

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C

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June 3, 2021

John Ruspantini, CHMM, PMP
NYSEG
18 Link Drive
Binghamton, NY 13904

Re: 2021 Annual Periodic Review Report - Approval
Madison Avenue Former MGP Site, Elmira
Site #808018

Dear John Ruspantini (as the Certifying Party):

The New York State Department of Environmental Conservation (the Department), along with the New York State Department of Health (NYSDOH), have reviewed the Annual Periodic Review Report (PRR) and IC/EC Certification for the above referenced site for the following period: 2021 (Q29 through Q32). This report serves to confirm and document site status in the interim between completion of the remedial action and receiving the Final Engineering Report, environmental easements, and entering into site management. The Department hereby accepts the PRR and associated Certification. The next PRR will be due in April 2022. If you have any questions, please feel free to contact me at 518-402-2029 or email: greta.white@dec.ny.gov.

Sincerely,



Greta White, P.G.
Project Manager
Remedial Action Bureau C
Division of Environmental Remediation

EC: D. Eaton, NYSDEC
J. Brown, NYSDEC
S. Lawrence, NYSDOH
J. Deming, NYSDOH
A. Martin, NYSDOH
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Department of
Environmental
Conservation



Department
of Health

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SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

June 3, 2021

Greta White
Division of Environmental Remediation
NYS Dept of Environmental Conservation
625 Broadway
Albany, NY 12233

RE: **2021 Periodic Review Report**
Madison Avenue Former MGP Site
Site # 808018
Elmira, Chemung County

Dear Greta White,

I reviewed the revised April 2021 *Periodic Review Report* for the referenced site. I understand that the Institutional and Engineering Controls are consistent with the 2014 *Site Management Plan*, the 2008 *Record of Decision*, and that the document is properly certified.

I have no health-related comments and find this report acceptable. If you have any questions, please contact me at 402-0450.

Sincerely,

Stephen Lawrence
Public Health Specialist
Bureau of Environmental Exposure Investigation

ec: J. Deming / A. Martin / e-File
A. Bonamici / C. Nicastro – NYSDOH WRO
P. Buzzetti – CCHD
M. Cruden / D. Eaton – NYSDEC Central Office
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NYSEG

2021 Periodic Review Report

**Madison Avenue Former MGP Site
Elmira, New York
NYSDEC Site No. 808018**

April 2021

2021 Periodic Review Report

Madison Avenue Former MGP Site
Elmira, New York
NYSDEC Site No. 808018

April 2021

Prepared By:

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Acronyms and Abbreviations

AW	application well
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylene
COC	constituents of concern
DNAPL	dense non-aqueous phase liquid
DUSR	Data Usability Summary Report
ISS	in-situ soil solidification
MDL	method detection limit
MGP	manufactured gas plant
O&M	operation and maintenance
NAPL	non-aqueous phase liquid
NRW	NAPL recovery well
NYSDEC	New York State Department of Environmental Conservation
PAH	polycyclic aromatic hydrocarbon
PMW	performance monitoring well
PRR	Periodic Review Report
ROD	Record of Decision
SMP	Site Management Plan
USEPA	United States Environmental Protection Agency

1 Introduction

This Periodic Review Report (PRR) summarizes monitoring results obtained and operation and maintenance (O&M) activities conducted during the eighth reporting period for the New York State Department of Environmental Conservation- (NYSDEC-) selected remedy for the Madison Avenue former manufactured gas plant (MGP) site. The former MGP site is located in the City of Elmira, Chemung County, New York (Figure 1). The site is approximately 6 acres in size and occupies most of the city block bounded by East Clinton Street, Madison Avenue, and East Fifth Street. A site plan is provided as Figure 2.

This PRR covers the time period from March 2020 through February 2021 and includes data collected during the Q29 (quarterly site visit) through February 2021 Q32 (annual site visit).

This report also includes NYSEG's verification that site controls were in place and effective, and that no changes have occurred at the site during this reporting period that would impair the ability of the controls to protect public health and the environment.

1.1 Background

The NYSDEC-selected soil and groundwater remedies for the site are presented in the Record of Decision (ROD) (NYSDEC 2008). The soil remedy for the site was completed in January 2012; remedial components associated with the groundwater treatment and non-aqueous phase liquid (NAPL) recovery systems were subsequently installed in October 2012.

The soil remedy consisted of:

- Excavation and disposal of approximately 9,800 tons of soil/fill containing visual evidence of heavy MGP-related impacts from three areas of the site at depths up to 15 feet below ground surface (bgs).
- In-situ soil solidification (ISS) of approximately 7,800 cubic yards of soil exhibiting visual evidence of heavy MGP-related impacts at depths up to 28 feet bgs in 10 discrete areas of the site.
- Excavation and removal of an oil/tar separator.

In addition, a shallow area (approximately 6,250 square feet) containing purifier waste that was observed on the eastern portion of the site during excavation of a test pit was removed, along with an abandoned electrical line encased in concrete and an abandoned section of railroad. The horizontal limits of completed excavation and ISS are shown on Figure 2.

The groundwater remedy consisted of increasing the oxygen content in groundwater in the southwest corner of the site to enhance natural biodegradation of MGP-related constituents of concern (COCs) and mitigate COC migration beyond the site boundary. The ROD identifies the following COCs for groundwater:

- Volatile organic compounds – benzene, toluene, ethylbenzene, and xylene (BTEX).
- Polycyclic aromatic hydrocarbons (PAHs) – benzo(a)anthracene, benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, and chrysene.

Enhancing the population of naturally occurring indigenous bacteria targets the single-ringed, less complex, more mobile BTEX compounds rather than the multi-ringed, complex PAH compounds. However, PAHs (particularly the six identified as COCs) are also considered when evaluating the groundwater remedy.

From May 2013 to August 2018, groundwater oxygen-enhancement was accomplished through the application of oxygen releasing compounds (i.e., oxygen-releasing socks) deployed in 19 4-inch-diameter application wells (AWs). Treatment system performance was measured using performance monitoring wells (PMWs) located hydraulically upgradient and downgradient from the AWs.

NAPL monitoring and passive removal is also a component of the site remedy. NAPL removal during the first 5-year operational period was completed at five NAPL recovery wells (NRW-1 through NRW-4, and NMW-0402S) and AW-17.

Based on site data collected during the first 5-year monitoring period, the fifth PRR (Arcadis 2018a) recommended:

- Suspending the application of oxygen-releasing material (and the associated performance monitoring tasks) for a 5-year period.
- Eliminating collection of groundwater samples from four monitoring wells (MW-2S, MW-7, MW-0402S, and MW-0403S) from the effectiveness monitoring program.
- Eliminating quarterly gauging at three NRWs (NRW-1, NRW-3, and NRW-4).

The NYSDEC approved these recommendations in a July 26, 2018 email to NYSEG. A Site Management Plan addendum letter (SMP Addendum) (Arcadis 2018b) was submitted to the NYSDEC and added to the Site Management Plan (SMP) (Arcadis 2014) to document the revisions. These modifications were implemented during the August 2018 (Q22) site visit.

Locations of all site wells, including the groundwater treatment wells, monitoring wells, and NAPL recovery wells are shown on Figure 2. Soil boring and well construction logs are included in the SMP.

1.2 Objectives

As presented in the SMP and SMP Addendum, the objectives of the post-construction O&M are to:

- Performance Monitoring
 - Confirm that the oxygen delivery system is delivering oxygen to the groundwater.
- Effectiveness Monitoring
 - Assess groundwater movement patterns at the site.
 - Document dissolved BTEX and PAH concentrations at the site.
- NAPL Gauging and Removal
 - Passively remove recoverable NAPL, if encountered.
- O&M
 - Inspect the site well network.
 - Conduct a comprehensive site condition inspection.

To document achieving the objectives, this PRR presents the following:

- Site-wide data collected during the monitoring period, including groundwater analytical data and groundwater elevation data.
- Conclusions and recommendations for modifications to the monitoring requirements, if required.

For comparison purposes, and to support conclusions and recommendations presented in Section 7, data collected during the previous site visits are included in tables, where appropriate. Effectiveness monitoring, and O&M activities for the current monitoring period were conducted in accordance with the SMP and SMP Addendum and are presented in this PRR.

1.3 Schedule of Activities Completed

A summary of the completed monitoring, gauging, and O&M tasks and associated dates are presented in Table 1.

Table 1 – Effectiveness Monitoring, NAPL Gauging, and Operation, and Maintenance

Event	Dates Completed	Effectiveness Monitoring	NAPL Gauging	Site Inspection	Well Inspections
Q29 (Quarterly) Monitoring	June 18, 2020		X		
Q30 (Semi-annual) Monitoring	August 26-27, 2020	X	X		
Q31 (Quarterly) Monitoring	November 19, 2020		X		
Q32 (Annual) Monitoring	February 16-17, 2021	X	X	X	X

2 Performance Monitoring and Results

As stated in Section 1, based on site data collected during the initial 5-year monitoring period (i.e., May 2013 to February 2018), NYSDEC approved suspending application of oxygen-releasing material and the associated performance monitoring tasks for a 5-year period. Therefore, performance monitoring was not conducted during this reporting period.

3 Effectiveness Monitoring and Results

As described in the SMP and SMP Addendum, along with NYSDEC-approved modifications to the effectiveness monitoring program presented in previous PRRs, effectiveness monitoring during the reporting period consisted of:

- Semi-annual groundwater elevation measurements in 17 MWs.
- Semi-annual groundwater sampling from six MWs for BTEX and PAH analysis.

As presented in the ROD, BTEX data is used to evaluate the groundwater remedy effectiveness; however, for completeness, PAH data (particularly the six identified as COCs) is also collected and evaluated. Effectiveness monitoring results are presented below.

3.1 Potentiometric Surfaces and Groundwater Flow

To document groundwater elevation and flow direction, field personnel measured the relative depth to groundwater from surveyed points semi-annually (i.e., Q30 and Q32) from the following locations, as described in the SMP and SMP Addendum:

- 17 site monitoring wells (MW-1S, MW-1D, MW-2S, MW-2D, MW-4S, MW-6S, MW-7, MW-8S, MW-8D, MW-9S, MW-9D, MW-0304D, MW-0402S, MW-0403S, MW-0404S, MW-0404D, and MW-0405S).

Water elevations measured during this reporting period, along with previously measured elevations, are summarized in Table 2.

The potentiometric surface and groundwater flow direction during the August 2020 (Q30 semi-annual) gauging event is presented on Figure 3 and the potentiometric surface and groundwater flow direction during the February 2021 (Q32 annual) gauging event is presented on Figure 4. As shown on the figures, the general groundwater flow direction at the site was to the south during both gauging events. When compared to potentiometric surface maps prepared for the previous years, no significant changes to site-wide groundwater flow direction have occurred. Depths to groundwater in the shallow wells ranged between 5.86 feet bgs (MW-9S) to 11.39 feet bgs (MW-0405S) during the reporting period.

3.2 Groundwater Quality

During the reporting period, groundwater samples collected from six monitoring wells (MW-4S, MW-6S, MW-8S, MW-9S, MW-0404S, and MW-0405S) were submitted to Eurofins TestAmerica Laboratories located in Amherst, New York for analysis of:

- BTEX by United States Environmental Protection Agency (USEPA) SW-846 Method 8260.
- PAHs by USEPA SW-846 Method 8270.

Analytical results are summarized in Table 3. For comparison purposes, historical groundwater results collected since April 2004 (i.e., Q1 through Q28) are also included in the table. Additionally, total BTEX and total PAH concentrations in groundwater samples collected since 2004 are summarized on Figures 5 and 6, respectively.

Arcadis reviewed the laboratory data packages for the Q30 and Q32 sampling events, conducted data validation, and prepared Data Usability Summary Reports (DUSRs) for both monitoring events. Data review indicated that

overall laboratory performance was acceptable, and that the overall data quality was within guidelines specified in the respective methods. The laboratory reports are included as Appendix A and the DUSRs are included as Appendix B.

BTEX and PAH groundwater analytical results for samples collected during the reporting period are summarized below.

- BTEX concentrations were all less than method detection limits (MDLs).
- PAH COC concentrations were all less than MDLs. Consistent with historical results, non-COC PAHs were detected in groundwater samples collected from monitoring well MW-8S, but at concentrations less than respective New York State groundwater standards or guidance values.

As reported by the laboratory, due to foaming during sample extraction/analysis, BTEX results for MW-8S and duplicate sample DUP-082720 from the Q30 event and MW-8S and duplicate sample DUP-021721 from the Q32 event were reported from 5X and 4X dilution runs, respectively.

4 NAPL Monitoring

NAPL monitoring was conducted quarterly during the reporting period. Field personnel gauged NAPL recovery wells NRW-2, NMW-0402S, and application well AW-17. A summary of the NAPL gauging data is included in Table 2 and a summary of cumulative NAPL removed is provided in Appendix C.

Key findings for NAPL monitoring during the reporting period are presented below:

- At NRW-2 and AW-17, dense non-aqueous phase liquid (DNAPL) was present during each of the four gauging events in trace amounts as blebs over an approximate 2-foot interval.
- At NMW-0402S, DNAPL was present during each of the four gauging events ranging from 0.42 feet to 0.59 feet in apparent thickness.
- A total of approximately 0.6 gallons of DNAPL was removed from NRW-2, NMW-0402S, and AW-17 during the reporting period.
- The cumulative volume of DNAPL removed from the NRWs and AW-17 since the 2013 baseline event is approximately 6.0 gallons.

Recovered DNAPL was containerized and staged in the on-site shed for disposal by NYSEG.

5 Operation and Maintenance

O&M activities conducted during the reporting period are summarized in Table 1 and included:

- An annual inspection of the site well network.
- A comprehensive site condition inspection.

A summary of these activities is presented in the following subsections.

5.1 Well Network

Completed well repair and inspection activities/findings are presented in the following subsections.

5.1.1 Well Repairs

Arcadis completed visual inspections of site wells during the annual (Q32) site visit to confirm that the integrity of protective road boxes and surrounding concrete aprons were maintained, and to identify potential repairs. Photographic documentation of the condition of each well associated with the site, including protective covers, well caps, and overall integrity of the well is provided as Appendix D.

Arcadis performed the following repairs during the semi-annual (Q30) site visit:

- Replaced the road box and concrete apron at MW-1S and MW-1D.

During visual inspection of site wells during the reporting period, Arcadis observed the following deficiencies or issues that require repair:

- MW-0304D – The road box lid is broken.
- AW-9 – Both bolt tabs on the road box are broken and the riser needs to be cut down.
- AW-13 – One bolt tab on the road box is broken.
- PMW-05 – Concrete within the road box is heaving around the well riser.

5.1.2 Depth to Bottom Assessment

Depth to bottom measurements and accumulated thickness of sediments (e.g., silts, sands) for each well were measured and are included in Table 2. Depth to bottom measurements were compared to the installed depth, as reported on each well's construction log, to determine whether re-development is needed. A summary of the most recent gauging event results is provided below.

- Monitoring Wells:
 - 4 of the 17 wells did not contain measurable amounts of accumulated sediments.
 - The remaining wells had less than 1-foot of accumulated sediments.
- Application Wells:
 - As described in the SMP Addendum, semi-annual gauging of AWs was not required during the reporting period, with the exception of AW-17 that has historically contained measurable quantities of NAPL.
 - Sediment accumulation in AW-17 ranged from 0.58 feet (Q30) and 0.84 feet (Q31).

- Performance Monitoring Wells:
 - As described in the SMP Addendum, semi-annual gauging of PMWs was not required during the reporting period.
- NAPL Recovery Wells:
 - One of the five NRWs did not contain measurable amounts of accumulated sediments.
 - The remaining wells had less than 1-foot of accumulated sediments.

5.2 Annual Site Inspection

Arcadis completed an annual site inspection on February 17, 2021. During the annual inspection, areas within the former MGP footprint were inspected for sparse vegetation, erosion, settling, and disturbance to the surface cover. A Site Inspection Form associated with the inspection is included in Appendix E. A photographic log documenting the site conditions at the time of the annual inspection is included as Appendix F. The location where each photograph was taken, and the direction that the photographer was facing, is shown on Figure 7. Due to snow cover observed during the annual site inspection, results presented below will be confirmed during the August 2021 semi-annual event. The annual site inspection indicated that the site cover is in good condition, and:

- Maintenance to the soil and gravel cover across the site was not required.
- Maintenance to the soil and gravel cover above the groundwater treatment system was not required.

To avoid potential obscuration by snow, future annual site inspections will be scheduled to occur during the August (semi-annual) site visit.

6 Disturbance Activities in Potentially Impacted Areas

NYSEG is not aware of any intrusive activities that were conducted in potentially impacted areas during the reporting period.

7 Conclusions and Recommendations

Conclusions and recommendations based on the eighth year of treatment system monitoring and operation are presented below.

7.1 Conclusions

A summary of pertinent conclusions is presented below.

- Effectiveness monitoring requirements were met during the reporting period.
- Groundwater flow direction continues to be to the south; the groundwater movement pattern is consistent with the previous seven years of monitoring.
- NAPL Monitoring
 - A total of approximately 0.6 gallons of DNAPL was removed from NRW-2, NMW-0402S, and AW-17.
 - The cumulative volume of DNAPL removed from the NRWs and AW-17 since the 2013 baseline event is approximately 6.0 gallons.
- Groundwater Quality
 - BTEX concentrations in groundwater samples collected during the reporting period were all less than MDLs.
 - PAH COC concentrations in groundwater samples collected during the reporting period were all less than MDLs.
- Well Network
 - The road boxes and concrete aprons for MW-1S and MW-1D were replaced during the semi-annual (Q30) site visit.
 - No significant amount of accumulated sediments were observed that were not within historical quantities previously reported, respective to each location.
- Annual Site Inspection
 - The soil and gravel cover across the site and above the groundwater treatment system was in good condition; no repairs were required.

7.2 Recommendations

Recommendations based on O&M of the NYSDEC-selected remedy during the reporting period are presented in the following subsections.

- Effectiveness Monitoring
 - Continue to conduct effectiveness monitoring as described in the SMP and SMP Addendum.
 - Continue semi-annual and annual gauging of wells and annual sampling of MWs as described in the SMP and SMP Addendum.
- NAPL Monitoring

- Continue to gauge NRW-2, NMW-0402S, and AW-17 quarterly for the presence of NAPL, and if present, remove to the extent practicable.
- O&M
 - Continue to conduct O&M as described in the SMP and SMP Addendum.
 - Conduct the following repairs to address deficiencies in the well network observed during the reporting period:
 - MW-0304D – Replace the broken well lid.
 - AW-9 – Replace the road box, cut down the riser, and resurvey the measuring point elevation.
 - AW-13 – Replace the road box.
 - PMW-05 – Remove concrete heaving inside the road box.
- Continue to prepare annual PRRs as described in the SMP and SMP Addendum.

8 Certification Statement

A statement from NYSEG confirming that site controls were in place and effective and, based on information provided and site conditions to the extent that they could be observed, no changes occurred during the reporting period that would impair the ability of the controls to protect public health and the environment is included as Appendix G.

9 References

Arcadis 2007. Supplemental Remedial Investigation Report, Madison Avenue MGP Site, Elmira, New York (February 2007).

Arcadis 2014. Site Management Plan. Prepared for NYSEG, Madison Avenue Former MGP Site, Chemung County, Elmira, New York (March 2014).

Arcadis 2018a. Periodic Review Report, Q17 through Q20. Madison Avenue Former MGP Site, Elmira, New York. April 2018.

Arcadis 2018b. Site Management Plan Addendum letter correspondence. Madison Avenue Former MGP Site. B. Ahrens to D. MacNeal. August 13, 2018.

