.92		100	Point Marked:	Yes	No
Length of Water Colu	mn: (feet)	7.23		Well Mate Well Dian			her: her:
Volume of Water in W		1.15		Comment			ner.
Three Well Volumes:	(gal)	3.47		30,,,,,,			
	· · · · · · · · · · · · · · · · · · ·						
Purging Information	on						
5						Conversion	
Purging Method: Tubing/Bailer Material	Bail			Ifos Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Sampling Method:	: Teflo			lyethylene Ifos Pump	of water	0.04 0.16	0.66 1.47
Average Pumping Rat		200	Grund	ilos Pulip		on=3.785L=3785r	
Duration of Pumping:	(min)	30				011 017002 07001	TE 100100. ICCL
Total Volume Remove	d: (gal)		Did well go dry?	Yes No	X		
Horiba U-52 Water Qu	ality Meter Used?	Ye	s No		·		
	7						
Time DT\	V Temp	рН	ORP	Conductivity	Turbidity	DO	TDS
(fee		·	(mV)	(mS/cm)	(NTU)	(mg/L)	(g/L)
	37.21 16.40	6.81	190	0.856	0.0	5.65	.555
0710 9.7	2 15.54	6.78	196	-868	0.0	3.51	.536
3915 9.7		6.74	194	.885	0.0	2.66	.567
0920 9.2		6.77	189	2906	0.0	3.06	6580
0930 7.73		6.80	181	0912	0.0	2.71	-574
0935 9.7		6.92	177	0916	0.0	2.21	2586
				712			2760
		1					
Sampling Information	<u> </u>						
EPA SW-846 Method	9270 61/00 1	DALU-			4 400 1	,, l	
EPA SW-846 Method					4 - 100ml ambe 3 - 40 ml vials	100, 100,000	$\Theta$
EPA Method 335			*		1 - 250 ml plast		$\Theta$ $\square$
EPA Method 200					1 - 250 ml plast		No H
Field Du	plicate 0921						
COMPANY AND ADMINISTRATION OF THE PARTY OF T			Yes No	Sh	ipped: Pa	ce Courier Pickı	ar 🔀
Sample Time:	735 MS	S/MSD?	Yes No X	200	Drop-off	Albany Service	Center
Comments/Notes:					Laboratory:	Pace Ana	lytical