NYSDEC 2008. Record of Decision, Madison Avenue Former Manufactured Gas Plant (MGP) Site, City of Elmira, Chemung County, New York. Site Number 8-08-018. 2008.

NYSDEC 2018. Email correspondence dated July 26, 2018 from Douglas MacNeal approving recommendations included in the Annual Periodic Review Report, Q17 through Q20.

Tables

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
MW-1S	852.88	13.78	04/01/13	8.44	844.44	--	13.75	0.03
			05/28/13	8.55	844.33	--	13.75	0.03
			08/26/13	8.63	844.25	--	13.71	0.07
			11/18/13	8.60	844.28	--	13.69	0.09
			02/03/14	8.50	844.38	--	13.75	0.03
			08/04/14	8.35	844.53	--	13.74	0.04
			02/23/15	8.81	844.07	--	13.70	0.08
			08/24/15	8.37	844.51	--	13.71	0.07
			02/08/16	8.41	844.47	--	13.70	0.08
			08/22/16	8.55	844.33	--	13.72	0.06
			02/20/17	7.88	845.00	--	13.72	0.06
			08/21/17	8.56	844.32	--	13.71	0.07
			02/12/18	8.40	844.48	--	13.72	0.06
			08/13/18	8.01	844.87	--	13.75	0.03
			02/19/19	8.12	844.76	--	13.79	-0.01
			08/12/19	8.24	844.64	--	13.75	0.03
			02/18/20	7.84	845.04	--	13.74	0.04
			08/26/20	8.89	843.99	--	13.74	0.04
			02/16/21	8.43	844.45	--	13.73	0.05
MW-1D	852.98	61.44	04/01/13	10.54	842.44	--	60.77	0.67
			05/28/13	10.75	842.23	--	60.76	0.68
			08/26/13	10.83	842.15	--	60.72	0.72
			11/18/13	10.87	842.11	--	60.67	0.77
			02/03/14	10.70	842.28	--	60.91	0.53
			08/04/14	11.01	841.97	--	60.92	0.52
			02/23/15	11.13	841.85	--	60.81	0.63
			08/24/15	10.85	842.13	--	60.85	0.59
			02/08/16	10.48	842.50	--	60.84	0.60
			08/22/16	10.96	842.02	--	60.89	0.55
			02/20/17	9.90	843.08	--	60.93	0.51
			08/21/17	11.71	841.27	--	60.90	0.54
			02/12/18	10.59	842.39	--	60.85	0.59
			08/13/18	10.17	842.81	--	60.89	0.55
			02/19/19	10.11	842.87	--	60.95	0.49
			08/12/19	11.41	841.57	--	60.90	0.54
			02/18/20	9.99	842.99	--	60.88	0.56
			08/26/20	11.32	841.66	--	60.89	0.55
			02/16/21	10.61	842.37	--	60.90	0.54
MW-2S	854.06	18.50	04/01/13	10.02	844.03	--	16.54	3.68
			05/28/13	10.06	843.99	--	16.20	4.02
			08/26/13	10.03	844.02	--	16.60	3.62
			11/18/13	10.03	844.02	--	17.00	3.22
			02/04/14	10.27	843.78	--	18.50	1.72
			08/04/14	9.79	844.26	--	18.56	1.66
			02/23/15	11.03	843.02	--	18.64	1.58
			08/24/15	9.82	844.23	--	18.49	1.73
			02/08/16	10.03	844.02	--	18.48	1.74
			08/22/16	10.14	843.91	--	18.45	1.77
			02/20/17	8.35	845.70	--	18.50	1.72
			08/21/17	10.23	843.82	--	18.50	1.72
			02/12/18	9.55	844.50	--	18.49	1.73
			08/13/18	9.13	844.92	--	18.49	1.73
			02/19/19	9.71	844.34	--	18.58	1.64
			08/12/19	9.72	844.34	--	18.50	0.00
			02/18/20	9.37	844.69	--	18.48	0.02
			08/26/20	10.38	843.68	--	18.52	-0.02
			02/17/21	10.18	843.88	--	18.50	0.00
MW-2D	855.66	68.19	04/01/13	14.87	840.79	--	64.51	3.68
			05/28/13	15.16	840.50	--	64.54	3.65
			08/26/13	15.35	840.31	--	64.53	3.66
			11/18/13	15.43	840.23	--	64.44	3.75
			02/03/14	15.09	840.57	--	64.64	3.55
			08/04/14	15.43	840.23	--	67.25	0.94
			02/23/15	15.73	839.93	--	67.17	1.02
			08/24/15	15.32	840.34	--	67.18	1.01
			02/08/16	14.73	840.93	--	67.21	0.98
			08/22/16	15.58	840.08	--	67.21	0.98
			02/20/17	13.89	841.77	--	67.61	0.58
			08/21/17	16.42	839.24	--	67.20	0.99
			02/12/18	15.00	840.66	--	67.18	1.01
			08/13/18	14.17	841.49	--	67.21	0.98
			02/19/19	14.12	841.54	--	67.29	0.90
			08/12/19	15.92	839.74	--	67.22	0.97
			02/18/20	14.00	841.66	--	67.18	1.01
			08/26/20	15.99	839.67	--	67.21	0.98
			02/16/21	15.00	840.66	--	67.20	0.99

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
MW-4S	851.47	16.67	04/01/13	7.65	843.69	--	15.65	1.15
			05/28/13	7.80	843.54	--	15.56	1.24
			08/26/13	7.78	843.56	--	15.55	1.25
			11/18/13	7.98	843.36	--	15.30	1.50
			02/03/14	8.09	843.25	--	16.10	0.70
			08/04/14	7.64	843.70	--	15.96	0.75
			02/23/15	9.73	841.74	--	15.88	0.79
			08/24/15	6.97	844.50	--	15.91	0.76
			02/08/16	7.22	844.25	--	15.87	0.80
			08/22/16	7.72	843.75	--	15.90	0.77
			02/20/17	6.61	844.86	--	15.88	0.79
			08/21/17	7.78	843.69	--	15.58	1.09
			02/12/18	6.90	844.57	--	15.90	0.77
			08/13/18	5.70	845.77	--	15.90	0.77
			02/19/19	6.77	844.70	--	15.97	0.70
			08/12/19	6.39	845.08	--	15.91	0.76
			02/18/20	5.94	845.53	--	15.83	0.84
			08/26/20	8.10	843.37	--	15.83	0.84
			02/16/21	7.21	844.26	--	15.88	0.79
MW-6S	852.54	24.84	04/01/13	5.41	847.13	--	20.91	3.93
			05/28/13	5.70	846.84	--	20.90	3.94
			08/26/13	5.39	847.15	--	20.85	3.99
			11/18/13	5.68	846.86	--	20.72	4.12
			02/03/14	4.66	847.88	--	24.80	0.04
			08/04/14	5.75	846.79	--	24.80	0.04
			02/23/15	6.71	845.83	--	24.69	0.15
			08/24/15	5.43	847.11	--	24.80	0.04
			02/08/16	5.41	847.13	--	24.77	0.07
			08/22/16	8.56	843.98	--	24.79	0.05
			02/20/17	5.28	847.26	--	24.79	0.05
			08/21/17	8.10	844.44	--	24.99	-0.15
			02/12/18	6.05	846.49	--	24.75	0.09
			08/13/18	5.06	847.48	--	24.80	0.04
			02/19/19	5.29	847.25	--	24.86	-0.02
			08/12/19	5.40	847.14	--	24.79	0.05
			02/18/20	5.15	847.39	--	24.79	0.05
			08/26/20	8.76	843.78	--	24.73	0.11
			02/16/21	5.92	846.62	--	24.79	0.05
MW-7	854.14	39.56	04/01/13	10.62	843.52	--	32.80	6.76
			05/28/13	10.71	843.43	--	32.76	6.80
			08/26/13	10.68	843.46	--	33.00	6.56
			11/18/13	10.69	843.45	--	33.07	6.49
			02/03/14	10.68	843.46	--	39.33	0.23
			08/04/14	10.51	843.63	--	39.17	0.39
			02/23/15	10.82	843.32	--	39.18	0.38
			08/24/15	10.62	843.52	--	39.22	0.34
			02/08/16	10.56	843.58	--	38.53	1.03
			08/22/16	10.69	843.45	--	39.04	0.52
			02/20/17	10.31	843.83	--	39.31	0.25
			08/21/17	10.50	843.64	--	38.55	1.01
			02/12/18	10.58	843.56	--	38.19	1.37
			08/13/18	10.28	843.86	--	38.28	1.28
			02/19/19	10.49	843.65	--	39.48	0.08
			08/12/19	10.49	843.65	--	39.40	0.16
			02/18/20	10.27	843.87	--	39.37	0.19
			08/26/20	10.80	843.34	--	39.32	0.24
			02/16/21	10.60	843.54	--	39.36	0.20
MW-8S	850.38	14.70	04/01/13	6.76	843.62	--	6.93	7.77
			05/28/13	6.89	843.49	--	6.94	7.76
			08/26/13	6.79	843.59	--	6.98	7.72
			11/18/13	6.85	843.53	--	7.02	7.68
			02/03/14	6.84	843.54	--	14.01	0.69
			08/04/14	6.68	843.70	--	14.02	0.68
			02/23/15	7.09	843.29	--	13.98	0.72
			08/24/15	6.80	843.58	--	14.00	0.70
			02/08/16	6.75	843.63	--	13.98	0.72
			08/22/16	6.85	843.53	--	14.00	0.70
			02/20/17	6.41	843.97	--	13.99	0.71
			08/21/17	6.80	843.58	--	14.00	0.70
			02/12/18	6.70	843.68	--	14.00	0.70
			08/13/18	6.01	844.37	--	14.01	0.69
			02/19/19	6.57	843.81	--	14.06	0.64
			08/12/19	6.67	843.71	--	14.01	0.69
			02/18/20	6.46	843.92	--	14.00	0.70
			08/26/20	6.95	843.43	--	14.02	0.68
			02/16/21	6.71	843.67	--	14.00	0.70

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
MW-8D	850.08	69.58	04/01/13	10.17	839.91	--	69.28	0.30
			05/28/13	10.57	839.51	--	69.24	0.34
			08/26/13	10.56	839.52	--	69.30	0.28
			11/18/13	10.73	839.35	--	70.43	-0.85
			02/03/14	10.42	839.66	--	69.36	0.22
			08/04/14	10.68	839.40	--	69.44	0.14
			02/23/15	11.19	838.89	--	70.30	-0.72
			08/24/15	10.61	839.47	--	69.30	0.28
			02/08/16	9.74	840.34	--	69.29	0.29
			08/22/16	11.23	838.85	--	69.31	0.27
			02/20/17	9.79	840.29	--	69.38	0.20
			08/21/17	10.78	839.30	--	69.41	0.17
			02/12/18	10.54	839.54	--	69.25	0.33
			08/13/18	9.46	840.62	--	69.34	0.24
			02/19/19	9.81	840.27	--	69.35	0.23
			08/12/19	10.38	839.70	--	69.40	0.18
			02/18/20	9.67	840.41	--	69.28	0.30
			08/26/20	11.16	838.92	--	69.30	0.28
			02/16/21	10.23	839.85	--	69.40	0.18
MW-9S	849.03	14.47	04/01/13	5.67	843.01	--	14.43	0.39
			05/28/13	5.91	842.77	--	14.41	0.41
			08/26/13	6.09	842.59	--	14.50	0.32
			11/18/13	6.32	842.36	--	14.47	0.35
			02/03/14	5.93	842.75	--	14.55	0.27
			08/04/14	5.03	843.65	--	14.40	0.42
			02/23/15	6.89	842.14	--	12.25	2.22
			08/24/15	5.16	843.87	--	14.27	0.20
			02/08/16	5.44	843.59	--	14.95	-0.48
			08/22/16	5.86	843.17	--	14.98	-0.51
			02/20/17	4.38	844.65	--	14.97	-0.50
			08/21/17	6.18	842.85	--	14.97	-0.50
			02/12/18	5.42	843.61	--	14.98	-0.51
			08/13/18	--	--	--	14.96	-0.49
			02/19/19	4.93	844.10	--	15.01	-0.54
			08/12/19	5.14	843.89	--	14.99	-0.52
			02/18/20	4.62	844.41	--	14.95	-0.48
			08/26/20	6.55	842.48	--	14.97	-0.50
			02/16/21	5.86	843.17	--	14.94	-0.47
MW-9D	849.06	71.44	04/01/13	8.05	840.67	--	67.96	3.82
			05/28/13	8.36	840.36	--	67.90	3.88
			08/26/13	8.39	840.33	--	67.93	3.85
			11/18/13	8.51	840.21	--	67.89	3.89
			02/03/14	8.20	840.52	--	67.95	3.83
			08/04/14	8.14	840.58	--	72.65	-0.87
			02/23/15	8.85	840.21	--	72.58	-1.14
			08/24/15	8.21	840.85	--	72.60	-1.16
			02/08/16	8.01	841.05	--	72.50	-1.06
			08/22/16	8.62	840.44	--	72.61	-1.17
			02/20/17	7.19	841.87	--	72.64	-1.20
			08/21/17	8.62	840.44	--	72.61	-1.17
			02/12/18	8.62	840.44	--	72.58	-1.14
			08/13/18	--	--	--	72.61	-1.17
			02/19/19	7.38	841.68	--	72.65	-1.21
			08/12/19	8.06	841.00	--	72.59	-1.15
			02/18/20	7.24	841.82	--	72.60	-1.16
			08/26/20	8.80	840.26	--	72.55	-1.11
			02/16/21	8.20	840.86	--	72.62	-1.18
MW-0304D	851.18	59.64	04/01/13	9.78	841.40	--	59.60	0.04
			05/28/13	9.89	841.29	--	59.55	0.09
			08/26/13	9.57	841.61	--	59.60	0.04
			11/18/13	9.78	841.40	--	59.58	0.06
			02/03/14	9.78	841.40	--	59.65	-0.01
			08/04/14	10.00	841.18	--	59.58	0.06
			02/23/15	10.35	840.83	--	59.56	0.08
			08/24/15	9.95	841.23	--	59.55	0.09
			02/08/16	9.51	841.67	--	59.50	0.14
			08/22/16	10.48	840.70	--	59.59	0.05
			02/20/17	8.81	842.37	--	59.50	0.14
			08/21/17	10.89	840.29	--	59.32	0.32
			02/12/18	9.70	841.48	--	59.42	0.22
			08/13/18	9.05	842.13	--	59.54	0.10
			02/19/19	8.90	842.28	--	59.62	0.02
			08/12/19	10.51	840.67	--	59.50	0.14
			02/18/20	8.89	842.29	--	59.41	0.23
			08/26/20	10.44	840.74	--	59.36	0.28
			02/16/21	9.71	841.47	--	59.57	0.07

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MW-0402S	850.09	22.38	04/01/13	7.78	842.31	--	22.48	-0.10
			05/28/13	7.89	842.20	--	22.49	-0.11
			08/26/13	7.97	842.12	--	22.50	-0.12
			11/18/13	8.15	841.94	--	22.49	-0.11
			02/03/14	7.94	842.15	--	22.54	-0.16
			08/04/14	7.39	842.70	--	22.55	-0.17
			02/23/15	8.36	841.73	--	22.48	-0.10
			08/24/15	7.65	842.44	--	22.51	-0.13
			02/08/16	7.77	842.32	--	22.50	-0.12
			08/22/16	7.93	842.16	--	22.52	-0.14
			02/20/17	7.30	842.79	--	22.51	-0.13
			08/21/17	7.95	842.14	--	22.50	-0.12
			02/12/18	7.89	842.20	--	22.52	-0.14
			08/13/18	6.69	843.40	--	22.52	-0.14
			02/19/19	7.55	842.54	--	22.62	-0.24
			08/12/19	7.51	842.58	--	22.53	-0.15
			02/18/20	7.12	842.97	--	22.51	-0.13
			08/26/20	8.15	841.94	--	22.54	-0.16
			02/16/21	7.72	842.37	--	22.52	-0.14
MW-0403S	849.66	39.32	04/01/13	9.45	840.21	--	39.40	-0.08
			05/28/13	9.75	839.91	--	39.36	-0.04
			08/26/13	9.81	839.85	--	39.32	0.00
			11/18/13	9.97	839.69	--	39.34	-0.02
			02/03/14	9.54	840.12	--	39.38	-0.06
			08/04/14	9.49	840.17	--	39.39	-0.07
			02/23/15	10.05	839.61	--	39.30	0.02
			08/24/15	9.62	840.04	--	39.33	-0.01
			02/08/16	9.48	840.18	--	39.34	-0.02
			08/22/16	9.83	839.83	--	39.35	-0.03
			02/20/17	8.25	841.41	--	39.31	0.01
			08/21/17	9.92	839.74	--	39.33	-0.01
			02/12/18	9.41	840.25	--	39.30	0.02
			08/13/18	8.64	841.02	--	39.34	-0.02
			02/19/19	8.84	840.82	--	39.41	-0.09
			08/12/19	9.46	840.20	--	39.35	-0.03
			02/18/20	8.83	840.83	--	39.31	0.01
			08/26/20	10.08	839.58	--	39.35	-0.03
			02/16/21	9.61	840.05	--	39.30	0.02
MW-0404S	849.99	28.57	04/01/13	9.71	840.28	--	27.94	0.63
			05/28/13	10.02	839.97	--	27.89	0.68
			08/26/13	10.06	839.93	--	27.81	0.76
			11/18/13	10.19	839.80	--	27.85	0.72
			02/03/14	9.80	840.19	--	28.25	0.32
			08/04/14	9.71	840.28	--	28.20	0.37
			02/23/15	10.39	839.60	--	28.20	0.37
			08/24/15	9.82	840.17	--	28.22	0.35
			02/08/16	9.70	840.29	--	28.20	0.37
			08/22/16	10.13	839.86	--	28.22	0.35
			02/20/17	8.98	841.01	--	28.25	0.32
			08/21/17	10.19	839.80	--	28.18	0.39
			02/12/18	9.71	840.28	--	28.20	0.37
			08/13/18	8.84	841.15	--	28.20	0.37
			02/19/19	9.07	840.92	--	28.29	0.28
			08/12/19	9.66	840.33	--	28.24	0.33
			02/18/20	9.04	840.95	--	28.20	0.37
			08/26/20	10.35	839.64	--	28.19	0.38
			02/16/21	9.86	840.13	--	28.21	0.36
MW-0404D	849.55	59.77	04/01/13	9.45	840.10	--	59.43	0.34
			05/28/13	9.89	839.66	--	59.45	0.32
			08/26/13	9.94	839.61	--	59.38	0.39
			11/18/13	10.22	839.33	--	60.21	-0.44
			02/03/14	9.73	839.82	--	59.40	0.37
			08/04/14	9.67	839.88	--	59.40	0.37
			02/23/15	10.50	839.05	--	59.33	0.44
			08/24/15	9.74	839.81	--	59.40	0.37
			02/08/16	9.35	840.20	--	59.20	0.57
			08/22/16	10.26	839.29	--	59.30	0.47
			02/20/17	8.35	841.20	--	59.21	0.56
			08/21/17	10.28	839.27	--	59.88	-0.11
			02/12/18	9.71	839.84	--	59.25	0.52
			08/13/18	8.23	841.32	--	59.35	0.42
			02/19/19	8.64	840.91	--	59.39	0.38
			08/12/19	9.60	839.95	--	59.36	0.41
			02/18/20	8.43	841.12	--	59.28	0.49
			08/26/20	10.98	838.57	--	59.24	0.53
			02/16/21	9.66	839.89	--	59.40	0.37

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MW-0405S	850.59	35.27	04/01/13	10.33	840.26	--	35.43	-0.16
			05/28/13	10.81	839.78	--	35.44	-0.17
			08/26/13	10.83	839.76	--	35.38	-0.11
			11/18/13	11.16	839.43	--	35.41	-0.14
			02/03/14	10.66	839.93	--	35.50	-0.23
			08/04/14	10.61	839.98	--	35.42	-0.15
			02/23/15	11.54	839.05	--	35.39	-0.12
			08/24/15	10.43	840.16	--	35.44	-0.17
			02/08/16	10.25	840.34	--	35.41	-0.14
			08/22/16	11.20	839.39	--	35.44	-0.17
			02/20/17	9.03	841.56	--	35.48	-0.21
			08/21/17	11.12	839.47	--	35.37	-0.10
			02/12/18	10.52	840.07	--	35.42	-0.15
			08/13/18	8.88	841.71	--	35.45	-0.18
			02/19/19	9.38	841.21	--	35.52	-0.25
			08/12/19	10.29	840.30	--	35.45	-0.18
			02/18/20	8.98	841.61	--	35.43	-0.16
			08/26/20	11.39	839.20	--	35.41	-0.14
			02/16/21	10.45	840.14	--	35.43	-0.16
AW-1	850.94	19.78	04/01/13	7.04	843.90	--	20.00	-0.22
			05/28/13	7.05	843.89	--	19.99	-0.21
			08/26/13	7.00	843.94	--	19.92	-0.14
			11/18/13	7.17	843.77	--	19.91	-0.13
			02/03/14	7.21	843.73	--	19.94	-0.16
			08/04/14	6.74	844.20	--	19.91	-0.13
			02/23/15	7.42	843.52	--	19.83	-0.05
			08/24/15	6.79	844.15	--	19.59	0.19
			02/08/16	6.85	844.09	--	19.68	0.10
			08/22/16	7.00	843.94	--	19.69	0.09
			02/20/17	6.16	844.78	--	19.55	0.23
			08/21/17	7.04	843.90	--	19.89	-0.11
			02/12/18	6.80	844.14	--	19.55	0.23
AW-2	851.23	20.04	04/01/13	7.51	843.44	--	20.17	0.15
			05/28/13	7.25	843.70	--	20.19	0.13
			08/26/13	7.61	843.34	--	20.18	0.14
			11/18/13	7.76	843.19	--	20.15	0.17
			02/03/14	7.75	843.20	--	20.13	0.19
			08/04/14	6.91	844.04	--	20.09	0.23
			02/23/15	8.43	842.80	--	20.10	-0.06
			08/24/15	6.91	844.32	--	19.96	0.08
			02/08/16	7.29	843.94	--	20.06	-0.02
			08/22/16	7.35	843.88	--	20.08	-0.04
			02/20/17	6.19	845.04	--	19.65	0.39
			08/21/17	7.03	844.20	--	20.12	-0.08
			02/12/18	6.85	844.38	--	19.50	0.54
AW-3	850.38	19.10	04/01/13	6.83	843.55	--	19.59	-0.49
			05/28/13	6.84	843.54	--	19.60	-0.50
			08/26/13	7.02	843.36	--	19.55	-0.45
			11/18/13	6.98	843.40	--	19.81	-0.71
			02/03/14	6.94	843.44	--	19.59	-0.49
			08/04/14	6.31	844.07	--	19.53	-0.43
			02/23/15	7.47	842.91	--	19.50	-0.40
			08/24/15	6.27	844.11	--	19.33	-0.23
			02/08/16	6.63	843.75	--	19.08	0.02
			08/22/16	6.68	843.70	--	18.62	0.48
			02/20/17	5.64	844.74	--	18.63	0.47
			08/21/17	--	--	--	--	--
			02/12/18	6.58	843.80	--	18.58	0.52

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
AW-4	850.62	19.77	04/01/13	6.30	844.08	--	20.01	-0.24
			05/28/13	6.22	844.16	--	19.83	-0.06
			08/26/13	6.91	843.71	--	19.96	-0.19
			11/18/13	7.74	842.88	--	19.97	-0.20
			02/03/14	7.50	843.12	--	19.98	-0.21
			08/04/14	5.49	845.13	--	19.75	0.02
			02/23/15	8.47	842.15	--	19.73	0.04
			08/24/15	5.91	844.71	--	19.78	-0.01
			02/08/16	6.57	844.05	--	19.56	0.21
			08/22/16	5.93	844.69	--	19.65	0.12
			02/20/17	5.49	845.13	--	19.45	0.32
			08/21/17	7.20	843.42	--	19.42	0.35
			02/12/18	6.09	844.53	--	19.58	0.19
AW-5	850.38	19.80	04/01/13	7.16	843.22	--	19.78	0.02
			05/28/13	7.24	843.14	--	19.73	0.07
			08/26/13	7.30	843.08	--	19.73	0.07
			11/18/13	7.71	842.67	--	19.70	0.10
			02/03/14	7.26	843.12	--	19.75	0.05
			08/04/14	6.81	843.57	--	19.75	0.05
			02/23/15	8.42	841.96	--	19.64	0.16
			08/24/15	6.83	843.55	--	19.71	0.09
			02/08/16	6.84	843.54	--	19.62	0.18
			08/22/16	7.37	843.01	--	19.21	0.59
			02/20/17	5.61	844.77	--	19.10	0.70
			08/21/17	7.22	843.16	--	19.33	0.47
			02/12/18	6.98	843.40	--	19.06	0.74
AW-6	849.85	19.28	04/01/13	7.72	842.13	--	19.04	0.24
			05/28/13	7.87	841.98	--	19.10	0.18
			08/26/13	7.87	841.98	--	19.03	0.25
			11/18/13	8.24	841.61	--	18.98	0.30
			02/03/14	7.77	842.08	--	19.02	0.26
			08/04/14	7.45	842.40	--	19.02	0.26
			02/23/15	8.64	841.21	--	18.79	0.49
			08/24/15	7.38	842.47	--	18.99	0.29
			02/08/16	7.11	842.74	--	18.72	0.56
			08/22/16	7.91	841.94	--	18.57	0.71
			02/20/17	6.15	843.70	--	18.43	0.85
			08/21/17	7.82	842.03	--	18.72	0.56
			02/12/18	7.04	842.81	--	18.55	0.73
AW-7	849.72	18.74	04/01/13	8.49	841.23	--	18.86	-0.12
			05/28/13	8.72	841.00	--	18.85	-0.11
			08/26/13	8.72	841.00	--	18.82	-0.08
			11/18/13	9.00	840.72	--	18.80	-0.06
			02/03/14	8.59	841.13	--	18.85	-0.11
			08/04/14	8.43	841.29	--	18.82	-0.08
			02/23/15	9.32	840.40	--	18.75	-0.01
			08/24/15	8.46	841.26	--	18.81	-0.07
			02/08/16	8.10	841.62	--	18.38	0.36
			08/22/16	9.02	840.70	--	18.41	0.33
			02/20/17	7.15	842.57	--	18.44	0.30
			08/21/17	8.73	840.99	--	18.40	0.34
			02/12/18	8.19	841.53	--	18.35	0.39

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AW-8	849.78	19.32	04/01/13	8.86	840.92	--	19.35	-0.03
			05/28/13	9.07	840.71	--	19.34	-0.02
			08/26/13	9.13	840.65	--	19.31	0.01
			11/18/13	9.35	840.43	--	19.25	0.07
			02/03/14	8.90	840.88	--	19.22	0.10
			08/04/14	8.71	841.07	--	19.20	0.12
			02/23/15	9.55	840.23	--	18.85	0.47
			08/24/15	8.76	841.02	--	18.85	0.47
			02/08/16	8.41	841.37	--	18.88	0.44
			08/22/16	9.30	840.48	--	18.98	0.34
			02/20/17	7.45	842.33	--	18.84	0.48
			08/21/17	9.08	840.70	--	18.89	0.43
			02/12/18	8.52	841.26	--	18.82	0.50
AW-9	849.61	22.27	04/01/13	8.30	841.31	--	22.22	0.05
			05/28/13	9.00	840.61	--	21.88	0.39
			08/26/13	9.05	840.56	--	21.92	0.35
			11/18/13	9.21	840.40	--	22.11	0.16
			02/03/14	8.87	840.74	--	22.10	0.17
			08/04/14	8.73	840.88	--	21.92	0.35
			02/23/15	9.54	840.07	--	21.71	0.56
			08/24/15	8.89	840.72	--	21.78	0.49
			02/08/16	8.39	841.22	--	21.26	1.01
			08/22/16	9.32	840.29	--	21.30	0.97
			02/20/17	7.39	842.22	--	22.30	-0.03
			08/21/17	9.02	840.59	--	22.18	0.09
			02/12/18	8.50	841.11	--	19.92	2.35
AW-10	849.60	24.20	04/01/13	9.18	840.42	--	24.28	-0.08
			05/28/13	9.42	840.18	--	24.27	-0.07
			08/26/13	9.51	840.09	--	24.20	0.00
			11/18/13	9.91	839.69	--	24.20	0.00
			02/03/14	9.25	840.35	--	24.18	0.02
			08/04/14	9.45	840.15	--	24.19	0.01
			02/23/15	9.67	839.93	--	23.76	0.44
			08/24/15	9.06	840.54	--	24.10	0.10
			02/08/16	8.92	840.68	--	23.54	0.66
			08/22/16	9.50	840.10	--	23.65	0.55
			02/20/17	7.84	841.76	--	23.74	0.46
			08/21/17	9.04	840.56	--	24.12	0.08
			02/12/18	8.72	840.88	--	22.90	1.30
AW-11	849.49	24.27	04/01/13	8.99	840.50	--	24.14	0.13
			05/28/13	9.22	840.27	--	24.13	0.14
			08/26/13	9.34	840.15	--	24.02	0.25
			11/18/13	9.45	840.04	--	24.06	0.21
			02/03/14	9.01	840.48	--	24.10	0.17
			08/04/14	9.01	840.48	--	24.02	0.25
			02/23/15	9.71	839.78	--	23.50	0.77
			08/24/15	9.05	840.44	--	23.95	0.32
			02/08/16	8.76	840.73	--	23.48	0.79
			08/22/16	9.42	840.07	--	22.79	1.48
			02/20/17	7.45	842.04	--	23.28	0.99
			08/21/17	9.36	840.13	--	23.33	0.94
			02/12/18	8.92	840.57	--	22.57	1.70

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AW-12	849.19	37.58	04/01/13	8.68	840.51	--	37.67	-0.09
			05/28/13	9.00	840.19	--	37.68	-0.10
			08/26/13	9.15	840.04	--	37.50	0.08
			11/18/13	9.29	839.90	--	37.50	0.08
			02/03/14	8.90	840.29	--	37.52	0.06
			08/04/14	8.78	840.41	--	37.15	0.43
			02/23/15	9.49	839.70	--	36.92	0.66
			08/24/15	8.93	840.26	--	37.10	0.48
			02/08/16	8.70	840.49	--	36.79	0.79
			08/22/16	9.30	839.89	--	35.74	1.84
			02/20/17	7.73	841.46	--	35.72	1.86
			08/21/17	9.26	839.93	--	35.69	1.89
			02/12/18	8.82	840.37	--	35.00	2.58
AW-13	849.07	27.46	04/01/13	8.59	840.48	--	27.40	0.06
			05/28/13	9.42	839.65	--	27.34	0.12
			08/26/13	8.98	840.09	--	27.24	0.22
			11/18/13	9.10	839.97	--	27.28	0.18
			02/03/14	8.72	840.35	--	27.32	0.14
			08/04/14	8.59	840.48	--	27.26	0.20
			02/23/15	9.32	839.75	--	26.97	0.49
			08/24/15	8.63	840.44	--	27.16	0.30
			02/08/16	8.42	840.65	--	25.85	1.61
			08/22/16	9.06	840.01	--	26.40	1.06
			02/20/17	7.65	841.42	--	27.40	0.06
			08/21/17	9.05	840.02	--	27.31	0.15
			02/12/18	8.59	840.48	--	26.95	0.51
AW-14	849.45	28.88	04/01/13	8.86	840.59	--	30.90	-2.02
			05/28/13	9.22	840.23	--	30.57	-1.69
			08/26/13	9.27	840.18	--	30.54	-1.66
			11/18/13	9.34	840.11	--	30.57	-1.69
			02/03/14	8.99	840.46	--	30.44	-1.56
			08/04/14	8.83	840.62	--	30.30	-1.42
			02/23/15	9.58	839.87	--	29.70	-0.82
			08/24/15	9.00	840.45	--	30.40	-1.52
			02/08/16	8.78	840.67	--	29.40	-0.52
			08/22/16	9.32	840.13	--	29.42	-0.54
			02/20/17	7.95	841.50	--	29.62	-0.74
			08/21/17	9.34	840.11	--	29.59	-0.71
			02/12/18	8.73	840.72	--	28.78	0.10
AW-15	849.11	34.68	04/01/13	8.67	840.44	--	34.57	0.11
			05/28/13	8.92	840.19	--	34.40	0.28
			08/26/13	9.02	840.09	--	34.20	0.48
			11/18/13	9.23	839.88	--	34.42	0.26
			02/03/14	8.75	840.36	--	33.85	0.83
			08/04/14	8.72	840.39	--	34.42	0.26
			02/23/15	9.40	839.71	--	33.89	0.79
			08/24/15	8.80	840.31	--	34.16	0.52
			02/08/16	8.59	840.52	--	33.62	1.06
			08/22/16	9.10	840.01	--	32.85	1.83
			02/20/17	7.76	841.35	--	34.49	0.19
			08/21/17	9.12	839.99	--	34.48	0.20
			02/12/18	8.70	840.41	--	34.20	0.48

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AW-16	849.12	34.80	04/01/13	8.56	840.56	--	34.44	0.36
			05/28/13	8.72	840.40	--	34.31	0.49
			08/26/13	8.85	840.27	--	34.20	0.60
			11/18/13	8.97	840.15	--	34.25	0.55
			02/03/14	8.60	840.52	--	34.23	0.57
			08/04/14	8.44	840.68	--	34.45	0.35
			02/23/15	9.14	839.98	--	31.78	3.02
			08/24/15	8.60	840.52	--	34.46	0.34
			02/08/16	8.44	840.68	--	31.97	2.83
			08/22/16	8.98	840.14	--	31.03	3.77
			02/20/17	7.78	841.34	--	34.50	0.30
			08/21/17	8.93	840.19	--	34.16	0.64
			02/12/18	8.57	840.55	--	33.62	1.18
AW-17	849.08	31.84	04/01/13	8.53	840.55	--	34.56	-2.72
			05/28/13	8.75	840.33	--	31.34	0.50
			08/26/13	8.81	840.27	--	31.52	0.32
			11/18/13	8.99	840.09	--	31.43	0.41
			02/03/14	8.62	840.46	--	31.10	0.74
			08/04/14	8.45	840.63	--	31.27	0.57
			02/23/15	9.13	839.95	--	30.49	1.35
			08/24/15	8.67	840.41	31.02	31.22	0.62
			11/18/15	8.45	840.63	TR	31.04	0.80
			02/08/16	8.54	840.54	TR	31.10	0.74
			05/12/16	8.49	840.59	TR	28.48	3.36
			08/22/16	8.91	840.17	TR	30.57	1.27
			11/17/16	8.81	840.27	TR	27.70	4.14
			02/20/17	7.70	841.38	TR	31.25	0.59
			08/21/17	8.95	840.13	TR	31.25	0.59
			02/12/18	8.50	840.58	TR	30.52	1.32
			05/17/18	8.30	840.78	29.40	30.90	0.94
			08/13/18	--	--	TR	27.40	4.44
			11/18/18	7.65	841.43	TR	27.30	4.54
			02/19/19	--	--	TR	27.25	4.59
			05/23/19	7.75	841.33	TR	27.42	4.42
			08/12/19	8.34	840.74	TR	31.57	0.27
			11/07/19	8.04	841.04	TR	31.45	0.39
			02/18/20	7.60	841.48	TR	31.29	0.55
			06/18/20	--	--	TR	31.20	0.64
			08/26/20	9.06	840.02	TR	31.26	0.58
			11/19/20	--	--	TR	31.00	0.84
			02/16/21	8.48	840.60	TR	31.15	0.69
AW-18	848.81	33.51	04/01/13	7.94	840.87	--	33.75	-0.24
			05/28/13	7.49	841.32	--	33.75	-0.24
			08/26/13	8.36	840.45	--	33.69	-0.18
			11/18/13	8.62	840.19	--	33.67	-0.16
			02/03/14	8.10	840.71	--	33.40	0.11
			08/04/14	6.78	842.03	--	33.15	0.36
			02/23/15	8.73	840.08	--	32.95	0.56
			08/24/15	7.83	840.98	--	33.01	0.50
			02/08/16	7.05	841.76	--	32.10	1.41
			08/22/16	8.25	840.56	--	31.81	1.70
			02/20/17	6.99	841.82	--	33.80	-0.29
			08/21/17	8.50	840.31	--	32.20	1.31
			02/12/18	7.49	841.32	--	30.92	2.59
AW-19	849.01	34.33	04/01/13	7.99	841.02	--	33.91	0.42
			05/28/13	8.29	840.72	--	33.89	0.44
			08/26/13	8.59	840.42	--	33.87	0.46
			11/18/13	8.74	840.27	--	33.90	0.43
			02/03/14	8.27	840.74	--	33.15	1.18
			08/04/14	7.39	841.62	--	34.05	0.28
			02/23/15	8.85	840.16	--	32.74	1.59
			08/24/15	8.44	840.57	--	34.05	0.28
			02/08/16	8.22	840.79	--	33.55	0.78
			08/22/16	8.28	840.73	--	33.15	1.18
			02/20/17	7.20	841.81	--	31.58	2.75
			08/21/17	8.71	840.30	--	31.00	3.33
			02/12/18	8.05	840.96	--	29.82	4.51

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PMW-1	851.05	18.67	04/01/13	7.78	843.41	--	19.24	-0.43
			05/28/13	7.89	843.30	--	19.35	-0.54
			08/26/13	8.02	843.17	--	19.29	-0.48
			11/18/13	8.35	842.84	--	19.41	-0.60
			02/03/14	7.97	843.22	--	19.38	-0.57
			08/04/14	7.50	843.69	--	19.32	-0.51
			02/23/15	9.21	841.98	--	19.29	-0.48
			08/24/15	7.53	843.66	--	19.36	-0.55
			02/08/16	7.56	843.63	--	19.34	-0.53
			08/22/16	8.05	843.14	--	19.40	-0.59
			02/20/17	6.33	844.86	--	19.30	-0.49
			08/21/17	7.99	843.20	--	19.35	-0.54
			02/12/18	7.64	843.55	--	19.92	-1.11
PMW-2	849.93	19.76	04/01/13	5.45	844.40	--	19.67	0.17
			05/28/13	5.01	844.84	--	19.65	0.19
			08/26/13	6.00	843.85	--	19.64	0.20
			11/18/13	5.68	844.17	--	19.62	0.22
			02/03/14	6.44	843.41	--	19.62	0.22
			08/04/14	4.96	844.89	--	19.53	0.31
			02/23/15	7.25	842.68	--	19.23	0.53
			08/24/15	4.98	844.95	--	19.24	0.52
			02/08/16	5.44	844.49	--	19.21	0.55
			08/22/16	5.00	844.93	--	19.18	0.58
			02/20/17	4.68	845.25	--	19.15	0.61
			08/21/17	5.58	844.35	--	19.21	0.55
			02/12/18	5.11	844.82	--	18.80	0.96
PMW-3	849.53	19.18	04/01/13	8.45	841.19	--	14.60	4.69
			05/28/13	8.98	840.66	--	15.33	3.96
			08/26/13	8.73	840.91	--	15.41	3.88
			11/18/13	8.76	840.88	--	15.15	4.14
			02/03/14	8.37	841.27	--	18.19	1.10
			08/04/14	7.75	841.89	--	15.35	3.94
			02/23/15	9.36	840.28	--	14.29	5.00
			05/22/15	7.33	842.31	--	19.29	0.00
			08/24/15	8.35	841.29	--	14.26	5.03
			11/18/15	7.51	842.13	--	14.18	5.11
			02/08/16	7.76	841.88	--	14.10	5.19
			05/12/16	7.40	842.24	--	14.04	5.25
			08/22/16	9.31	840.33	--	14.12	5.17
			11/17/16	8.13	841.51	--	14.22	5.07
			02/20/17	5.84	843.80	--	18.95	0.34
			08/21/17	8.95	840.69	--	19.26	0.03
PMW-4	849.77	19.53	02/12/18	8.25	841.39	--	18.50	0.79
			04/01/13	9.20	840.82	--	19.85	-0.07
			05/28/13	9.45	840.57	--	19.85	-0.07
			08/26/13	9.51	840.51	--	19.85	-0.07
			11/18/13	9.73	840.29	--	19.81	-0.03
			02/03/14	9.26	840.76	--	19.82	-0.04
			08/04/14	9.13	840.89	--	19.86	-0.08
			02/23/15	9.70	840.32	--	19.81	-0.03
			08/24/15	9.19	840.83	--	19.80	-0.02
			02/08/16	8.83	841.19	--	19.80	-0.02
			08/22/16	9.71	840.31	--	19.81	-0.03
			02/20/17	7.70	842.32	--	19.80	-0.02
			08/21/17	9.40	840.62	--	19.82	-0.04
			02/12/18	8.89	841.13	--	19.81	-0.03