Greensburg, PA

Sampling Pe	ersonnel:	etar cyon			Date: 9	/22/21									
Job Number:					Weather: 65° Cloudy										
Well Id.	LTMW-S10			Time In: 975 Time Out: 1030											
Well In	nformation														
			TOC	Other	Well Type		shmount	Stick-Up	$\boxtimes$						
Depth to Wat		(feet)	10.37		Well Lock		Yes	No	$\vdash$						
Depth to Bott		(feet)	17.18			Point Marked:	Yes	No							
Length of Wa		(feet)	6.81	-	Well Mate Well Diam			her: her:							
Volume of W		(gal)	1,08		Comments			ner.							
Three Well V		(gal)	3.26		O O I I I I I I I I I I I I I I I I I I	J.									
									ec. 100						
Purging I	Information								11.00 00 0000						
							Conversion								
Purging Meth		Bailer		<u> </u>	lfos Pump	gal/ft.	1" ID 2" ID	4" ID	6" ID						
Tubing/Bailer Sampling Me		Teflon			lyethylene	of	004 046	0.00	4 47						
Average Pum		Bailer (ml/min)		c Grund	fos Pump	water	0.04   0.16		1.47						
Duration of P		(mi/min)	200			1 gail	on=3.785L=3785r	mL=133/cu	u. feet						
Total Volume		(gal)	<u> 30                                    </u>	Did well go dry?	Yes No	X									
	Water Quality N			s No	100										
MONDA U-52 V	Water Quality is	/leter USeu :	1 65	3 NO L											
Time	T DTW	Temp	T nH	T ORP	Conductivity	Turhidity	DO 1	ТП	10						
Time	DTW (feet)	Temp (°C)	рН	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TD (a/							
Time	DTW (feet)	(°C)	pH	(mV)	Conductivity (mS/cm)	(NTU)	(mg/L)	(g/	L)						
	(feet)			1	(mS/cm)	1.5	255	(g/	L)						
0955	(feet) 10,52 10,64 10,70	(°C) 15.81 15.62 15.64	6.25	(mV)	(mS/cm)	(NTU)	(mg/L) 1.87 0.70 0:03	(g/	L)						
1005	(feet) 10.52 10.64 10.70 10.75	(°C) 15.81 15.62 15.64 16.64	6.44 6.25 6.17 6.12	(mV)	(mS/cm) 1.02/ 1.02 1.03 1.05	(NTU) 0,4 3,8	(mg/L) 1.87 0.70 0:03	(g/l - 64 - 63 - 63	L) 66 7 7 70						
1005 1005 1015	(feet) 10,52 10,64 10,70 10,75 10,75	(°C) 15.81 15.62 15.64 16.64 15.72	6.44 6.25 6.17 6.12	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,7 3,8 0,0 0,0	(mg/L) 1.87 0.70 0:03 0.00	(g/l 64 104 63	L) 66 7 7 70						
0955 1006 1005 1010 1015 1020	(feet) 10,52 10,64 10,70 10,75 10,78	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 7 7 70 77 77						
1005 1005 1015	(feet) 10,52 10,64 10,70 10,75 10,75	(°C) 15.81 15.62 15.64 16.64 15.72	6.44 6.25 6.17 6.12	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,7 3,8 0,0 0,0	(mg/L) 1.87 0.70 0:03 0.00	(g/ ,64 ,63 65	L) 66 9 7 7 70 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						
0955 1006 1005 1010 1015 1020	(feet) 10,52 10,64 10,70 10,75 10,78	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 9 7 7 70 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						
0955 1006 1005 1010 1015 1020	(feet) 10,52 10,64 10,70 10,75 10,78	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 9 7 7 70 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						
0955 1006 1005 1010 1015 1020	(feet) 10,52 10,64 10,70 10,75 10,78	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 9 7 7 70 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						
0955 1006 1005 1010 1015 1020	(feet) 10,52 10,64 10,70 10,75 10,78	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 7 7 70 77 77						
0955 1006 1005 1010 1015 1020	(feet) 10.52 10.64 10.75 10.75 10.78 10.80	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 7 7 70 77 77						
1005 1005 1015 1020 1025	(feet) 10.52 10.64 10.75 10.75 10.78 10.80	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L)  1.87  0.70  0:03  0.00  0.00	(g/ 664 663 663 664	L) 66 7 7 70 77 77						
1005 1005 1015 1020 1025	(feet) 10.52 10.64 10.75 10.75 10.78 10.80	(°C) 15.81 15.62 15.64 16.64 15.72 15.72	6.44 6.25 6.17 6.12 6.10 6.09 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0	(mg/L) 1.87 0.70 0:03 0.00 0.00 0.17 0.14	(g/l	L) 66 7 7 70 77 77						
0933   1005   1005   1015   1025   1025   Sampling Info	(feet) 10.52 10.64 10.75 10.75 10.78 10.78 10.80	(°C) 15.81 15.62 15.64 16.64 15.72 15.58 15.34	6.44 6.25 6.12 6.12 6.10 6.09 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0,4 3,8 0,0 0,0 0,0 0,0	(mg/L) 1.87 0.70 0:03 0.00 0.17 0.14	(g/l .64 .63 .65 .65 .65	L) 66 7 7 70 77 77						
0935   1005   1005   1000   1025   1025   Sampling Info	(feet)  10.52  10.64  10.75  10.75  10.78  10.78  10.780  formation:	(°C) 15.81 15.62 15.64 15.72 15.38 15.34	6.44 6.25 6.17 6.10 6.09 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0.4 3.8 0.0 0.0 0.0 0.0 0.0 6-100ml ambe	(mg/L)  1.87  0.70  0:03  0.05  0.17  0.14  ers Yes	(g/l .64 .63 .65 .65 .65	L) 66 7 7 70 77 77						
0 0 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	(feet) 10.52 10.64 10.75 10.75 10.78 10.78 10.80 Formation: 46 Method 8270 46 Method 8260 ethod 335.4 ethod 200.7	(°C) 15.81 15.62 15.64 16.64 15.72 15.58 15.54 SVOC P. VOC'S B	6.44 6.25 6.12 6.10 6.09 6.09 6.09	(mV) 41 25 24 21 17	(mS/cm)  1.04  1.02  1.03  1.05  1.06	(NTU) 0.4 3.8 0.0 0.0 0.0 0.0 0.0 6-100ml amber 3-40 ml vials	(mg/L)  // %7  0.70  0.03  0.00  0.00  0.17  0.14  ers Yes  tic Yes	(g/l	L) 66 7 7 70 77 77						
0 9 3 3 3   10 2 6   10 2 5	(feet) 10.52 10.64 10.75 10.75 10.78 10.78 10.78 10.78 10.78 10.80 formation: 46 Method 8270 46 Method 8260 ethod 335.4 ethod 200.7 -\$10-M\$\$-0921	(°C) 15.81 15.62 15.64 15.72 15.58 15.5 4 SVOC P. VOC's B Cyanic Metals LTMW-S	6.44 6.25 6.12 6.10 6.09 6.09 6.09	(mV) 4/1 25 24 21 17 17 17	(mS/cm)  1.03  1.03  1.05  1.06  1.07	(NTU)  0.4  3.8  0.0  0.0  0.0  0.0  3-40 ml vials  1-250 ml plast	(mg/L)  // 47	(g/l .64 .63 .63 .63 .63 .63 .83	L) 66 7 7 70 77 77						
Sampling Info  EPA SW-84  EPA Me  EPA Me  LTMW-  Sample ID:	(feet) 10.52 10.64 10.75 10.75 10.78 10.78 10.78 10.78 10.80 formation: 46 Method 8270 46 Method 8260 ethod 335.4 ethod 200.7 -S10-MS-0921 LTMW-S10-1	(°C) 15.81 15.62 15.64 15.72 15.72 15.58 15.34 SVOC P. VOC's B. Cyanic Metals LTMW-S	6.49 6.25 6.12 6.10 6.09 6.09 6.09 6.09 6.09	(mV)  4// 25  24  21  17  17  17  17  10  Yes No	(mS/cm)  1.03  1.03  1.05  1.06  1.07	(NTU)  0.4  3.8  0.0  0.0  0.0  0.0  0.0  1.0  0.0  0	ers Yes tic Yes tic Yes tic Yes	(g/l	L) 66 7 7 70 77 77						
0 9 3 3 3   10 2 6   10 2 5	(feet) 10.52 10.64 10.75 10.75 10.78 10.78 10.78 10.78 10.78 10.80 formation: 46 Method 8270 46 Method 8260 ethod 335.4 ethod 200.7 -\$10-M\$\$-0921	(°C) 15.81 15.62 15.64 15.72 15.72 15.58 15.34 SVOC P. VOC's B. Cyanic Metals LTMW-S	6.49 6.25 6.12 6.10 6.09 6.09 6.09 6.09 6.09	(mV) 4/1 25 24 21 17 12 16	(mS/cm)  1.03  1.03  1.05  1.06  1.07	(NTU)  0.4  3.8  0.0  0.0  0.0  0.0  0.0  1.0  0.0  0	(mg/L)  // 47	(g/l	L) 66 7 7 70 77 77						
Sampling Info  EPA SW-84  EPA Me  EPA Me  LTMW-  Sample ID:	(feet)  10.52  10.64  10.75  10.75  10.78  10.78  10.80  formation:  46 Method 8270 46 Method 8260 ethod 335.4 ethod 200.7 -S10-MS-0921  LTMW-S10-6	(°C) 15.81 15.62 15.64 15.72 15.72 15.58 15.34 SVOC P. VOC's B. Cyanic Metals LTMW-S	6.49 6.25 6.12 6.10 6.09 6.09 6.09 6.09 6.09	(mV)  4// 25  24  21  17  17  17  17  10  Yes No	(mS/cm)  1.02  1.03  1.05  1.06  1.06  1.07	(NTU)  0.4  3.8  0.0  0.0  0.0  0.0  0.0  1.0  0.0  0	ers Yes tic Yes tic Yes tic Yes	No No No No Center	L) 66 7 7 70 77 77						