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
PMW-5	849.08	32.77	04/01/13	8.58	840.50	--	32.65	0.12
			05/28/13	8.77	840.31	--	32.36	0.41
			08/26/13	8.95	840.13	--	32.26	0.51
			11/18/13	9.11	839.97	--	32.20	0.57
			02/03/14	8.74	840.34	--	32.30	0.47
			08/04/14	8.60	840.48	--	32.69	0.08
			02/23/15	9.25	839.83	--	31.69	1.08
			08/24/15	8.70	840.38	--	33.65	-0.88
			02/08/16	8.57	840.51	--	32.50	0.27
			08/22/16	9.00	840.08	--	32.49	0.28
			02/20/17	7.75	841.33	--	32.34	0.43
			08/21/17	9.04	840.04	--	32.34	0.43
			02/12/18	8.58	840.50	--	30.40	2.37
PMW-6	849.59	38.81	04/01/13	9.19	840.40	--	37.97	0.84
			05/28/13	9.35	840.24	--	37.45	1.36
			08/26/13	9.50	840.09	--	37.35	1.46
			11/18/13	9.68	839.91	--	37.23	1.58
			02/03/14	9.23	840.36	--	37.25	1.56
			08/04/14	9.19	840.40	--	38.33	0.48
			02/23/15	9.90	839.69	--	38.06	0.75
			08/24/15	9.29	840.30	--	38.32	0.49
			02/08/16	9.09	840.50	--	38.10	0.71
			08/22/16	9.65	839.94	--	38.10	0.71
			02/20/17	8.28	841.31	--	38.10	0.71
			08/21/17	9.32	840.27	--	37.90	0.91
			02/12/18	9.20	840.39	--	37.90	0.91
NMW-0402S	849.77	31.29	04/01/13	9.24	840.53	29.87	31.07	0.22
			05/28/13	9.59	840.18	30.77	31.17	0.12
			08/26/13	9.89	839.88	29.25	31.25	0.04
			11/18/13	9.98	839.79	29.25	31.25	0.04
			02/03/14	5.42	844.35	30.08	31.28	0.01
			05/30/14	8.75	841.02	29.92	31.41	-0.12
			08/04/14	9.48	840.29	29.93	31.33	-0.04
			11/20/14	10.08	839.69	30.28	31.38	-0.09
			02/23/15	10.13	839.64	30.15	31.35	-0.06
			05/22/15	9.10	840.67	30.88	31.38	-0.09
			08/24/15	9.55	840.22	31.03	31.38	-0.09
			11/18/15	9.02	840.75	--	31.39	-0.10
			02/08/16	9.21	840.56	31.04	31.44	-0.15
			05/12/16	8.89	840.88	31.24	31.45	-0.16
			08/22/16	9.83	839.94	31.02	31.43	-0.14
			11/17/16	9.68	840.09	30.96	31.46	-0.17
			02/20/17	8.21	841.56	31.00	31.50	-0.21
			08/21/17	10.36	839.41	30.73	31.33	-0.04
			02/12/18	9.44	840.33	30.88	31.55	-0.26
			05/17/18	8.95	840.82	31.20	31.59	-0.30
			08/13/18	7.36	842.41	30.75	31.58	-0.29
			11/15/18	5.42	844.35	31.07	31.57	-0.28
			02/19/19	8.54	841.23	31.12	31.54	-0.25
			05/23/19	8.38	841.39	31.05	31.55	-0.26
			08/12/19	9.56	840.21	31.34	31.67	-0.38
			11/07/19	8.73	841.04	31.31	31.56	-0.27
			02/18/20	8.31	841.46	31.12	31.62	-0.33
			06/18/20	--	--	31.07	31.57	-0.28
			08/26/20	--	--	31.20	31.62	-0.33
			11/19/20	--	--	31.08	31.58	-0.29
			02/16/21	9.52	840.25	31.03	31.62	-0.33

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
NRW-1	852.45	33.74	04/01/13	11.21	841.15	--	33.82	0.01
			05/28/13	11.48	840.88	--	33.75	0.08
			08/26/13	11.42	840.94	--	33.70	0.13
			11/18/13	11.61	840.75	--	33.68	0.15
			02/03/14	11.29	841.07	--	33.75	0.08
			05/30/14	10.87	841.07	--	33.62	0.08
			08/04/14	11.11	841.25	--	33.65	0.18
			11/20/14	11.54	840.91	--	33.59	0.15
			02/23/15	11.62	840.83	--	33.46	0.28
			05/22/15	10.96	841.49	--	33.46	0.28
			08/24/15	11.06	841.39	--	33.45	0.29
			11/18/15	10.68	841.77	--	33.45	0.29
			02/08/16	10.80	841.65	--	33.46	0.28
			05/12/16	10.77	841.68	--	33.48	0.26
			08/22/16	11.34	841.11	--	33.45	0.29
			11/17/16	11.25	841.20	--	33.51	0.23
			02/20/17	9.05	843.40	--	33.41	0.33
			08/21/17	11.36	841.09	--	33.40	0.34
			02/12/18	10.37	842.08	--	33.41	0.33
			05/17/18	10.80	841.65	--	33.33	0.41
			08/13/18	9.75	842.70	--	33.35	0.39
			11/15/18	9.76	842.69	--	33.62	0.12
			02/19/19	9.70	842.75	--	33.58	0.16
			08/12/19	10.42	842.03	--	33.39	0.35
			02/18/20	9.95	842.50	--	33.42	0.32
			08/26/20	11.48	840.97	--	33.36	0.38
			02/16/21	10.85	841.60	--	33.39	0.35
NRW-2	849.80	58.25	04/01/13	9.36	840.44	57.54	57.87	0.38
			05/28/13	9.62	840.18	--	57.31	0.94
			08/26/13	9.80	840.00	56.73	57.20	1.05
			11/18/13	9.98	839.82	56.93	57.63	0.62
			02/03/14	7.20	842.60	--	57.70	0.55
			05/30/14	8.94	840.86	--	57.92	0.33
			08/04/14	9.46	840.34	56.61	57.81	0.44
			11/20/14	10.05	839.75	57.44	57.83	0.42
			02/23/15	10.13	839.67	57.30	57.70	0.55
			05/22/15	9.23	840.57	--	57.80	0.45
			08/24/15	9.50	840.30	--	57.82	0.43
			11/18/15	9.12	840.68	--	57.82	0.43
			02/08/16	9.31	840.49	56.74	57.84	0.41
			05/12/16	9.17	840.63	56.92	57.92	0.33
			08/22/16	9.94	839.86	57.37	57.88	0.37
			11/17/16	9.71	840.09	57.42	57.92	0.33
			02/20/17	8.44	841.36	57.03	57.93	0.32
			08/21/17	10.85	838.95	57.39	58.09	0.16
			02/12/18	9.40	840.40	56.59	58.09	0.16
			05/17/18	9.10	840.70	--	58.05	0.20
			08/13/18	6.36	843.44	57.70	58.12	0.13
			11/15/18	8.24	841.56	56.10	58.10	0.15
			02/19/19	8.72	841.08	57.28	58.12	0.13
			05/23/19	8.60	841.20	57.79	58.12	0.13
			08/12/19	9.50	840.30	57.15	58.15	0.10
			11/07/19	8.93	840.87	57.89	58.14	0.11
			02/18/20	8.51	841.29	57.20	58.20	0.05
			06/18/20	--	--	TR	58.12	0.13
			08/26/20	--	--	TR	58.17	0.08
			11/09/20	--	--	TR	58.20	0.05
			02/16/21	9.65	840.15	TR	58.17	0.08

Well ID	Measuring Point Elevation	Actual Depth to Bottom (feet TOC)	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)
NRW-3	849.78	53.76	04/01/13	9.33	840.45	--	52.97	0.79
			05/28/13	9.59	840.19	--	52.49	1.27
			08/26/13	9.77	840.01	--	52.13	1.63
			11/18/13	9.93	839.85	--	52.34	1.42
			02/03/14	9.43	840.35	--	52.30	1.46
			05/30/14	8.93	840.85	--	52.24	1.52
			08/04/14	9.44	840.34	--	52.12	1.64
			11/20/14	10.02	839.76	--	52.23	1.53
			02/23/15	10.10	839.68	--	52.32	1.44
			05/22/15	9.22	840.56	--	52.09	1.67
			08/24/15	9.49	840.29	--	53.78	-0.02
			11/18/15	9.97	839.81	--	53.12	0.64
			02/08/16	9.25	840.53	--	52.90	0.86
			05/12/16	9.10	840.68	--	52.93	0.83
			08/22/16	9.88	839.90	--	53.00	0.76
			11/17/16	9.69	840.09	--	53.00	0.76
			02/20/17	8.35	841.43	--	53.90	-0.14
			08/21/17	10.92	838.86	--	53.88	-0.12
			02/12/18	9.32	840.46	--	53.03	0.73
			05/17/18	9.00	840.78	--	53.10	0.66
			08/13/18	6.53	843.25	--	53.03	0.73
			11/15/18	8.19	841.59	--	53.87	-0.11
			02/19/19	8.56	841.22	--	53.00	0.76
			08/12/19	9.32	840.46	--	52.98	0.78
			02/18/20	8.35	841.43	--	53.02	0.74
			08/26/20	10.10	839.68	--	52.90	0.86
			02/16/21	9.46	840.32	--	53.05	0.71
NRW-4	849.52	56.68	04/01/13	9.06	840.46	--	57.40	-0.72
			05/28/13	9.35	840.17	--	57.34	-0.66
			08/26/13	9.53	839.99	--	56.57	0.11
			11/18/13	9.69	839.83	--	56.59	0.09
			02/03/14	9.21	840.31	--	56.99	-0.31
			05/30/14	8.66	840.86	--	56.64	0.04
			08/04/14	9.18	840.34	--	56.58	0.10
			11/20/14	9.76	839.76	--	56.62	0.06
			02/23/15	9.88	839.64	--	56.40	0.28
			05/22/15	8.83	840.69	--	56.48	0.20
			08/24/15	9.23	840.29	--	57.05	-0.37
			11/18/15	8.82	840.70	--	56.55	0.13
			02/08/16	8.98	840.54	--	56.55	0.13
			05/12/16	8.82	840.70	--	56.33	0.35
			08/22/16	9.64	839.88	--	56.69	-0.01
			11/17/16	9.42	840.10	--	56.40	0.28
			02/20/17	8.10	841.42	--	57.30	-0.62
			08/21/17	9.70	839.82	--	57.37	-0.69
			02/12/18	9.18	840.34	--	56.52	0.16
			05/17/18	8.75	840.77	--	57.50	-0.82
			08/13/18	6.56	842.96	--	56.78	-0.10
			11/15/18	7.90	841.62	--	57.44	-0.76
			02/19/19	8.29	841.23	--	57.04	-0.36
			08/12/19	9.06	840.46	--	56.84	-0.16
			02/18/20	8.09	841.43	--	56.85	-0.17
			08/26/20	9.86	839.66	--	56.44	0.24
			02/16/21	9.21	840.31	--	56.69	-0.01

Notes:

All measurements from Top of Casing (TOC).

Elevations in feet above mean sea level (ft amsl), 1988 North American Vertical Datum (NAVD88).

-- Indicates measurement not taken or not available.

Due to well repairs, MW-4S, MW-9S, MW-9D, AW-2, PMW-2 and NRW-1 were resurveyed during the August 2014 site visit but after the gauging dated 8/4/2014. *Measuring Point Elevations* and *Actual Depth to Bottom* values have been updated and used starting with the gauging dated 2/23/2015.

TR - Indicates DNAPL product observed but not in a quantifiable amount.

AW-03 was not safely accessible on February 12, 2018 due to a nearby nest of ground bees.

MW-9S and MW-9D were underwater on 8/13/18 and the depth to water was not able to be gauged.

To confirm survey data and due to well repairs, wells MW-2S, PMW-1, PMW-3, and PMW-4 were resurveyed on 2/19/2019.

Table 3
Groundwater Analytical Data
2021 Periodic Review Report
NYSEG
Elmira, New York



Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-2S							
			Historical	Baseline	Q2	Q4	Q6	Q8	Q10	Q12
Date Collected:			04/21/04	04/04/13	08/27/13	02/06/14	08/06/14	02/26/15	08/27/15	02/11/16
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 UJ	4.8 U	4.7 U	4.9 U
Acenaphthylene	--	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Anthracene	50 (GV)	µg/L	10 U	4.8 U	4.8 UB	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	1 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Benzo(a)pyrene*	0	µg/L	1 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	1 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Benzo(g,h,i)perylene	--	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	1 UJ	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Chrysene*	0.002 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Dibenzo(a,h)anthracene	--	µg/L	1 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Fluoranthene	50 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Fluorene	50 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 UJ	4.8 U	4.7 U	4.9 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	1 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
Naphthalene	10 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 UJ	10 U	4.8 U	4.7 U	4.9 U
Phenanthrene	50 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 UB	4.9 U
Pyrene	50 (GV)	µg/L	10 U	4.8 U	4.8 U	4.8 U	10 U	4.8 U	4.7 U	4.9 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

Table 3
Groundwater Analytical Data
2021 Periodic Review Report
NYSEG
Elmira, New York



Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-2S				MW-4S			
			Q14	Q16	Q18	Q20	Historical	Historical	Baseline	Q2
Date Collected:			08/25/16	02/23/17	08/24/17	02/15/18	04/22/04	08/23/11	04/04/13	08/27/13
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	4 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Xylenes (total)	5	µg/L	2 U	2 U	2 U	2 U	5 U	NA	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.9 U	5 U	5 U	5 U	10 U	0.07	4.9 U	4.8 U
Acenaphthylene	--	µg/L	4.9 U	5 UJ	5 U	5 U	10 U	0.1	4.9 U	4.8 U
Anthracene	50 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	10 U	5 U	4.9 U	4.8 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	1 U	0.06	4.9 U	4.8 U
Benzo(a)pyrene*	0	µg/L	4.9 UJ	5 UJ	5 U	5 U	1 U	0.05 U	1.2 J	4.8 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	1 U	0.07	1.2 J	4.8 U
Benzo(g,h,i)perylene	--	µg/L	4.9 UJ	5 UJ	5 U	5 U	10 U	3 U	4.9 U	4.8 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5 U	1 UJ	0.05 U	0.75 J	4.8 U
Chrysene*	0.002 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	10 U	0.05 U	4.9 U	4.8 U
Dibenzo(a,h)anthracene	--	µg/L	4.9 UJ	5 UJ	5 U	5 U	1 U	0.03	4.9 U	4.8 U
Fluoranthene	50 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	10 U	5 U	4.9 U	4.8 U
Fluorene	50 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	10 U	5 U	4.9 U	4.8 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.9 UJ	5 UJ	5 U	5 U	1 U	0.05 U	1.7 J	4.8 U
Naphthalene	10 (GV)	µg/L	4.9 U	5 U	5 U	5 U	10 U	5 U	4.9 U	4.8 U
Phenanthrene	50 (GV)	µg/L	4.9 U	5 UJ	5 U	5 U	10 U	0.09	4.9 U	4.8 U
Pyrene	50 (GV)	µg/L	4.9 U	5 U	5 U	5 U	10 U	5 U	0.42 J	4.8 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	0.13	4.85 J	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	0.42	5.27 J	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

Table 3
Groundwater Analytical Data
2021 Periodic Review Report
NYSEG
Elmira, New York



Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-4S							
			Q4	Q6	Q8	Q10	Q12	Q14	Q16	Q18
Date Collected:			02/06/14	08/06/14	02/26/15	08/27/15	02/11/16	08/25/16	02/23/17	08/24/17
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.8 UJ	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Acenaphthylene	--	µg/L	4.8 UJ	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Anthracene	50 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Benzo(a)pyrene*	0	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.8 U	9.6 U	0.48 J	4.8 U	5 U	4.8 U	4.5 U	25 U
Benzo(g,h,i)perylene	--	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Chrysene*	0.002 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Dibenzo(a,h)anthracene	--	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Fluoranthene	50 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Fluorene	50 (GV)	µg/L	4.8 UJ	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Naphthalene	10 (GV)	µg/L	4.8 UJ	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
Phenanthrene	50 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 UB	5 U	4.8 U	4.5 U	25 U
Pyrene	50 (GV)	µg/L	4.8 U	9.6 U	5 U	4.8 U	5 U	4.8 U	4.5 U	25 U
PAH COCs	--	µg/L	ND	ND	0.48 J	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	0.48 J	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

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Groundwater Analytical Data
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NYSEG
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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-4S							MW-6S
			Q20	Q22	Q24	Q26	Q28	Q30	Q32	Historical
Date Collected:			02/15/18	08/14/18	02/20/19	08/13/19	02/19/20	08/27/20	02/17/21	04/22/04
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	4 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	5 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2.0 U	2.0 U	5 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Acenaphthylene	--	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Anthracene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	1 U
Benzo(a)pyrene*	0	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	1 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	1 U
Benzo(g,h,i)perylene	--	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	1 UJ
Chrysene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Dibenzo(a,h)anthracene	--	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	1 U
Fluoranthene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Fluorene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	1 U
Naphthalene	10 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Phenanthrene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
Pyrene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	10 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-6S							
			Baseline	Q2	Q4	Q6	Q8	Q10	Q12	Q14
Date Collected:			04/04/13	08/27/13	02/06/14	08/07/14	02/26/15	08/27/15	02/11/16	08/25/16
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 U	4.8 U	5 U	5.1 U
Acenaphthylene	--	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 U	4.8 U	5 U	5.1 U
Anthracene	50 (GV)	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 U	4.8 U	5 U	5.1 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Benzo(a)pyrene*	0	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Benzo(g,h,i)perylene	--	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Chrysene*	0.002 (GV)	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Dibenzo(a,h)anthracene	--	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 UJ	4.8 U	5 U	5.1 U
Fluoranthene	50 (GV)	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 U	4.8 U	5 U	5.1 U
Fluorene	50 (GV)	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 U	4.8 U	5 U	5.1 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.8 U	4.7 U	4.8 U	9.8 U	5 U	4.8 U	5 U	5.1 U
Naphthalene	10 (GV)	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 U	4.8 U	5 U	5.1 U
Phenanthrene	50 (GV)	µg/L	4.8 U	0.45 J	4.8 U	9.8 U	5 U	4.8 UB	5 U	5.1 U
Pyrene	50 (GV)	µg/L	4.8 U	4.7 U	4.8 UJ	9.8 U	5 U	4.8 U	5 U	5.1 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	0.45 J	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-6S							
			Q16	Q18	Q20	Q22	Q24	Q26	Q28	Q30
Date Collected:			02/23/17	08/24/17	02/15/18	08/14/18	02/20/19	08/13/19	02/19/20	08/27/20
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Acenaphthylene	--	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Anthracene	50 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene*	0	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	--	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Chrysene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	--	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Fluoranthene	50 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Fluorene	50 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Naphthalene	10 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Phenanthrene	50 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
Pyrene	50 (GV)	µg/L	4.9 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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NYSEG
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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-6S	MW-7						
			Q32	Historical	Baseline	Q2	Q4	Q6	Q8	Q10
Date Collected:			02/17/21	04/22/04	04/04/13	08/27/13	02/06/14	08/06/14	02/26/15	08/27/15
BTEX										
Benzene	1	µg/L	1.0 U	1 U	1 U	1 U	0.45 J	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1.0 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1.0 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	µg/L	2.0 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	0.45 J	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Acenaphthylene	--	µg/L	5 U	1.1 J	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Anthracene	50 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	1 U	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 U
Benzo(a)pyrene*	0	µg/L	5 U	1 U	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5 U	1 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Benzo(g,h,i)perylene	--	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	1 UJ	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 U
Chrysene*	0.002 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Dibenzo(a,h)anthracene	--	µg/L	5 U	1 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Fluoranthene	50 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 U
Fluorene	50 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	1 U	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Naphthalene	10 (GV)	µg/L	5 U	17	4.9 U	4.9 U	4.9 UJ	9.9 U	4.7 U	4.9 U
Phenanthrene	50 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 UB
Pyrene	50 (GV)	µg/L	5 U	10 U	4.9 U	4.9 U	4.9 U	9.9 U	4.7 U	4.9 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	18.1 J	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-7					MW-8S		
			Q12	Q14	Q16	Q18	Q20	Historical	Baseline	Q2
Date Collected:			02/11/16	08/25/16	02/23/17	08/24/17	02/15/18	04/22/04	04/05/13	08/27/13
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1.3 J	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
Xylenes (total)	5	µg/L	2 U	2 U	2 U	2 U	2 U	6	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	7.8 J	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	2 J	4.8 U	4.8 U
Acenaphthylene	--	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	10 U	4.8 U	4.8 U
Anthracene	50 (GV)	µg/L	4.8 U	5 U	0.28 J	5 U	5 U	10 U	4.8 U	4.8 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1 U	4.8 U	4.8 U
Benzo(a)pyrene*	0	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1 U	4.8 U	4.8 UJ
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1 U	4.8 U	4.8 UJ
Benzo(g,h,i)perylene	--	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	10 U	4.8 U	4.8 UJ
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1 UJ	4.8 U	4.8 UJ
Chrysene*	0.002 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	10 U	4.8 U	4.8 UJ
Dibenzo(a,h)anthracene	--	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1 U	4.8 U	4.8 UJ
Fluoranthene	50 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	0.4 J	4.8 U	4.8 U
Fluorene	50 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1.7 J	4.8 U	4.8 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	1 U	4.8 U	4.8 UJ
Naphthalene	10 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	14	4.8 U	4.8 U
Phenanthrene	50 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	0.2 J	4.8 U	0.44 J
Pyrene	50 (GV)	µg/L	4.8 U	5 U	4.9 U	5 U	5 U	0.3 J	4.8 U	4.8 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	0.28 J	ND	ND	18.6 J	ND	0.44 J
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

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NYSEG
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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-8S							
			Q4	Q6	Q8	Q10	Q12	Q14	Q16	Q18
Date Collected:			02/07/14	08/07/14	02/26/15	08/27/15	02/11/16	08/25/16	02/23/17	08/24/17
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	2 U	2 U	4 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	2 U	2 U	4 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	2 U	2 U	4 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	4 U	4 U	8 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	6 J	6.8 J	8	7.5	7.5	6.6	9.4	7.9 J
Acenaphthylene	--	µg/L	23 UJ	9.6 U	0.46 J	4.7 U	0.5 J	4.7 U	0.36 J	25 U
Anthracene	50 (GV)	µg/L	23 UJ	9.6 U	0.97 J	0.61 J	1 J	0.56 J	0.69 J	25 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	23 UJ	9.6 U	1.2 J	4.7 U	1.2 J	0.52 J	0.38 J	25 U
Benzo(a)pyrene*	0	µg/L	23 UJ	9.6 U	1.2 J	4.7 U	1.2 J	4.7 U	0.43 J	25 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	23 UJ	9.6 U	1.4 J	4.7 U	1.2 J	0.43 J	0.39 J	25 U
Benzo(g,h,i)perylene	--	µg/L	23 UJ	9.6 U	0.49 J	4.7 U	0.53 J	4.7 U	4.6 U	25 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	23 UJ	9.6 U	4.9 U	4.7 U	5.3 U	4.7 U	4.6 U	25 U
Chrysene*	0.002 (GV)	µg/L	23 UJ	9.6 U	0.97 J	4.7 U	1 J	0.31 J	4.6 U	25 U
Dibenzo(a,h)anthracene	--	µg/L	23 UJ	9.6 U	4.9 U	4.7 U	5.3 U	4.7 U	4.6 U	25 U
Fluoranthene	50 (GV)	µg/L	23 UJ	9.6 U	3.4 J	2 J	3.6 J	2.4 J	2.7 J	2.7 J
Fluorene	50 (GV)	µg/L	23 UJ	9.6 U	5.1 J	4.8 J	5.4	5.5	5	5.2 J
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	23 UJ	9.6 U	0.55 J	4.7 U	0.7 J	4.7 U	4.6 U	25 U
Naphthalene	10 (GV)	µg/L	23 UJ	9.6 U	2.5 J	4.7 U	5.3 U	4.7 U	4.6 U	25 U
Phenanthrene	50 (GV)	µg/L	23 UJ	9.6 U	0.57 J	4.7 UB	5.3 U	4.7 U	4.6 U	25 U
Pyrene	50 (GV)	µg/L	23 UJ	9.6 U	2.6 J	1.3 J	2.8 J	1.7 J	1.9 J	25 U
PAH COCs	--	µg/L	ND	ND	5.32 J	ND	5.30	1.26 J	1.20 J	ND
Total PAHs	--	µg/L	9.5 J	11.9 J	29.1 J	16.8J	26.7 J	17.5 J	22.3 J	15.8 J
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

Table 3
Groundwater Analytical Data
2021 Periodic Review Report
NYSEG
Elmira, New York



Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-8S							MW-9S
			Q20	Q22	Q24	Q26	Q28	Q30	Q32	Historical
Date Collected:			02/15/18	08/14/18	02/20/19	08/13/19	02/19/20	08/27/20	02/17/21	04/27/04
BTEX										
Benzene	1	µg/L	4 U	8 U	8 U	8 U	8 U	5.0 U	4.0 U	1 U
Ethylbenzene	5	µg/L	4 U	8 U	8 U	8 U	8 U	5.0 U	4.0 U	4 U
Toluene	5	µg/L	4 U	8 U	8 U	8 U	8 U	5.0 U	4.0 U	5 U
Xylenes (total)	5	ug/L	8 U	16 U	16 U	16 U	16 U	5.0 U	8.0 U	5 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.7 J	2.1 J	5.9	8	6.1	9	6.9	11 U
Acenaphthylene	--	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	11 U
Anthracene	50 (GV)	µg/L	25 U	25 U	0.47 J	0.47 J	0.37 J	0.65 J	0.4 J	11 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	25 U	25 U	5 U	5 U	0.39 J	5 U	5 U	1.1 U
Benzo(a)pyrene*	0	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	1.1 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	1.1 U
Benzo(g,h,i)perylene	--	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	11 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	1.1 U
Chrysene*	0.002 (GV)	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	11 U
Dibenzo(a,h)anthracene	--	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	1.1 U
Fluoranthene	50 (GV)	µg/L	25 U	25 U	1.7 J	2.2 J	2.2 J	2.8 J	1.6 J	11 U
Fluorene	50 (GV)	µg/L	25 U	25 U	4.6 J	6.6	4.9 J	7.1	5.8	11 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	1.1 U
Naphthalene	10 (GV)	µg/L	25 U	25 U	5 U	5 U	5 U	5 U	5 U	11 U
Phenanthrene	50 (GV)	µg/L	25 U	25 U	5 U	5 U	5 U	0.58 J	5 U	11 U
Pyrene	50 (GV)	µg/L	25 U	25 U	1.5 J	1.4 J	1.7 J	1.9 J	1.1 J	11 U
PAH COCs	--	µg/L	ND	ND	ND	ND	0.39 J	ND	ND	ND
Total PAHs	--	µg/L	8.9 J	2.1 J	14.2 J	18.7 J	15.7 J	22 J	15.8 J	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

Table 3
Groundwater Analytical Data
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NYSEG
Elmira, New York



Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-9S							
			Baseline	Q2	Q4	Q6	Q8	Q10	Q12	Q14
Date Collected:			04/05/13	08/27/13	02/07/14	08/06/14	02/26/15	08/27/15	02/11/16	08/25/16
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Acenaphthylene	--	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Anthracene	50 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Benzo(a)pyrene*	0	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Benzo(g,h,i)perylene	--	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Chrysene*	0.002 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Dibenzo(a,h)anthracene	--	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Fluoranthene	50 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Fluorene	50 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Naphthalene	10 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
Phenanthrene	50 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 UB	4.8 U	4.7 U
Pyrene	50 (GV)	µg/L	5.1 U	4.8 U	4.9 U	9.6 U	4.9 U	4.7 U	4.8 U	4.7 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-9S							
			Q16	Q18	Q20	Q22	Q24	Q26	Q28	Q30
Date Collected:			02/23/17	08/24/17	02/15/18	08/14/18	02/20/19	08/13/19	02/19/20	08/27/20
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Acenaphthylene	--	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Anthracene	50 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Benzo(a)pyrene*	0	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Benzo(g,h,i)perylene	--	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Chrysene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Dibenzo(a,h)anthracene	--	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Fluoranthene	50 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Fluorene	50 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Naphthalene	10 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Phenanthrene	50 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
Pyrene	50 (GV)	µg/L	4.9 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Table 3
Groundwater Analytical Data
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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-9S	MW-0402S						
			Q32	Historical	Baseline	Q2	Q4	Q6	Q8	Q10
Date Collected:			02/17/21	04/28/04	04/04/13	08/27/13	02/06/14	08/07/14	02/26/15	08/27/15
BTEX										
Benzene	1	µg/L	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1.0 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1.0 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	2.0 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	10 U	4.8 U	4.6 U	4.7 U	9.9 U	4.9 U	4.9 U
Acenaphthylene	--	µg/L	5 U	10 U	4.8 UJ	4.6 U	4.7 U	9.9 U	4.9 U	4.9 U
Anthracene	50 (GV)	µg/L	5 U	10 U	4.8 UJ	4.6 U	4.7 U	9.9 U	4.9 U	4.9 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	1 U	4.8 UJ	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Benzo(a)pyrene*	0	µg/L	5 U	1 U	4.8 U	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5 U	1 U	4.8 U	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Benzo(g,h,i)perylene	--	µg/L	5 U	10 U	4.8 UJ	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	1 U	4.8 U	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Chrysene*	0.002 (GV)	µg/L	5 U	10 U	4.8 UJ	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Dibenzo(a,h)anthracene	--	µg/L	5 U	1 U	4.8 U	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Fluoranthene	50 (GV)	µg/L	5 U	10 U	4.8 U	4.6 U	4.7 U	9.9 U	4.9 U	4.9 U
Fluorene	50 (GV)	µg/L	5 U	10 U	4.8 UJ	4.6 U	4.7 U	9.9 U	4.9 U	4.9 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	1 U	4.8 UJ	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Naphthalene	10 (GV)	µg/L	5 U	10 U	4.8 U	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
Phenanthrene	50 (GV)	µg/L	5 U	10 U	4.8 U	4.6 U	4.7 U	9.9 U	4.9 U	4.9 UB
Pyrene	50 (GV)	µg/L	5 U	10 U	4.8 U	4.6 U	4.7 UJ	9.9 U	4.9 U	4.9 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-0402S					MW-0403S		
			Q12	Q14	Q16	Q18	Q20	Historical	Baseline	Q2
Date Collected:			02/11/16	08/25/16	02/23/17	08/24/17	02/15/18	04/28/04	04/04/13	08/27/13
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	4 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U
Total BTEX	- -	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Acenaphthylene	- -	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Anthracene	50 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	1 U	4.8 U	4.7 U
Benzo(a)pyrene*	0	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	1 U	4.8 U	4.7 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	1 U	4.8 U	4.7 U
Benzo(g,h,i)perylene	- -	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	1 U	4.8 U	4.7 U
Chrysene*	0.002 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Dibenzo(a,h)anthracene	- -	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	1 U	4.8 U	4.7 U
Fluoranthene	50 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Fluorene	50 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	1 U	4.8 U	4.7 U
Naphthalene	10 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Phenanthrene	50 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
Pyrene	50 (GV)	µg/L	5.3 U	4.7 U	4.6 U	5 U	5 U	10 U	4.8 U	4.7 U
PAH COCs	- -	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	- -	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	- -	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	- -	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

See notes on last page

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NYSEG
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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-0403S							
			Q4	Q6	Q8	Q10	Q12	Q14	Q16	Q18
Date Collected:			02/06/14	08/07/14	02/26/15	08/27/15	02/11/16	08/25/16	02/23/17	08/24/17
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	µg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Acenaphthylene	--	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Anthracene	50 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Benzo(a)pyrene*	0	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Benzo(g,h,i)perylene	--	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 UJ	4.9 U	4.6 U	5 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Chrysene*	0.002 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Dibenzo(a,h)anthracene	--	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Fluoranthene	50 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Fluorene	50 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 UJ	4.9 U	4.6 U	5 U
Naphthalene	10 (GV)	µg/L	4.6 U	10 U	0.94 J	4.7 U	5.2 U	4.9 U	4.6 U	5 U
Phenanthrene	50 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 UB	5.2 U	4.9 U	4.6 U	5 U
Pyrene	50 (GV)	µg/L	4.6 U	10 U	4.7 U	4.7 U	5.2 U	4.9 U	4.6 U	5 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	0.94 J	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Table 3
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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-0403S	MW-0404S						
			Q20	Historical	Baseline	Q2	Q4	Q6	Q8	Q10
Date Collected:			02/15/18	04/29/04	04/04/13	08/27/13	02/06/14	08/07/14	02/26/15	08/27/15
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	µg/L	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	10 U	4.7 U	1.3 J	4.7 U	9.8 U	4.7 U	4.9 U
Acenaphthylene	--	µg/L	5 U	10 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Anthracene	50 (GV)	µg/L	5 U	10 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	1 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Benzo(a)pyrene*	0	µg/L	5 U	1 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5 U	1 U	4.7 U	4.6 U	4.7 U	9.8 U	0.33 J	4.9 U
Benzo(g,h,i)perylene	--	µg/L	5 U	10 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	1 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Chrysene*	0.002 (GV)	µg/L	5 U	10 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Dibenzo(a,h)anthracene	--	µg/L	5 U	1 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Fluoranthene	50 (GV)	µg/L	5 U	10 U	4.7 U	0.49 J	4.7 U	9.8 U	4.7 U	4.9 U
Fluorene	50 (GV)	µg/L	5 U	10 U	4.7 U	1.2 J	4.7 U	9.8 U	4.7 U	4.9 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	1 U	4.7 U	4.6 U	4.7 U	9.8 U	4.7 U	4.9 U
Naphthalene	10 (GV)	µg/L	5 U	10 U	4.7 U	4.6 U	4.7 U	9.8 U	3.2 J	4.9 U
Phenanthrene	50 (GV)	µg/L	5 U	10 U	4.7 U	0.45 J	4.7 U	9.8 U	4.7 U	4.9 UB
Pyrene	50 (GV)	µg/L	5 U	10 U	4.7 U	0.38 J	4.7 U	9.8 U	4.7 U	4.9 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	0.33 J	ND
Total PAHs	--	µg/L	ND	ND	ND	3.82 J	ND	ND	3.53 J	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-0404S							
			Q12	Q14	Q16	Q18	Q20	Q22	Q24	Q26
Date Collected:			02/11/16	08/25/16	02/23/17	08/24/17	02/15/18	08/14/18	02/20/19	08/13/19
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	--	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Anthracene	50 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene*	0	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	--	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Chrysene*	0.002 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	--	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	50 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Fluorene	50 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	10 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Phenanthrene	50 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
Pyrene	50 (GV)	µg/L	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	5 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-0404S			MW-0405S				
			Q28	Q30	Q32	Historical	Baseline	Q2	Q4	Q6
Date Collected:			02/19/20	08/27/20	02/17/21	04/29/04	04/04/13	08/27/13	02/06/14	08/07/14
BTEX										
Benzene	1	µg/L	1 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1.0 U	1.0 U	4 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1.0 U	1.0 U	5 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	µg/L	2 U	2.0 U	2.0 U	5 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Acenaphthylene	--	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Anthracene	50 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	5 U	5 U	1 U	4.7 U	4.7 U	4.6 U	9.7 U
Benzo(a)pyrene*	0	µg/L	5 U	5 U	5 U	1 U	4.7 U	4.7 U	4.6 U	9.7 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5 U	5 U	5 U	1 U	4.7 U	4.7 U	4.6 U	9.7 U
Benzo(g,h,i)perylene	--	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	5 U	5 U	1 U	4.7 U	4.7 U	4.6 U	9.7 U
Chrysene*	0.002 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Dibenzo(a,h)anthracene	--	µg/L	5 U	5 U	5 U	1 U	4.7 U	4.7 U	4.6 U	9.7 U
Fluoranthene	50 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Fluorene	50 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	5 U	5 U	1 U	4.7 U	4.7 U	4.6 U	9.7 U
Naphthalene	10 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
Phenanthrene	50 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	0.45 J	4.6 U	9.7 U
Pyrene	50 (GV)	µg/L	5 U	5 U	5 U	10 U	4.7 U	4.7 U	4.6 U	9.7 U
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	0.45 J	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	MW-0405S							
			Q8	Q10	Q12	Q14	Q16	Q18	Q20	Q22
Date Collected:			02/26/15	08/27/15	02/11/16	08/25/16	02/23/17	08/24/17	02/15/18	08/14/18
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Acenaphthylene	--	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Anthracene	50 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Benzo(a)pyrene*	0	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	0.35 J	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	--	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Chrysene*	0.002 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	--	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Fluoranthene	50 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Fluorene	50 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Naphthalene	10 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Phenanthrene	50 (GV)	µg/L	5 U	4.9 UB	5 U	4.9 U	4.5 U	5 U	5 U	5 U
Pyrene	50 (GV)	µg/L	5 U	4.9 U	5 U	4.9 U	4.5 U	5 U	5 U	5 U
PAH COCs	--	µg/L	0.35 J	ND	ND	ND	ND	ND	ND	ND
Total PAHs	--	µg/L	0.35 J	ND	ND	ND	ND	ND	ND	ND
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	MW-0405S					PMW-1		
			Q24	Q26	Q28	Q30	Q32	Baseline	Q2	Q6
Date Collected:			02/20/19	08/13/19	02/19/20	08/27/20	02/17/21	04/03/13	08/28/13	08/06/14
BTEX										
Benzene	1	µg/L	1 U	1 U	1 U	1.0 U	1.0 U	NA	NA	NA
Ethylbenzene	5	µg/L	1 U	1 U	1 U	1.0 U	1.0 U	NA	NA	NA
Toluene	5	µg/L	1 U	1 U	1 U	1.0 U	1.0 U	NA	NA	NA
Xylenes (total)	5	ug/L	2 U	2 U	2 U	2.0 U	2.0 U	NA	NA	NA
Total BTEX	--	µg/L	ND	ND	ND	ND	ND	NA	NA	NA
PAHs										
Acenaphthene	20 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Acenaphthylene	--	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Anthracene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Benzo(a)anthracene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Benzo(a)pyrene*	0	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Benzo(g,h,i)perylene	--	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Chrysene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Dibenzo(a,h)anthracene	--	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Fluoranthene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Fluorene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Naphthalene	10 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Phenanthrene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
Pyrene	50 (GV)	µg/L	5 U	5 U	5 U	5 U	5 U	NA	NA	NA
PAH COCs	--	µg/L	ND	ND	ND	ND	ND	NA	NA	NA
Total PAHs	--	µg/L	ND	ND	ND	ND	ND	NA	NA	NA
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	4,500	3,500	2,000U
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	2,400	NA	2,000U