Well ID	Sample ?	Well Size	DTW	DTP	DTB	Comments
MW-OU2-1	No	4"	9.35	42.14	45.81	Remailed Spelling DUTIPI
MW-OU2-2	No	4"	10,25	46.35	47.53	Removed 2001/000 DNAP
MW-OU2-3	No	4"	6.92	_	34.18	
MW-OU2-4	No	4"	6.89	34.64	39.55	Romoded Signibus Dulle
MW-OU2-5	No	4"	7,62	-	36.01	
DNAPL-02	No	6"	9.69	Trace	50.40	
DNAPL-03	No	6"	9,06	Trace	52.32	
DNAPL-04	No	6"	11.23		51.45	
DNAPL-05	No	6"	13.36		54.75	
DNAPL-06	No	6"	12.47		51.45	
DNAPL-07	No .	6"	12,86		53.60	
DNAPL-08	No	6"	1339		58.01	
DNAPL-09	No	6"	14,33		57.58	
VTM-1	No	6"	13.28		46.37	
VTM-2	No	6"	10.73		49.47	
VTM-3	No	6"	11.80		50.91	
VTM-4	No	6"	13.64		50.62	
VTM-5	No	6"	13,74		52.52	
LTMW-D01	Yes	2"	8.63	V-	46.84	
LTMW-S01	Yes	2"	8.82		16.92	
LTMW-D02	Yes	2"	10.83	_	40.29	
LTMW-S02	Yes	2"	10.62	J	17.98	
LTMW-D03	Yes	2"	5.28	-	40.73	
LTMW-S03	Yes	2"	4.52	_	13.70	
LTMW-D04	Yes	2"	10.54	-	46.36	
LTMW-S04	Yes	2"	10.13	_	17.26	
LTMW-D05	Yes	2"	9.75	_	46.53	
LTMW-S05	Yes	2"	10.71	_	16.83	
LTMW-D06	Yes	2"	12.55	_	52.22	
LTMW-S06	Yes	2"	13.44		17.60	
LTMW-S07	Yes	2"	11.13	w	17.82	
LTMW-S08	Yes	2"	15.78		17.39	
LTMW-S09	Yes	2"	9.69	ments.	16.92	Dup
LTMW-S10	Yes	2"	10.37	_	17.18	MS/MSD