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Location ID:	NYSDEC TOGS 1.1.1 Std. or Guidance Values	Units	PMW-1	PMW-2					PMW-3	
			Q8	Baseline	Q2	Q4	Q6	Q8	Baseline	Q2
Date Collected:			02/24/15	04/03/13	08/28/13	02/05/14	08/06/14	02/24/15	04/03/13	08/30/13
BTEX										
Benzene	1	µg/L	NA	1 U	1 U	1 U	1 U	1 U	NA	NA
Ethylbenzene	5	µg/L	NA	1 U	1 U	0.92 J	1 U	1 U	NA	NA
Toluene	5	µg/L	NA	1 U	1 U	1 U	1 U	1 U	NA	NA
Xylenes (total)	5	ug/L	NA	2 U	2 U	2 U	2 U	2 U	NA	NA
Total BTEX	--	µg/L	NA	ND	ND	0.92 J	ND	ND	NA	NA
PAHs										
Acenaphthene	20 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Acenaphthylene	--	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Anthracene	50 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene*	0.002 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene*	0	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	--	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Chrysene*	0.002 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	--	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Fluoranthene	50 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Fluorene	50 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Naphthalene	10 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Phenanthrene	50 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
Pyrene	50 (GV)	µg/L	NA	4.8 U	NA	NA	NA	NA	NA	NA
PAH COCs	--	µg/L	NA	ND	NA	NA	NA	NA	NA	NA
Total PAHs	--	µg/L	NA	ND	NA	NA	NA	NA	NA	NA
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	99,000	13,000
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	NA	NA	NA	NA	NA	79,400	NA

See notes on last page

Table 3
Groundwater Analytical Data
2021 Periodic Review Report
NYSEG
Elmira, New York



Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	PMW-3		PMW-4					PMW-5
			Q6	Q8	Baseline	Q2	Q4	Q6	Q8	Baseline
Date Collected:			08/06/14	02/24/15	04/03/13	08/28/13	02/05/14	08/06/14	02/25/15	04/03/13
BTEX										
Benzene	1	µg/L	NA	NA	230 D	81	150	4 U	81	NA
Ethylbenzene	5	µg/L	NA	NA	110 D	36	55	4 U	29	NA
Toluene	5	µg/L	NA	NA	9.3	2.9 J	5.4	4 U	4.9	NA
Xylenes (total)	5	ug/L	NA	NA	80	21	33	8 U	21	NA
Total BTEX	--	µg/L	NA	NA	429	141 J	243	ND	136	NA
PAHs										
Acenaphthene	20 (GV)	µg/L	NA	NA	110 D	NA	NA	NA	NA	NA
Acenaphthylene	--	µg/L	NA	NA	6.2	NA	NA	NA	NA	NA
Anthracene	50 (GV)	µg/L	NA	NA	8.8	NA	NA	NA	NA	NA
Benzo(a)anthracene*	0.002 (GV)	µg/L	NA	NA	0.88 J	NA	NA	NA	NA	NA
Benzo(a)pyrene*	0	µg/L	NA	NA	1.3 J	NA	NA	NA	NA	NA
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	NA	NA	1.3 J	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	--	µg/L	NA	NA	1 J	NA	NA	NA	NA	NA
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	NA	NA	0.71 J	NA	NA	NA	NA	NA
Chrysene*	0.002 (GV)	µg/L	NA	NA	0.70 J	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	--	µg/L	NA	NA	4.7 U	NA	NA	NA	NA	NA
Fluoranthene	50 (GV)	µg/L	NA	NA	5.4	NA	NA	NA	NA	NA
Fluorene	50 (GV)	µg/L	NA	NA	29	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	NA	NA	4.7 U	NA	NA	NA	NA	NA
Naphthalene	10 (GV)	µg/L	NA	NA	800 D	NA	NA	NA	NA	NA
Phenanthrene	50 (GV)	µg/L	NA	NA	33	NA	NA	NA	NA	NA
Pyrene	50 (GV)	µg/L	NA	NA	9.5	NA	NA	NA	NA	NA
PAH COCs	--	µg/L	NA	NA	4.89 J	NA	NA	NA	NA	NA
Total PAHs	--	µg/L	NA	NA	1,008 J	NA	NA	NA	NA	NA
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	6,900	NA	NA	NA	NA	NA	NA	2,000 U
Carbonaceous Biochemical Oxygen Demand	--	µg/L	10,600	NA	NA	NA	NA	NA	NA	2,000 U

See notes on last page

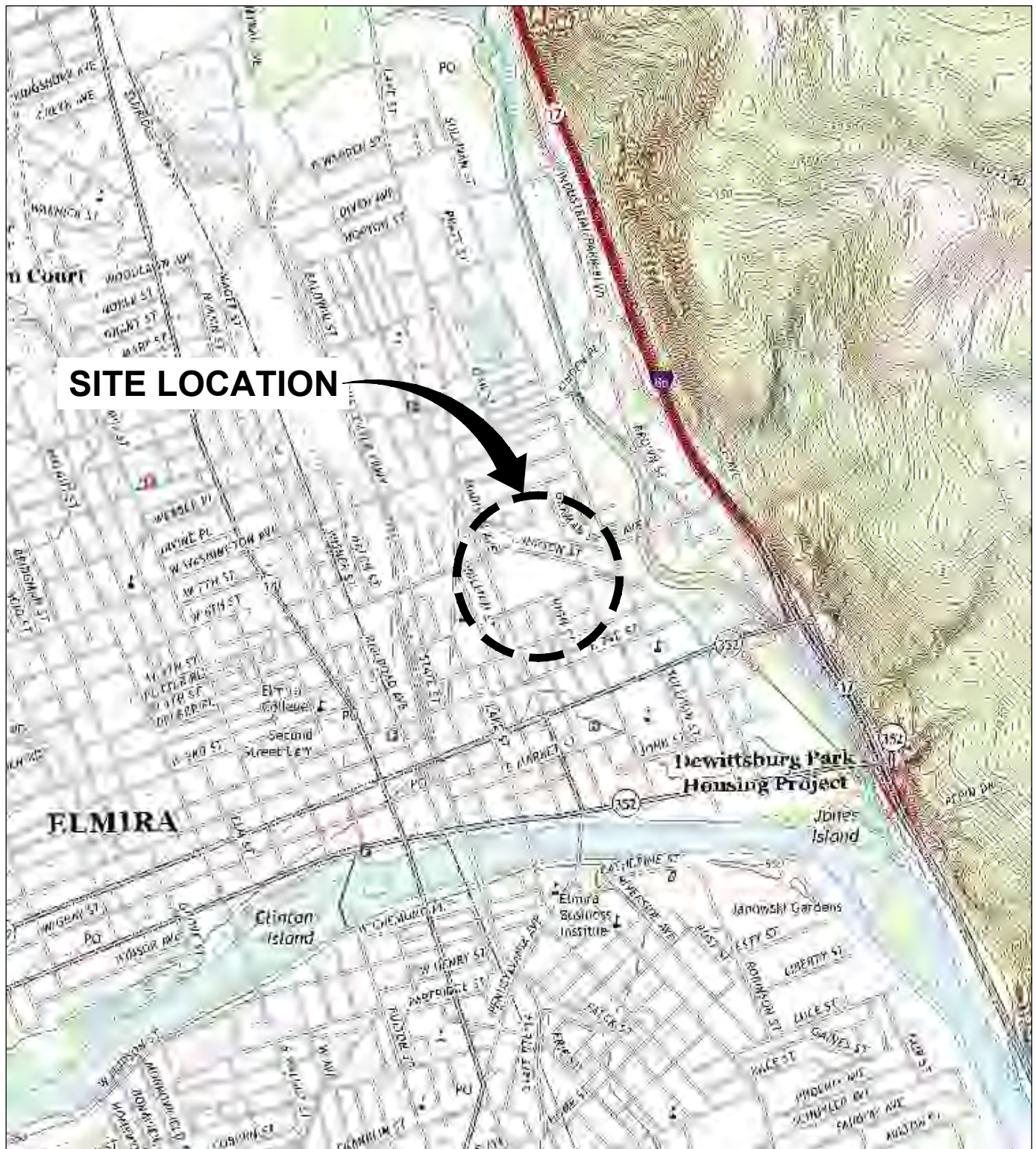
Table 3
Groundwater Analytical Data
2021 Periodic Review Report
NYSEG
Elmira, New York



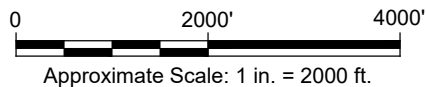
Location ID:	NYSDEC TOGS 1.1.1 Stds. or Guidance Values	Units	PMW-5			PMW-6				
			Q2	Q6	Q8	Baseline	Q2	Q4	Q6	Q8
Date Collected:			08/28/13	08/06/14	02/24/15	04/03/13	08/28/13	02/05/14	08/06/14	02/25/15
BTEX										
Benzene	1	µg/L	NA	NA	NA	3.4	25	89	90	1,200 D
Ethylbenzene	5	µg/L	NA	NA	NA	1.4	6.4	42	57	290 D
Toluene	5	µg/L	NA	NA	NA	1 U	0.54 J	1	3.4	10
Xylenes (total)	5	ug/L	NA	NA	NA	1.1 J	8.9	30	95	290 D
Total BTEX	--	µg/L	NA	NA	NA	5.9 J	40.8 J	162	245	1,790 D
PAHs										
Acenaphthene	20 (GV)	µg/L	NA	NA	NA	7.2	NA	NA	NA	NA
Acenaphthylene	--	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Anthracene	50 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Benzo(a)anthracene*	0.002 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Benzo(a)pyrene*	0	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Benzo(b)fluoranthene*	0.002 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Benzo(g,h,i)perylene	--	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Benzo(k)fluoranthene*	0.002 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Chrysene*	0.002 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Dibenzo(a,h)anthracene	--	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Fluoranthene	50 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Fluorene	50 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene*	0.002 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Naphthalene	10 (GV)	µg/L	NA	NA	NA	7.3	NA	NA	NA	NA
Phenanthrene	50 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
Pyrene	50 (GV)	µg/L	NA	NA	NA	4.8 U	NA	NA	NA	NA
PAH COCs	--	µg/L	NA	NA	NA	ND	NA	NA	NA	NA
Total PAHs	--	µg/L	NA	NA	NA	14.5	NA	NA	NA	NA
Oxygen Demand										
Biochemical Oxygen Demand	--	µg/L	2,000 U	2,000U	NA	NA	NA	NA	NA	NA
Carbonaceous Biochemical Oxygen Demand	--	µg/L	NA	2,000U	NA	NA	NA	NA	NA	NA

See notes on last page

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., ELMIRA, NY-PA., 2013.