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Section		Section B			Section	C																				
_	red Client Information:	Required Project Information:			Invoice Inf	ormation:																		Page:	10	of · 1
	iny: GES - Syracuse	Report To: Devin Shay (GES) dshay@gesonline.com			Attention:	Accounts Pa	ayable via en	nail at ges-in	voices@g	esonline.	com		100 1000		$\neg$	Distant.				No.	REG	ULAT	ORY	AGENC	Υ	
	s: 6780 Northern BLVD Suite 100	Report To: Tim Beaumont (GES tbeaumont@gesonline.com	)		1		undwater & E								$\exists$	□ NP	DES		GRO		WATE			FlG WA⁻		
	vracuse, New York 13057	Quarterly System E	fflue	nt	Address: 5 Technology Place, Suite 4, East Syracuse, NY 13057								$\exists$	1   _						Γ						
	o: dshay@gesonline.com	Purchase Order No.:	200		Pace Quot	te Reference	<b>:</b> :							-	$\dashv$	1350	1	SIT	E			GA [		- IN F		- NC
Phone: x4051	800.220.3069 Fax: None	Project Name: National Grid - Ro Kingsley Ave. Site, Rome, NY	ome		Pace Proje	ct Manager:	Rachel Chris	stner					-		$\dashv$	LOCA	ATIC							r wir		
Reque	sted Due Date/TAT: Standard	Project Number: 0603275-134400-221-1106			Pace Profi	e#:									$\dashv$	Filtered (						7	7/	7	777	777
ITEM#	SAMPLE ID	Valid Matrix Codes  MATRIX CODE  CHINE SIGNATOR  CHINE SIGNATOR  CHINE CHIN CHINE CHIN CHIN CHIN CHIN CHIN CHIN CHIN CHIN	MATRIX CODE	SAMPLE TYPE G+GRAB C=COMP	COMPOSITES:		GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Inpreserved	Pro solution of the solution o	eserva		Wethanol	Request Analysis:									### P	ace Project Number
1	Effluent System	0921	WT	G	DATE	THVIE		1320	40 .0.		+~+	ř É		S.	N S	-	-{	6/6		13/	\$/		4			Lab I.D.
3	Trip Blank	0021	WT				9/23/50	1320	13,6	10	5	1	3 1	+	+		- ;	3 4	1	1	1	$\vdash$	+			
4	END OF RECO	)RD	001	G			11248			3	$\vdash$	+	3	H	+		- 1	3	$\vdash$	+	4	$\vdash$	$\perp$			
5 6 7 8 9																										
10 11																	1			1	$\parallel$					
12										_		+	+	$\vdash$	+		+	+	H	+	+	+	+			
Addition	al Comments:		RELI	NQUIS	SHED BY / A	AFFILIATION		DATE	TIME	ACCEP	TEDE	Y/AF	FILIATI	ON				G	DATE		TIME			F 001		
SAMP	LES WILL ARRIVE IN #	COOLERS.		-		ion Go		2/27/21			)												AWIPL	E CONI		
		OGGERO.	1		- 2, 0)	000	שט מע	40401				10	^					11	12	<del>}</del>	ls?	le	$\dashv$	Z Z	Z >	Z >
Please	send reports to: dshay@gesonline.com, tbear	umont@gesonline.com					-											+		+	-	-	$\dashv$	Z Z	Z Z	Z Z
	ion@gesonline.com, ges@equisonline.c	3.0																+		+		-	$\dashv$	Z Z	Z Z	Z >
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				SAMPLER	NAME AND	SIGNATUR	E										ed .				-	X X	N N	- X
	FIC EDD NAME:				ſ	PRINT Name of S	SAMPLER:						In-		and the					( town			remp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
NGRO	me-labnumber.28351.EQEDD.zip												DAT	E Signed	(MM / C	U/YY)						1	PP	Re	Seal	Sam