NYSEG
MADISON AVENUE FORMER MGP SITE
PERIODIC REVIEW REPORT

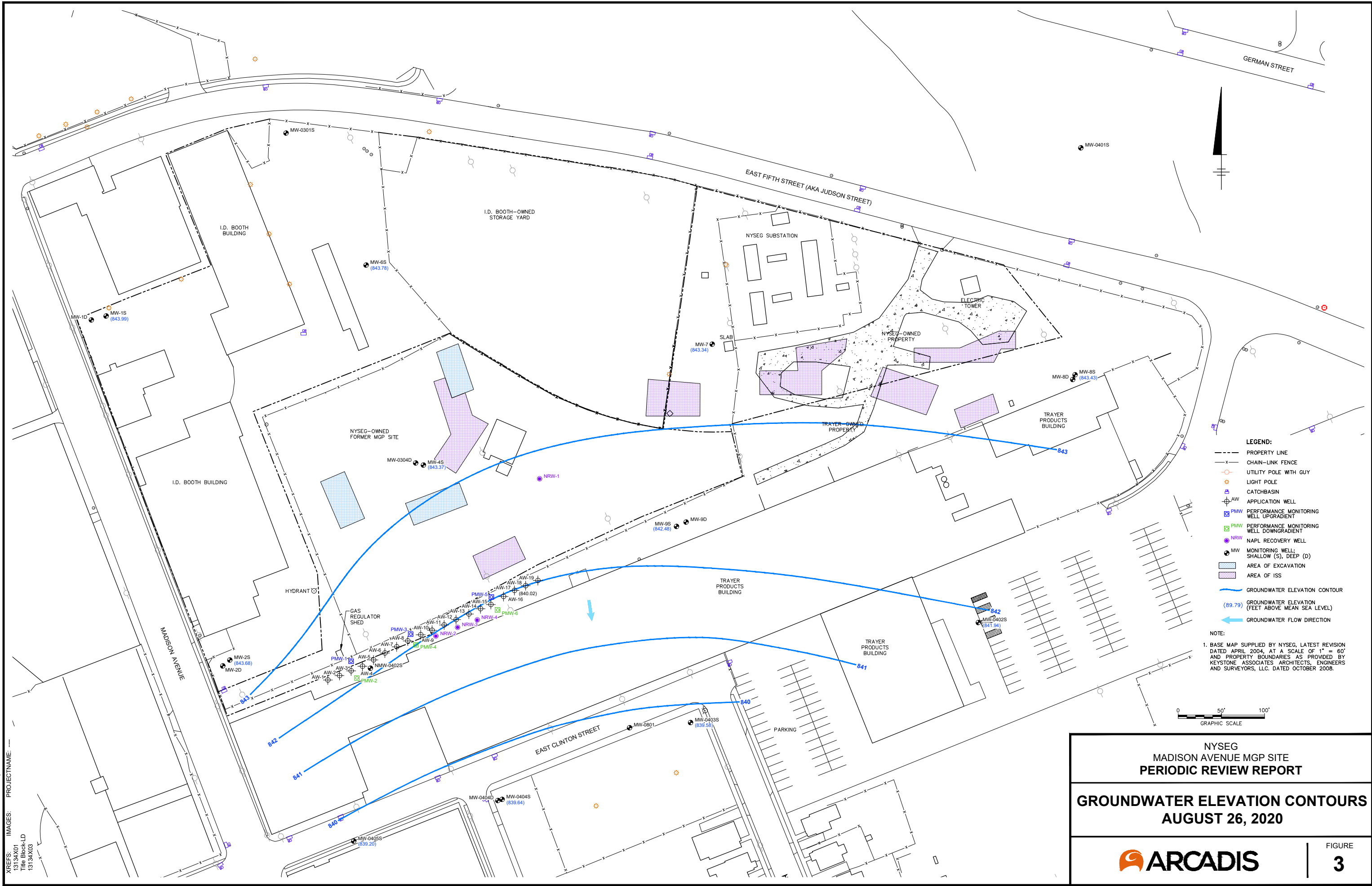
SITE LOCATION MAP



FIGURE

1



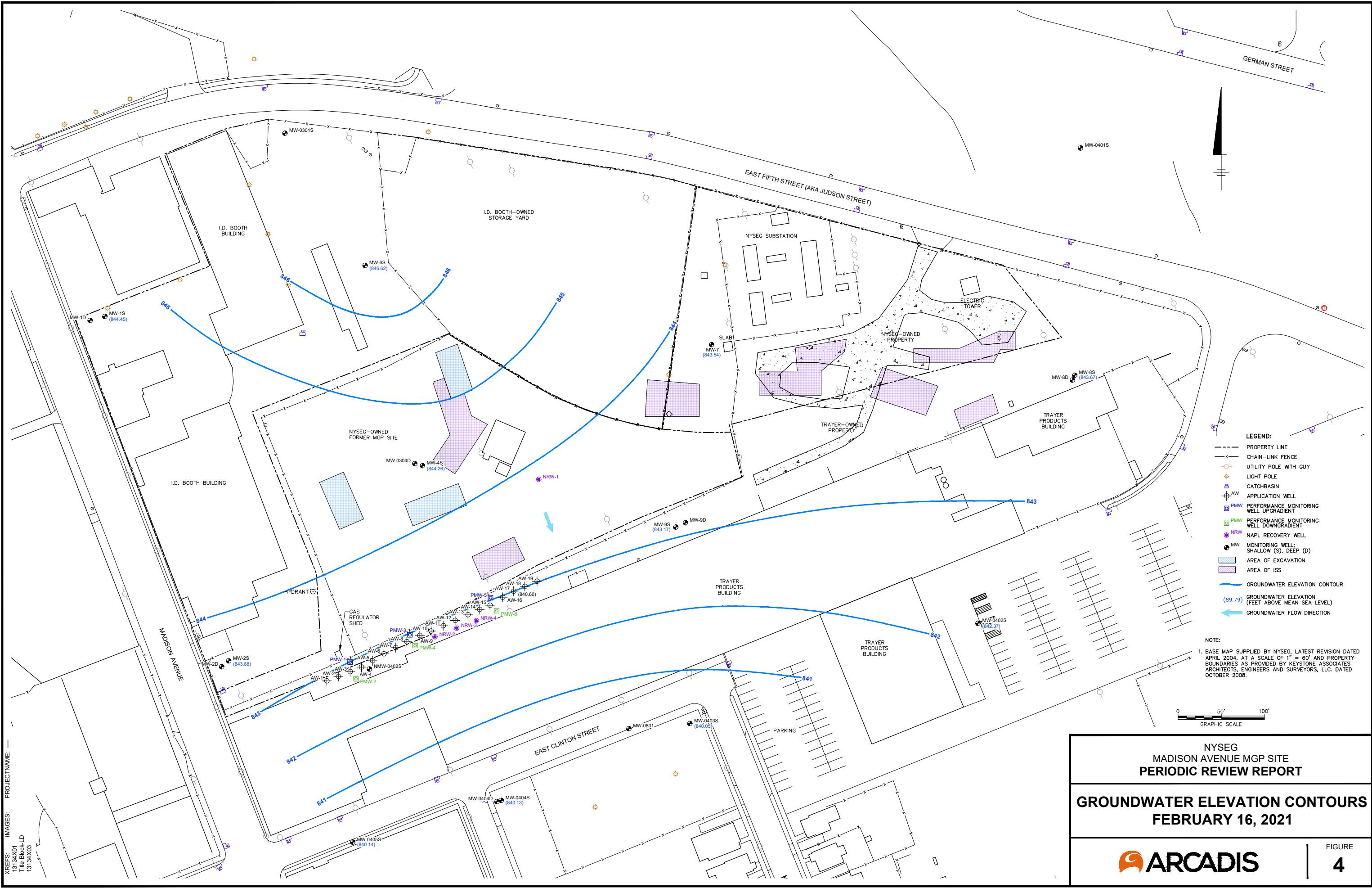


NYSEG
MADISON AVENUE MGP SITE
PERIODIC REVIEW REPORT

GROUNDWATER ELEVATION CONTOURS
AUGUST 26, 2020

ARCADIS

FIGURE
3

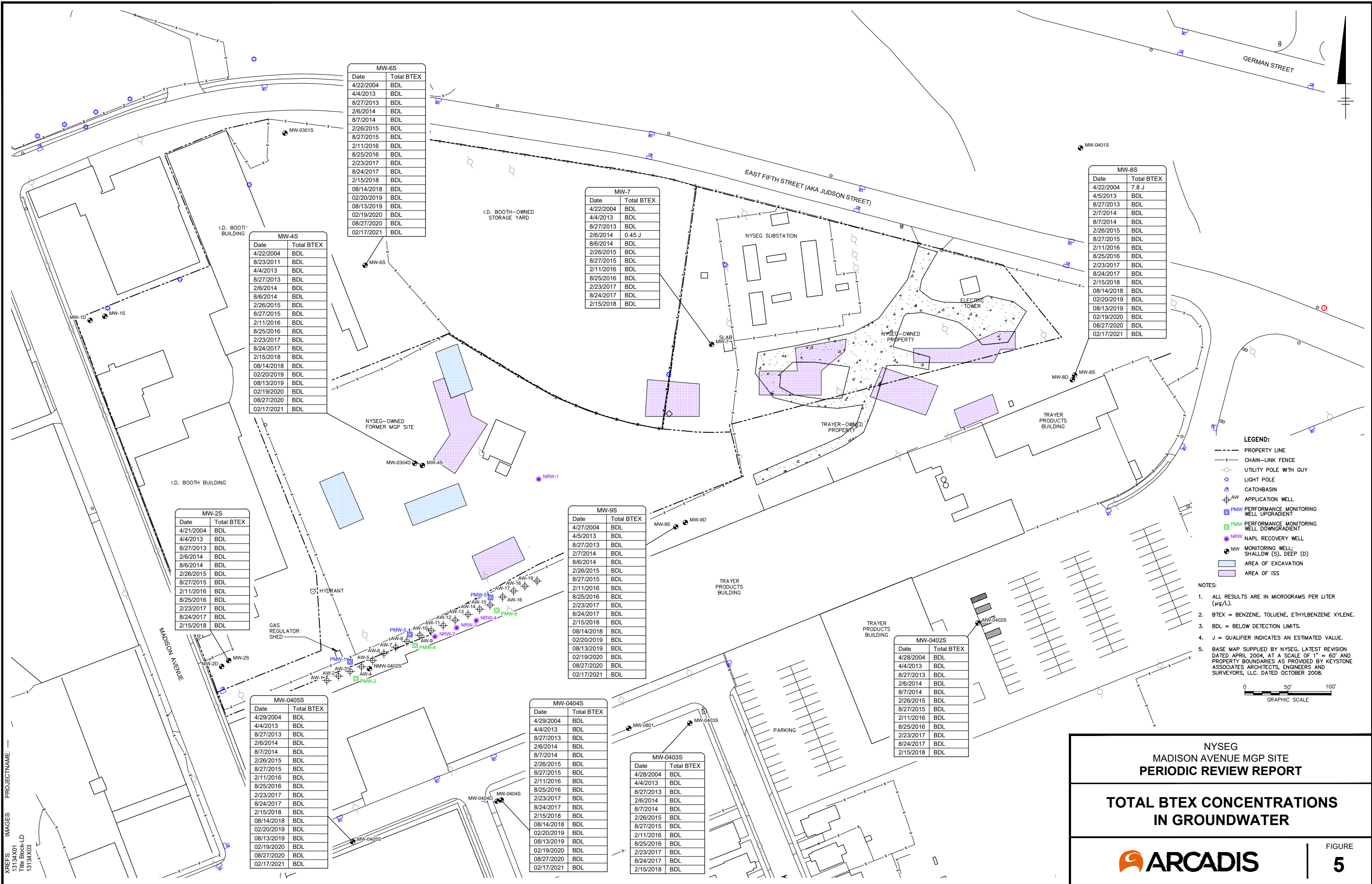


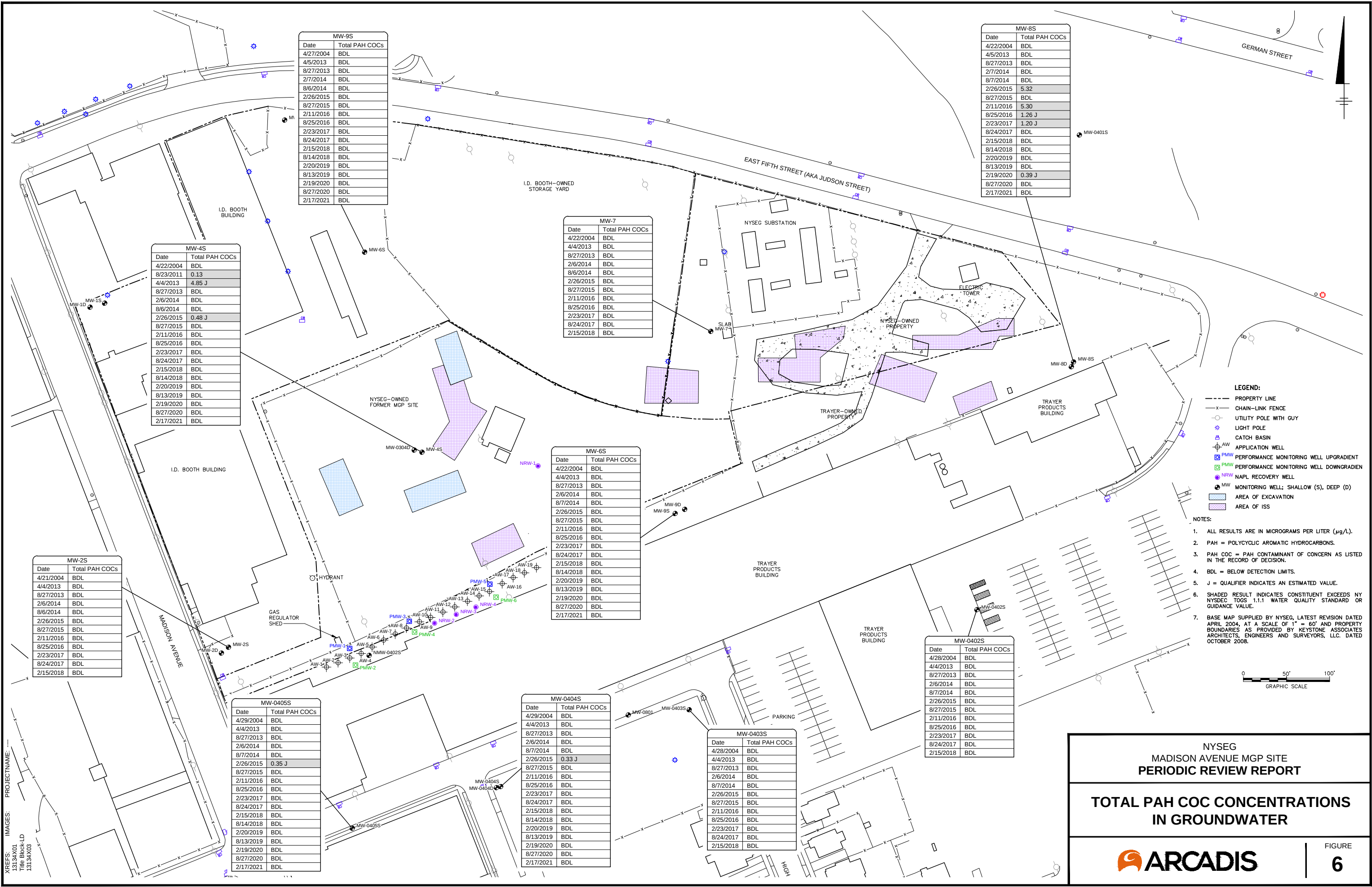
NYSEG
MADISON AVENUE MGP SITE
PERIODIC REVIEW REPORT

GROUNDWATER ELEVATION CONTOURS
FEBRUARY 16, 2021



FIGURE
4

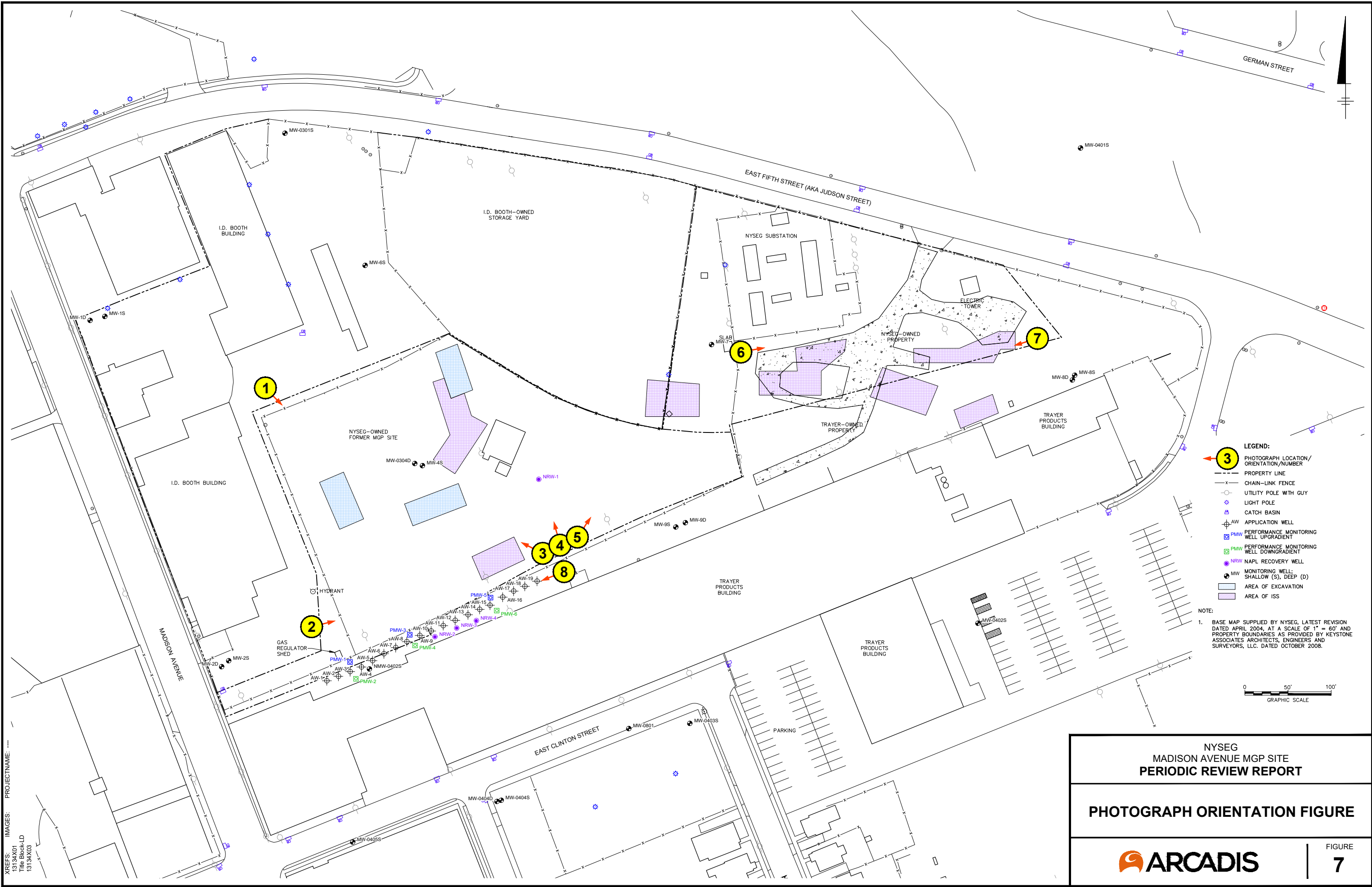




NYSEG
MADISON AVENUE MGP SITE
PERIODIC REVIEW REPORT

TOTAL PAH COC CONCENTRATIONS
IN GROUNDWATER





NYSEG
MADISON AVENUE MGP SITE
PERIODIC REVIEW REPORT

PHOTOGRAPH ORIENTATION FIGURE



FIGURE
7

Appendix A

Laboratory Data Packages

ANALYTICAL REPORT

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

Laboratory Job ID: 480-174444-1

Client Project/Site: NYSEG - Elmira Madison Ave Former MGP
Sampling Event: Groundwater Analysis

For:

ARCADIS U.S. Inc
100 Chestnut Street
Suite 1020
Rochester, New York 14604

Attn: Mr. Nicholas K Beyrle



Authorized for release by:

9/4/2020 11:08:05 AM

Rebecca Jones, Project Management Assistant I

Rebecca.Jones@Eurofinset.com

Designee for

John Schove, Project Manager II

(716)504-9838

John.Schove@Eurofinset.com

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Job ID: 480-174444-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-174444-1

Comments

No additional comments.

Receipt

The samples were received on 8/28/2020 11:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6° C and 3.0° C.

GC/MS VOA

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-8S (480-174444-5), MW-8S (480-174444-5[MS]), MW-8S (480-174444-5[MSD]) and DUP-082720 (480-174444-8). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-547410 and analytical batch 480-547630 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Organic Prep

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-174444-1

No Detections.

Client Sample ID: MW-0405S

Lab Sample ID: 480-174444-2

No Detections.

Client Sample ID: MW-4S

Lab Sample ID: 480-174444-3

No Detections.

Client Sample ID: MW-6S

Lab Sample ID: 480-174444-4

No Detections.

Client Sample ID: MW-8S

Lab Sample ID: 480-174444-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	9.0		5.0	0.41	ug/L	1		8270D	Total/NA
Anthracene	0.65	J	5.0	0.28	ug/L	1		8270D	Total/NA
Fluoranthene	2.8	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	7.1		5.0	0.36	ug/L	1		8270D	Total/NA
Phenanthrene	0.58	J F1 F2	5.0	0.44	ug/L	1		8270D	Total/NA
Pyrene	1.9	J	5.0	0.34	ug/L	1		8270D	Total/NA

Client Sample ID: MW-9S

Lab Sample ID: 480-174444-6

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-174444-7

No Detections.

Client Sample ID: DUP-082720

Lab Sample ID: 480-174444-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	9.1		5.4	0.45	ug/L	1		8270D	Total/NA
Anthracene	0.65	J	5.4	0.30	ug/L	1		8270D	Total/NA
Fluoranthene	2.9	J	5.4	0.43	ug/L	1		8270D	Total/NA
Fluorene	7.1		5.4	0.39	ug/L	1		8270D	Total/NA
Phenanthrene	0.57	J	5.4	0.48	ug/L	1		8270D	Total/NA
Pyrene	1.9	J	5.4	0.37	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-174444-1

Date Collected: 08/27/20 10:40

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 16:33	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 16:33	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 16:33	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		08/29/20 16:33	1
4-Bromofluorobenzene (Surr)	96		73 - 120		08/29/20 16:33	1
Dibromofluoromethane (Surr)	101		75 - 123		08/29/20 16:33	1
Toluene-d8 (Surr)	100		80 - 120		08/29/20 16:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 16:27	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 16:27	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 16:27	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 16:27	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 16:27	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 16:27	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:27	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:27	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 16:27	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 16:27	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	100		48 - 120	08/31/20 07:45	09/01/20 16:27	1
Nitrobenzene-d5	89		46 - 120	08/31/20 07:45	09/01/20 16:27	1
p-Terphenyl-d14	87		60 - 148	08/31/20 07:45	09/01/20 16:27	1

Client Sample ID: MW-0405S

Lab Sample ID: 480-174444-2

Date Collected: 08/27/20 09:25

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 16:56	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 16:56	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 16:56	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/29/20 16:56	1
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 16:56	1
Dibromofluoromethane (Surr)	102		75 - 123		08/29/20 16:56	1
Toluene-d8 (Surr)	101		80 - 120		08/29/20 16:56	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-0405S

Lab Sample ID: 480-174444-2

Date Collected: 08/27/20 09:25

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 16:56	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 16:56	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 16:56	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 16:56	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 16:56	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 16:56	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:56	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:56	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 16:56	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 16:56	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	99		48 - 120				08/31/20 07:45	09/01/20 16:56	1
Nitrobenzene-d5	90		46 - 120				08/31/20 07:45	09/01/20 16:56	1
p-Terphenyl-d14	100		60 - 148				08/31/20 07:45	09/01/20 16:56	1

Client Sample ID: MW-4S

Lab Sample ID: 480-174444-3

Date Collected: 08/27/20 09:20

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 17:19	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 17:19	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 17:19	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					08/29/20 17:19	1
4-Bromofluorobenzene (Surr)	98		73 - 120					08/29/20 17:19	1
Dibromofluoromethane (Surr)	101		75 - 123					08/29/20 17:19	1
Toluene-d8 (Surr)	100		80 - 120					08/29/20 17:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.3		5.3	0.44	ug/L		08/31/20 07:45	09/01/20 17:26	1
Acenaphthylene	<5.3		5.3	0.40	ug/L		08/31/20 07:45	09/01/20 17:26	1
Anthracene	<5.3		5.3	0.30	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benz(a)anthracene	<5.3		5.3	0.38	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(a)pyrene	<5.3		5.3	0.50	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(b)fluoranthene	<5.3		5.3	0.36	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(g,h,i)perylene	<5.3		5.3	0.37	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(k)fluoranthene	<5.3		5.3	0.78	ug/L		08/31/20 07:45	09/01/20 17:26	1
Chrysene	<5.3		5.3	0.35	ug/L		08/31/20 07:45	09/01/20 17:26	1
Dibenz(a,h)anthracene	<5.3		5.3	0.45	ug/L		08/31/20 07:45	09/01/20 17:26	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-4S

Date Collected: 08/27/20 09:20

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-3

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<5.3		5.3	0.43	ug/L		08/31/20 07:45	09/01/20 17:26	1
Fluorene	<5.3		5.3	0.38	ug/L		08/31/20 07:45	09/01/20 17:26	1
Indeno(1,2,3-c,d)pyrene	<5.3		5.3	0.50	ug/L		08/31/20 07:45	09/01/20 17:26	1
Naphthalene	<5.3		5.3	0.81	ug/L		08/31/20 07:45	09/01/20 17:26	1
Phenanthrene	<5.3		5.3	0.47	ug/L		08/31/20 07:45	09/01/20 17:26	1
Pyrene	<5.3		5.3	0.36	ug/L		08/31/20 07:45	09/01/20 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		48 - 120				08/31/20 07:45	09/01/20 17:26	1
Nitrobenzene-d5	81		46 - 120				08/31/20 07:45	09/01/20 17:26	1
p-Terphenyl-d14	83		60 - 148				08/31/20 07:45	09/01/20 17:26	1

Client Sample ID: MW-6S

Date Collected: 08/27/20 11:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-4

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 17:42	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 17:42	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 17:42	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120					08/29/20 17:42	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/29/20 17:42	1
Dibromofluoromethane (Surr)	101		75 - 123					08/29/20 17:42	1
Toluene-d8 (Surr)	100		80 - 120					08/29/20 17:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 17:56	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 17:56	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 17:56	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 17:56	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 17:56	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 17:56	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 17:56	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 17:56	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 17:56	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 17:56	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		48 - 120				08/31/20 07:45	09/01/20 17:56	1
Nitrobenzene-d5	85		46 - 120				08/31/20 07:45	09/01/20 17:56	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-6S

Date Collected: 08/27/20 11:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-4

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	79		60 - 148	08/31/20 07:45	09/01/20 17:56	1