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:	Section B	Sec	ction C							
Company: GES - Syracuse	Required Project Information:	Invo	oice Information:						Page:	2 of 2
	Report To: Devin Shay (GES) dshay@gesonline.com	Atter	ention: Accounts Payable via	email at ges-invoice	@gesonline	com			r ugu.	2012
Address: 6780 Northern BLVD, Suite 100	Report To: Tim Beaumont (GES) tbeaumont@gesonline.com		npany Name: Groundwater 8					REGULATO	ORY AGENCY	
ast Syracuse, New York 13057	ascadinora@gesoriline.com						T NPDES TORC	and the second second second second second		
mail To: dshay@gesonline.com	Purchase Order No.;		lress: 5 Technology Place, Si	uite 4, East Syracuse	NY 13057		L DST L SCH		PRINKING WATE	R
Phone: 800.220.3069 Fax: None	and the second s		e Quote Reference:						THER	21
4051	Project Name: National Grid - Rome Ave. Site, Rome, NY	e Kingsley Pace	e Project Manager: Rachel C	hristner			SITE	GA F	L	L. L.
equested Due Date/TAT: Standard	Project Number: 0603275-134400-221-1106			Quarterly	CIMO		LOCATION	L 2H L	ic I n I	HER
Section D Promised Clients	Valid Malrix Codes	T		Guarterry	GWS		Filtered (Y/N)		1111	1111
SAMPLE ID			COLLECTED			Preservatives	Requested	//	/////	////
One Character per box.	DRINKING ATER ATER WIT WASTE WATER WWW MDDUCT P ORUMNUD S2	с=сомр			- 1		Analysis:	///	/////	////
(A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE	DUTING ST. D.	9		į				///	////	///
9	THER TS	G+GRAB G+GRAB	OSITE START GRAB		υ				/////	//
		MATRIX CODE			CONTAINERS		1		/////	//
	Ě	Ē		SAMPI F TEMP AT	ATN		1	/////		/
	N N	MA			90			////5/	/////	
1	1	m			#0#	1	1 /	/_/ / 3//		
±	1	SAMPLE		awa.			1 //		////	
		S.		, ,	1	yed	6/3	7.33///	///	
		DAT	TE TIME DATE			Unpresser H <sub>2</sub> SO <sub>3</sub> HNO <sub>3</sub> HCI NaOH Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Wethanol			///	Pace Projec
LTMW-S07-092	21 w	Targetti.	7/22/	1 1/20 Pa			Chief		//	Numbe Lab LD
LTMW-S08-092	21 w	1	4000			2 1 3 1	3 2 1	1		7.50
LTMW-S09-092	21 w	The state of		1210 PL	7	2 1 3 1	3 2 1	1		
LTMW-S10-092		200		6935 PC	7	2 1 3 1	3 2 1	1		
LTMW-S10-MS-0		- The state of the		1025 PC	7	2 1 3 1	3 2 1	1		
LTMW-S10-MSD-0	2024			1025 PC	7	2 1 3 1		1	_	
Field Duplicate-09	224	1		1025 FC	7	2 1 3 1	3 2 1			
Trip Blank	441	- THE R. P. LEWIS CO., LANSING, MICH.	4	0735 R	7	2 1 3 1	3 2 1	<del>'</del>  - - - - -	-	
END OF RECOR	W	T Lab	7/33/3	1 - 86	2	2	2	<del>'                                     </del>	-	
ZIND OF KECOK	(D	_						++++		
itional Comments;						<del>                                     </del>		++++		
	REL	LINQUISHED BY	BY / AFFILIATION	DATE TIME	ACCEPT	ED BY / AFFILIATION				
MPLES WILL ARRIVE IN #	COOLERS.	Es com	(GES)	9/23/21		A SECTION OF THE PARTY OF THE P	DATE	TIME SAM	PLE CONDITI	ONS
			(369)	1003/31	1 P	~ /-	9/23	12-26	N N	N X
ase send reports to: dshay@gesonline.com, tbeaum	iont@gesonline.com			-	-			15220	N N	
Region@gesonline.com, ges@equisonline.com	1				-				N N	
ECIFIC EDD NAME:	L		SAMPLER NAME AND	SIGNATURE	For Asia	1724 WALLEY E. T.	15-22-23-23-23-23-23-23-23-23-23-23-23-23-		N N	
			PRINT Name of SAMPLER:			CHARLES STORY		ů p	Received on Ice	Intact
Rome-labnumber.28351.EQEDD.zip			SIGNATURE of SAMPLER:				D/YY)	Temp in	lce lce astody	Samples In



# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Requi	ired Client Information:	Required Project Information:			Sectio																				Stevenson Contra
Report To: Devin Shay (GES)				Attentio	voice Information;											Pag	je:	1 of 2							
Address: 6780 Northern BLVD, Suite 100 Report To: Tim Beaumont (GE		-61			Attention: Accounts Payable via email at ges-invoices@gesonline.com  Company Name: Groundwater & Environmental Services. Inc.								W. 1915		100	P.F	GUI	ATO	RY AGE	NOV	The same				
East S	Syracuse, New York 13057	tbeaumont@gesonline.com													$\dashv$	T NI	DEC	F-0-							
Email To: dshay@gesonline.com		Address: 5 Technology Place. Suite 4, East Syracuse, NY 13057								D WA	ATER		RINKING												
	: 800.220.3069 Fax: None	Purchase Order No.:			Pace Qu	ote Referen	ce:								-	Lu	-	□ RC	RA				THER_		
x4051 Kingslav Ave City B		Rome		Pace Pro	Pace Project Manager: Rachel Christner							SITE		L	GA	T 1	L	4	1 [ 3						
Requested Due Date/TAT: Standard Project Number: 0603275-134400-221-1106					-	0 1 1					LOC	ATIO	4		Г	ОН	Γ:	sc I	VI I T	THER					
4200	Section D Required Client Information	Valid Matrix Codes			Quarterly GWS					Filtered (Y/N)															
	SAMPLE ID	MATRIX CODE	1			CO	LECTED				T	P	reserva	tives	Table San	Request	ed				-/	1	//	///	111
	One Character per box. (A-Z, 0-9 / ,-)	WASTE HATER PAR FRODUCT P SOL SOLO		C=COMP						1	П	T	TT	T	T	Analysis	:					//	//	///	
	Samples IDs MUST BE UNIQUE	OIL OIL WIPE WP AIR IN OTHER OT TESLE TS			COMPOSITE	OV-DE			SAMPLE TEMP AT COLLECTION							1				/	' /	//	//	///	//
		TESLE TO	ODE	G+GRAB	CONTROLE	START	GRAB		J S	IRS I										/	//		///	///	
			MATRIX CODE	ō					AT CC	CONTAINERS									/	/	/	/ /	//	///	
			MAT	TYPE					EMP,										Ι,	//	//.	5/1	///	//	
				E TY			1		PLE T	#O#	11					1			//	1		"/,	///	//	
# V				SAMPLE					SAM		ا		11					//		2	0	//	//	/	
ITEM				"							Serve			်	100		,		7 3			//	//		
1	LTMW-D01-0	921	╁	$\vdash$	DATE	TIME	DATE	TIME			Unprese	HNO3	I LCI	Na <sub>2</sub> S <sub>2</sub>	Methar				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		//	//	//		Pace Proje Numb
2	LTMW-S01-0		WT				7/23/3		_	7	2	1	3 1	H			3	2 1		+	1	1	-		Lab I.I
3	LTMW-D02-0		WT	G			9/23	0955	82	7	2	1	3 1	11			$\neg$			+	+	+	+-		
4			WT	G			9/22/5	1550	Pe	7	2	1	3 1							+	+	++	┼		
5	LTMW-S02-0		WT	G			9/22/3	1635	PL	7	2	1	3 1	11	$\top$		3	2 1		+	+	$\vdash$	-		
6	LTMW-D03-0		WT	G			7/23	1075	PL	7	2	1	3 1	+	+		3	2 1	1	+	+	$\vdash$			
-	LTMW-S03-09		WT	G				1125	FC	7	2			++	+		3	2 1	1	+	+	$\vdash$	_		
-	LTMW-D04-09		WT	G				1210	Pc			1	3 1	++	+		3	2 1	1	4	_	$\sqcup$			
8 _	LTMW-S04-09	921	WT	G				1250	PC	7	2	+1	3 1	$\vdash$	$\dashv$		3	2 1	1	$\perp$	$\perp$				
9	LTMW-D05-09	921	WT	G			9/11/2	16630	-	7	2	11	3 1	-	$\perp$		3	2 1	1						
10	LTMW-S05-09	921	WT	G			6/1	1723	PL	7	2	1	3 1	Ц	Ш		3	2 1	1						
11	LTMW-D06-09						12431	1505	PL	7	2	1	3 1				3	2 1	1						
12	LTMW-S06-09		WT	G			110411	10.55	PC	7	2	1	3 1				3	2 1	1	$\top$	T	$\top$	1		
ditiona	al Comments:		WT	_	um avv		1/23/21	1335	PL	7	2		3 1					2 1	1		$\top$	1	1		
AMPL	ES WILL ARRIVE IN #	7	KELI	NOUIS	HED BY / ,	AFFILIATIO	1	DATE	TIME	ACCEP	TED B	Y/AF	LIATIO	NC				DATE		TIM	E	SAME	I E CC	NDITION	NO.
	#	COOLERS.	-	kho	es és	Lypol	CE5)	9/27/21		D.	~	K-				BOOK STO				19.00		- CANT	1		
2250 5	and reports to the C	_															-	1/23		الكنا			N Z	¥	×
Dog!	end reports to: dshay@gesonline.com, tbea	umont@gesonline.com															+		+	4.	20		\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	N.	N N
-regi	on@gesonline.com, ges@equisonline.c	<u>om</u>															$\dashv$		-		$\dashv$		N.	××××××××××××××××××××××××××××××××××××××	X.
FCIE	IC EDD NAME:					SAMPLER	NAME AND	SIGNATURI	B 45 (1)	N. Car	100	2750	100	3V2/2	- gr	Th. 10 15	20000						××××××××××××××××××××××××××××××××××××××	× ×	Ĭ,
					ſ	PRINT Name of	SAMPLER		and the later of the		Sec. Co.		694	149b	200					1		Temp in °C	uo p	Custody saled Cooler	Samples Intact
7K011	ne-labnumber.28351.EQEDD.zip				Ī	GIGNATURE of	SAMPLER:						IDATE	Signed (	MM / DD	1300						mp ir	Received	ustor ed Cr	les l



# 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

December 1, 2021

Devin Shay Groundwater & Environmental Services, Syracuse 6780 Northern Blvd., Suite 100 East Syracuse, NY 13057.

RE: Data Usability Summary Report for National Grid- Rome Kingsley Avenue Site Data Packages Pace Analytical Job Nos. 30442248, 30442252

Groundwater & Environmental Services, Inc. (GES) reviewed two data packages (Laboratory Project Number 30442248, 30442252) from Pace Analytical Services, Inc., for the analysis of an effluent sample and trip blank collected on September 23, 2021 as well as groundwater samples collected on September 22 and 23, 2021 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, and total cyanide. The effluent system sample was processed for volatiles, eight metals, mercury, pH 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	рН	Analyzed after holding time					
LTMW-S10-0921	J-	Acenaphthene	Low MSD recovery					
LTMW-D01-0921 Effluent	UJ- J-	Cyanide	Low MS recovery					

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**

All samples arrived within the EPA acceptable range of 4°C ± 2°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. Matrix spikes recovered within criteria with the exception of a high recovery for benzene associated with LTMW-S10-0921. Benzene was not reported above detection limit in the associated sample; no qualification was required.

# 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 were not calculated, as there were no detections above reporting limit.

Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria for site samples. The analytes were not reported above detection limit, and no qualification was required. Laboratory control samples recovered within laboratory limits. Matrix spike and matrix spike recoveries were within laboratory specified criteria



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 of acenaphthene where the MSD recovery was less than 10%. The acenaphthene in LTMW-S10-0921 is qualified as estimated low.

# Metals by EPA 200.7/EPA 245.3/NYSDEC ASP

The matrix spikes and post digestion spikes show acceptable accuracy and precision. Initial and continuing calibration recoveries were within criteria. CRDL Check standard recoveries were within criteria, and there was no indication of any interfering component affecting the data. The blind field duplicate correlations of LTMW-S09 were not calculated, as there were no detections above reporting limit.

Instrument performance is compliant, and blanks show no contamination above the reporting limit.

# Wet Chemistry-Total Cyanide by 9012B and pH

Data was validated 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 sample. Calibration standard responses are compliant. Blanks show no detections above the reporting limits.

The matrix spike recoveries associated with the effluent sample and the LTMW-D01-0921 were low, and the reported concentrations for both samples are qualified as estimated with a possible low bias.

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 associated matrix spikes and/or laboratory duplicates of total cyanide show acceptable recoveries. Qualifications are noted in Table 1.

# **Data Package Completeness**

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

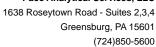
Please do not hesitate to contact me if you have comments or questions regarding this report.

Sincerely,

Bonnie Janowiak, Ph.D.

Souwiek

Senior Chemist



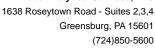


# **SAMPLE SUMMARY**

Project: National Grid - Rome Kingsley

Pace Project No.: 30442248

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30442248001	LTMW-D01-0921	Water	09/23/21 09:15	09/24/21 10:00
30442248002	LTMW-S01-0921	Water	09/23/21 09:55	09/24/21 10:00
30442248003	LTMW-D02-0921	Water	09/22/21 15:50	09/24/21 10:00
30442248004	LTMW-S02-0921	Water	09/22/21 16:35	09/24/21 10:00
30442248005	LTMW-D03-0921	Water	09/23/21 10:45	09/24/21 10:00
30442248006	LTMW-S03-0921	Water	09/23/21 11:25	09/24/21 10:00
30442248007	LTMW-D04-0921	Water	09/23/21 12:10	09/24/21 10:00
30442248008	LTMW-S04-0921	Water	09/23/21 12:50	09/24/21 10:00
30442248009	LTMW-D05-0921	Water	09/22/21 14:25	09/24/21 10:00
30442248010	LTMW-S05-0921	Water	09/22/21 15:05	09/24/21 10:00
30442248011	LTMW-D06-0921	Water	09/22/21 12:55	09/24/21 10:00
30442248012	LTMW-S06-0921	Water	09/22/21 13:35	09/24/21 10:00
30442248013	LTMW-S07-0921	Water	09/22/21 11:20	09/24/21 10:00
30442248014	LTMW-S08-0921	Water	09/22/21 12:10	09/24/21 10:00
30442248015	LTMW-S09-0921	Water	09/22/21 09:35	09/24/21 10:00
30442248016	LTMW-S10-0921	Water	09/22/21 10:25	09/24/21 10:00
30442248017	LTMW-S10-MS-0921	Water	09/22/21 10:25	09/24/21 10:00
30442248018	LTMW-S10-MSD-0921	Water	09/22/21 10:25	09/24/21 10:00
30442248019	Field Duplicate-0921	Water	09/22/21 09:35	09/24/21 10:00
30442248020	Trip Blank	Water	09/23/21 00:01	09/24/21 10:00





Project: National Grid - Rome Kingsley

Pace Project No.: 30442248

Method: EPA 200.7

Description: 200.7 Metals, Total

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

**Date:** October 20, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

The samples were prepared in accordance with EPA 200.7 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.

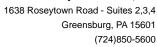
#### Matrix Spikes:

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:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442248

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

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

**Date:** October 20, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

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

#### Initial Calibrations (including MS Tune as applicable):

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

#### **Continuing Calibration:**

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

# Internal Standards:

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

#### Surrogates:

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

#### Method Blank:

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

#### **Laboratory Control Spike:**

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

#### Matrix Spikes:

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

QC Batch: 465825

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30442248016

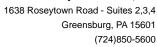
ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2249314)
  - Acenaphthene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2249314)
  - Acenaphthene

#### **Additional Comments:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442248

Method: EPA 8260C Description: 8260C MSV

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

**Date:** October 20, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Initial Calibrations (including MS Tune as applicable):

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

#### **Continuing Calibration:**

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

#### **Internal Standards:**

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

#### Surrogates:

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

#### Method Blank:

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

# **Laboratory Control Spike:**

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

#### Matrix Spikes:

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

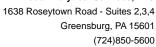
QC Batch: 466165

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30442248016

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

- MS (Lab ID: 2251075)
  - Benzene

#### **Additional Comments:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442248

Method: EPA 335.4

Description: 335.4 Cyanide, Total

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

**Date:** October 20, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

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

#### Method Blank:

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

#### **Laboratory Control Spike:**

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

# Matrix Spikes:

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

QC Batch: 465686

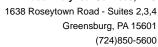
A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30442248001,30442252001

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

- MSD (Lab ID: 2248521)
  - Cyanide

# **Additional Comments:**

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



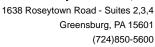


# **SAMPLE SUMMARY**

Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30442252001	Effluent System 0921	Water	09/23/21 13:20	09/24/21 10:00
30442252002	Trip Blank	Water	09/23/21 00:01	09/24/21 10:00





Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: EPA 200.7

Description: 200.7 Metals, Total

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

**Date:** October 07, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

The samples were prepared in accordance with EPA 200.7 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.

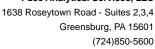
#### Matrix Spikes:

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:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: EPA 245.1 Description: 245.1 Mercury

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

**Date:** October 07, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

The samples were prepared in accordance with EPA 245.1 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.

QC Batch: 227618

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70188685001,70188686001

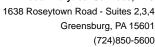
M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1147732)
  - Mercury

#### **Duplicate Sample:**

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

#### **Additional Comments:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

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

**Date:** October 07, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

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

#### Initial Calibrations (including MS Tune as applicable):

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

#### **Continuing Calibration:**

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

# Internal Standards:

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

#### Surrogates:

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

# Method Blank:

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

#### **Laboratory Control Spike:**

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

#### Matrix Spikes:

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

QC Batch: 465825

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30442248016

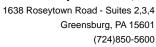
ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MSD (Lab ID: 2249314)
  - Acenaphthene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2249314)
  - Acenaphthene

#### **Additional Comments:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: EPA 8260C Description: 8260C MSV

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

**Date:** October 07, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Initial Calibrations (including MS Tune as applicable):

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

#### **Continuing Calibration:**

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

#### **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: 466785

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30441891002

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

- MS (Lab ID: 2254129)
  - 1,2-Dichloropropane

R1: RPD value was outside control limits.

- MSD (Lab ID: 2254130)
  - Bromomethane

#### Additional Comments:



Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: EPA 8260C Description: 8260C MSV

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

**Date:** October 07, 2021

Analyte Comments:

QC Batch: 466785

1c: The analyte did not meet the method recommended minimum RF.

• BLANK (Lab ID: 2254127)

Acetone

• LCS (Lab ID: 2254128)

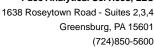
Acetone

• MS (Lab ID: 2254129)

Acetone

• MSD (Lab ID: 2254130)

Acetone





Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: SM 4500H+B-2011

Description: 4500H+ pH, Electrometric

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

**Date:** October 07, 2021

#### **General Information:**

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

#### **Hold Time:**

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

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

• Effluent System 0921 (Lab ID: 30442252001)

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

• Effluent System 0921 (Lab ID: 30442252001)

#### 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.

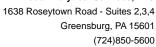
#### Matrix Spikes:

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:**





Project: National Grid - Rome Kingsley

Pace Project No.: 30442252

Method: EPA 335.4

Description: 335.4 Cyanide, Total

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

**Date:** October 07, 2021

#### **General Information:**

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

#### **Hold Time:**

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

#### Sample Preparation:

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

#### Method Blank:

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

#### **Laboratory Control Spike:**

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

# Matrix Spikes:

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

QC Batch: 465686

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30442248001,30442252001

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

- MSD (Lab ID: 2248521)
  - Cyanide

# **Additional Comments:**

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