Client Sample ID: MW-8S

Date Collected: 08/27/20 11:15

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-5

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	2.1	ug/L			08/29/20 18:06	5
Ethylbenzene	<5.0		5.0	3.7	ug/L			08/29/20 18:06	5
Toluene	<5.0		5.0	2.6	ug/L			08/29/20 18:06	5
Xylenes, Total	<10		10	3.3	ug/L			08/29/20 18:06	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/29/20 18:06	5
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 18:06	5
Dibromofluoromethane (Surr)	102		75 - 123		08/29/20 18:06	5
Toluene-d8 (Surr)	100		80 - 120		08/29/20 18:06	5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 15:28	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 15:28	1
Anthracene	0.65	J	5.0	0.28	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 15:28	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 15:28	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 15:28	1
Fluoranthene	2.8	J	5.0	0.40	ug/L		08/31/20 07:45	09/01/20 15:28	1
Fluorene	7.1		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 15:28	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 15:28	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 15:28	1
Phenanthrene	0.58	J F1 F2	5.0	0.44	ug/L		08/31/20 07:45	09/01/20 15:28	1
Pyrene	1.9	J	5.0	0.34	ug/L		08/31/20 07:45	09/01/20 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		48 - 120	08/31/20 07:45	09/01/20 15:28	1
Nitrobenzene-d5	79		46 - 120	08/31/20 07:45	09/01/20 15:28	1
p-Terphenyl-d14	75		60 - 148	08/31/20 07:45	09/01/20 15:28	1

Client Sample ID: MW-9S

Date Collected: 08/27/20 12:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-6

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 18:29	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 18:29	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-9S

Lab Sample ID: 480-174444-6

Date Collected: 08/27/20 12:50

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 18:29	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					08/29/20 18:29	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/29/20 18:29	1
Dibromofluoromethane (Surr)	101		75 - 123					08/29/20 18:29	1
Toluene-d8 (Surr)	99		80 - 120					08/29/20 18:29	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.2		5.2	0.43	ug/L		08/31/20 07:45	09/01/20 18:25	1
Acenaphthylene	<5.2		5.2	0.40	ug/L		08/31/20 07:45	09/01/20 18:25	1
Anthracene	<5.2		5.2	0.29	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benz(a)anthracene	<5.2		5.2	0.38	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(a)pyrene	<5.2		5.2	0.49	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(b)fluoranthene	<5.2		5.2	0.35	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(g,h,i)perylene	<5.2		5.2	0.36	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(k)fluoranthene	<5.2		5.2	0.76	ug/L		08/31/20 07:45	09/01/20 18:25	1
Chrysene	<5.2		5.2	0.34	ug/L		08/31/20 07:45	09/01/20 18:25	1
Dibenz(a,h)anthracene	<5.2		5.2	0.44	ug/L		08/31/20 07:45	09/01/20 18:25	1
Fluoranthene	<5.2		5.2	0.42	ug/L		08/31/20 07:45	09/01/20 18:25	1
Fluorene	<5.2		5.2	0.38	ug/L		08/31/20 07:45	09/01/20 18:25	1
Indeno(1,2,3-c,d)pyrene	<5.2		5.2	0.49	ug/L		08/31/20 07:45	09/01/20 18:25	1
Naphthalene	<5.2		5.2	0.79	ug/L		08/31/20 07:45	09/01/20 18:25	1
Phenanthrene	<5.2		5.2	0.46	ug/L		08/31/20 07:45	09/01/20 18:25	1
Pyrene	<5.2		5.2	0.35	ug/L		08/31/20 07:45	09/01/20 18:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		48 - 120				08/31/20 07:45	09/01/20 18:25	1
Nitrobenzene-d5	87		46 - 120				08/31/20 07:45	09/01/20 18:25	1
p-Terphenyl-d14	92		60 - 148				08/31/20 07:45	09/01/20 18:25	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-174444-7

Date Collected: 08/27/20 00:00

Matrix: WQ

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 18:52	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 18:52	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 18:52	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					08/29/20 18:52	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/29/20 18:52	1
Dibromofluoromethane (Surr)	103		75 - 123					08/29/20 18:52	1
Toluene-d8 (Surr)	101		80 - 120					08/29/20 18:52	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: DUP-082720

Lab Sample ID: 480-174444-8

Date Collected: 08/27/20 00:00

Matrix: Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	2.1	ug/L			08/29/20 19:15	5
Ethylbenzene	<5.0		5.0	3.7	ug/L			08/29/20 19:15	5
Toluene	<5.0		5.0	2.6	ug/L			08/29/20 19:15	5
Xylenes, Total	<10		10	3.3	ug/L			08/29/20 19:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		08/29/20 19:15	5
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 19:15	5
Dibromofluoromethane (Surr)	101		75 - 123		08/29/20 19:15	5
Toluene-d8 (Surr)	100		80 - 120		08/29/20 19:15	5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.1		5.4	0.45	ug/L		08/31/20 07:45	09/01/20 18:55	1
Acenaphthylene	<5.4		5.4	0.41	ug/L		08/31/20 07:45	09/01/20 18:55	1
Anthracene	0.65	J	5.4	0.30	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benz(a)anthracene	<5.4		5.4	0.39	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(a)pyrene	<5.4		5.4	0.51	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(b)fluoranthene	<5.4		5.4	0.37	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(g,h,i)perylene	<5.4		5.4	0.38	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(k)fluoranthene	<5.4		5.4	0.79	ug/L		08/31/20 07:45	09/01/20 18:55	1
Chrysene	<5.4		5.4	0.36	ug/L		08/31/20 07:45	09/01/20 18:55	1
Dibenz(a,h)anthracene	<5.4		5.4	0.46	ug/L		08/31/20 07:45	09/01/20 18:55	1
Fluoranthene	2.9	J	5.4	0.43	ug/L		08/31/20 07:45	09/01/20 18:55	1
Fluorene	7.1		5.4	0.39	ug/L		08/31/20 07:45	09/01/20 18:55	1
Indeno(1,2,3-c,d)pyrene	<5.4		5.4	0.51	ug/L		08/31/20 07:45	09/01/20 18:55	1
Naphthalene	<5.4		5.4	0.83	ug/L		08/31/20 07:45	09/01/20 18:55	1
Phenanthrene	0.57	J	5.4	0.48	ug/L		08/31/20 07:45	09/01/20 18:55	1
Pyrene	1.9	J	5.4	0.37	ug/L		08/31/20 07:45	09/01/20 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	102		48 - 120	08/31/20 07:45	09/01/20 18:55	1
Nitrobenzene-d5	91		46 - 120	08/31/20 07:45	09/01/20 18:55	1
p-Terphenyl-d14	78		60 - 148	08/31/20 07:45	09/01/20 18:55	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-174444-1	MW-0404S	99	96	101	100
480-174444-2	MW-0405S	101	97	102	101
480-174444-3	MW-4S	101	98	101	100
480-174444-4	MW-6S	100	96	101	100
480-174444-5	MW-8S	101	97	102	100
480-174444-5 MS	MW-8S	100	100	101	101
480-174444-5 MSD	MW-8S	100	101	100	102
480-174444-6	MW-9S	101	96	101	99
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-174444-8	DUP-082720	99	97	101	100
LCS 480-547332/5	Lab Control Sample	98	100	99	101
MB 480-547332/8	Method Blank	100	97	101	99
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: WQ

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-174444-7	TRIP BLANK	101	96	103	101
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (48-120)	NBZ (46-120)	TPHd14 (60-148)
480-174444-1	MW-0404S	100	89	87

Eurofins TestAmerica, Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc

Job ID: 480-174444-1

Project/Site: NYSEG - Elmira Madison Ave Former MGP

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (48-120)	NBZ (46-120)	TPHd14 (60-148)
480-174444-2	MW-0405S	99	90	100
480-174444-3	MW-4S	91	81	83
480-174444-4	MW-6S	95	85	79
480-174444-5	MW-8S	93	79	75
480-174444-5 MS	MW-8S	100	97	79
480-174444-5 MSD	MW-8S	97	92	72
480-174444-6	MW-9S	98	87	92
Surrogate Legend				
FBP = 2-Fluorobiphenyl				
NBZ = Nitrobenzene-d5				
TPHd14 = p-Terphenyl-d14				

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (48-120)	NBZ (46-120)	TPHd14 (60-148)
480-174444-8	DUP-082720	102	91	78
LCS 480-547410/2-A	Lab Control Sample	98	96	111
MB 480-547410/1-A	Method Blank	103	92	117
Surrogate Legend				
FBP = 2-Fluorobiphenyl				
NBZ = Nitrobenzene-d5				
TPHd14 = p-Terphenyl-d14				

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-547332/8

Matrix: Water

Analysis Batch: 547332

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 11:48	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 11:48	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 11:48	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 11:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		08/29/20 11:48	1
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 11:48	1
Dibromofluoromethane (Surr)	101		75 - 123		08/29/20 11:48	1
Toluene-d8 (Surr)	99		80 - 120		08/29/20 11:48	1

Lab Sample ID: LCS 480-547332/5

Matrix: Water

Analysis Batch: 547332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.6		ug/L		102	71 - 124
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
Toluene	25.0	25.8		ug/L		103	80 - 122
Xylenes, Total	50.0	52.0		ug/L		104	76 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Dibromofluoromethane (Surr)	99		75 - 123
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 480-174444-5 MS

Matrix: Ground Water

Analysis Batch: 547332

Client Sample ID: MW-8S

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<5.0		125	143		ug/L		114	71 - 124
Ethylbenzene	<5.0		125	139		ug/L		111	77 - 123
Toluene	<5.0		125	142		ug/L		113	80 - 122
Xylenes, Total	<10		250	279		ug/L		112	76 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Dibromofluoromethane (Surr)	101		75 - 123
Toluene-d8 (Surr)	101		80 - 120

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-174444-5 MSD

Matrix: Ground Water

Analysis Batch: 547332

Client Sample ID: MW-8S

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<5.0		125	138		ug/L		111	71 - 124	3	13
Ethylbenzene	<5.0		125	135		ug/L		108	77 - 123	2	15
Toluene	<5.0		125	137		ug/L		110	80 - 122	3	15
Xylenes, Total	<10		250	273		ug/L		109	76 - 122	2	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	100		75 - 123
Toluene-d8 (Surr)	102		80 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-547410/1-A

Matrix: Water

Analysis Batch: 547630

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 547410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 11:30	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 11:30	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 11:30	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 11:30	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 11:30	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 11:30	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 11:30	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 11:30	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 11:30	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 11:30	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 11:30	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 11:30	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 11:30	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 11:30	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 11:30	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	103		48 - 120	08/31/20 07:45	09/01/20 11:30	1
Nitrobenzene-d5	92		46 - 120	08/31/20 07:45	09/01/20 11:30	1
p-Terphenyl-d14	117		60 - 148	08/31/20 07:45	09/01/20 11:30	1

Lab Sample ID: LCS 480-547410/2-A

Matrix: Water

Analysis Batch: 547630

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 547410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	31.6		ug/L		99	60 - 120
Acenaphthylene	32.0	31.7		ug/L		99	63 - 120
Anthracene	32.0	34.5		ug/L		108	67 - 120

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-547410/2-A

Matrix: Water

Analysis Batch: 547630

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 547410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benz(a)anthracene	32.0	34.7		ug/L		108	70 - 121
Benzo(a)pyrene	32.0	35.3		ug/L		110	60 - 123
Benzo(b)fluoranthene	32.0	35.5		ug/L		111	66 - 126
Benzo(g,h,i)perylene	32.0	37.3		ug/L		117	66 - 150
Benzo(k)fluoranthene	32.0	34.3		ug/L		107	65 - 124
Chrysene	32.0	34.5		ug/L		108	69 - 120
Dibenz(a,h)anthracene	32.0	36.5		ug/L		114	65 - 135
Fluoranthene	32.0	37.2		ug/L		116	69 - 126
Fluorene	32.0	32.8		ug/L		102	66 - 120
Indeno(1,2,3-c,d)pyrene	32.0	36.1		ug/L		113	69 - 146
Naphthalene	32.0	28.2		ug/L		88	57 - 120
Phenanthrene	32.0	35.4		ug/L		111	68 - 120
Pyrene	32.0	36.4		ug/L		114	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	98		48 - 120
Nitrobenzene-d5	96		46 - 120
p-Terphenyl-d14	111		60 - 148

Lab Sample ID: 480-174444-5 MS

Matrix: Ground Water

Analysis Batch: 547630

Client Sample ID: MW-8S

Prep Type: Total/NA

Prep Batch: 547410

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	9.0		36.4	45.3		ug/L		100	48 - 120
Acenaphthylene	<5.0		36.4	37.6		ug/L		103	63 - 120
Anthracene	0.65	J	36.4	38.5		ug/L		104	65 - 122
Benz(a)anthracene	<5.0		36.4	36.3		ug/L		100	43 - 124
Benzo(a)pyrene	<5.0		36.4	35.5		ug/L		98	23 - 125
Benzo(b)fluoranthene	<5.0		36.4	35.7		ug/L		98	27 - 127
Benzo(g,h,i)perylene	<5.0		36.4	34.3		ug/L		94	16 - 147
Benzo(k)fluoranthene	<5.0		36.4	35.9		ug/L		99	20 - 124
Chrysene	<5.0		36.4	36.2		ug/L		100	44 - 122
Dibenz(a,h)anthracene	<5.0		36.4	34.3		ug/L		94	16 - 139
Fluoranthene	2.8	J	36.4	41.4		ug/L		106	63 - 129
Fluorene	7.1		36.4	44.6		ug/L		103	62 - 120
Indeno(1,2,3-c,d)pyrene	<5.0		36.4	34.2		ug/L		94	16 - 140
Naphthalene	<5.0		36.4	32.9		ug/L		90	45 - 120
Phenanthrene	0.58	J F1 F2	36.4	45.4	F1	ug/L		123	65 - 122
Pyrene	1.9	J	36.4	42.1		ug/L		111	58 - 128

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	100		48 - 120
Nitrobenzene-d5	97		46 - 120
p-Terphenyl-d14	79		60 - 148

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-174444-5 MSD

Matrix: Ground Water

Analysis Batch: 547630

Client Sample ID: MW-8S

Prep Type: Total/NA

Prep Batch: 547410

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	9.0		34.0	41.8		ug/L		96	48 - 120	8	24
Acenaphthylene	<5.0		34.0	34.3		ug/L		101	63 - 120	9	18
Anthracene	0.65	J	34.0	33.2		ug/L		96	65 - 122	15	15
Benz(a)anthracene	<5.0		34.0	33.2		ug/L		98	43 - 124	9	15
Benzo(a)pyrene	<5.0		34.0	31.9		ug/L		94	23 - 125	11	15
Benzo(b)fluoranthene	<5.0		34.0	30.8		ug/L		91	27 - 127	15	15
Benzo(g,h,i)perylene	<5.0		34.0	30.2		ug/L		89	16 - 147	13	15
Benzo(k)fluoranthene	<5.0		34.0	29.7		ug/L		87	20 - 124	19	22
Chrysene	<5.0		34.0	33.2		ug/L		97	44 - 122	9	15
Dibenz(a,h)anthracene	<5.0		34.0	30.7		ug/L		90	16 - 139	11	15
Fluoranthene	2.8	J	34.0	35.6		ug/L		96	63 - 129	15	15
Fluorene	7.1		34.0	41.3		ug/L		100	62 - 120	8	15
Indeno(1,2,3-c,d)pyrene	<5.0		34.0	30.5		ug/L		89	16 - 140	12	15
Naphthalene	<5.0		34.0	29.8		ug/L		88	45 - 120	10	29
Phenanthrene	0.58	J F1 F2	34.0	36.7	F2	ug/L		106	65 - 122	21	15
Pyrene	1.9	J	34.0	37.1		ug/L		104	58 - 128	13	19

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	97		48 - 120
Nitrobenzene-d5	92		46 - 120
p-Terphenyl-d14	72		60 - 148

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

GC/MS VOA

Analysis Batch: 547332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-174444-1	MW-0404S	Total/NA	Ground Water	8260C	
480-174444-2	MW-0405S	Total/NA	Ground Water	8260C	
480-174444-3	MW-4S	Total/NA	Ground Water	8260C	
480-174444-4	MW-6S	Total/NA	Ground Water	8260C	
480-174444-5	MW-8S	Total/NA	Ground Water	8260C	
480-174444-6	MW-9S	Total/NA	Ground Water	8260C	
480-174444-7	TRIP BLANK	Total/NA	WQ	8260C	
480-174444-8	DUP-082720	Total/NA	Water	8260C	
MB 480-547332/8	Method Blank	Total/NA	Water	8260C	
LCS 480-547332/5	Lab Control Sample	Total/NA	Water	8260C	
480-174444-5 MS	MW-8S	Total/NA	Ground Water	8260C	
480-174444-5 MSD	MW-8S	Total/NA	Ground Water	8260C	

GC/MS Semi VOA

Prep Batch: 547410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-174444-1	MW-0404S	Total/NA	Ground Water	3510C	
480-174444-2	MW-0405S	Total/NA	Ground Water	3510C	
480-174444-3	MW-4S	Total/NA	Ground Water	3510C	
480-174444-4	MW-6S	Total/NA	Ground Water	3510C	
480-174444-5	MW-8S	Total/NA	Ground Water	3510C	
480-174444-6	MW-9S	Total/NA	Ground Water	3510C	
480-174444-8	DUP-082720	Total/NA	Water	3510C	
MB 480-547410/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-547410/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-174444-5 MS	MW-8S	Total/NA	Ground Water	3510C	
480-174444-5 MSD	MW-8S	Total/NA	Ground Water	3510C	

Analysis Batch: 547630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-174444-1	MW-0404S	Total/NA	Ground Water	8270D	547410
480-174444-2	MW-0405S	Total/NA	Ground Water	8270D	547410
480-174444-3	MW-4S	Total/NA	Ground Water	8270D	547410
480-174444-4	MW-6S	Total/NA	Ground Water	8270D	547410
480-174444-5	MW-8S	Total/NA	Ground Water	8270D	547410
480-174444-6	MW-9S	Total/NA	Ground Water	8270D	547410
480-174444-8	DUP-082720	Total/NA	Water	8270D	547410
MB 480-547410/1-A	Method Blank	Total/NA	Water	8270D	547410
LCS 480-547410/2-A	Lab Control Sample	Total/NA	Water	8270D	547410
480-174444-5 MS	MW-8S	Total/NA	Ground Water	8270D	547410
480-174444-5 MSD	MW-8S	Total/NA	Ground Water	8270D	547410

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-174444-1

Date Collected: 08/27/20 10:40

Matrix: Ground Water

Date Received: 08/28/20 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547332	08/29/20 16:33	WJD	TAL BUF
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 16:27	JMM	TAL BUF

Client Sample ID: MW-0405S

Lab Sample ID: 480-174444-2

Date Collected: 08/27/20 09:25

Matrix: Ground Water

Date Received: 08/28/20 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547332	08/29/20 16:56	WJD	TAL BUF
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 16:56	JMM	TAL BUF

Client Sample ID: MW-4S

Lab Sample ID: 480-174444-3

Date Collected: 08/27/20 09:20

Matrix: Ground Water

Date Received: 08/28/20 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547332	08/29/20 17:19	WJD	TAL BUF
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 17:26	JMM	TAL BUF

Client Sample ID: MW-6S

Lab Sample ID: 480-174444-4

Date Collected: 08/27/20 11:50

Matrix: Ground Water

Date Received: 08/28/20 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547332	08/29/20 17:42	WJD	TAL BUF
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 17:56	JMM	TAL BUF

Client Sample ID: MW-8S

Lab Sample ID: 480-174444-5

Date Collected: 08/27/20 11:15

Matrix: Ground Water

Date Received: 08/28/20 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	547332	08/29/20 18:06	WJD	TAL BUF
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 15:28	JMM	TAL BUF

Client Sample ID: MW-9S

Lab Sample ID: 480-174444-6

Date Collected: 08/27/20 12:50

Matrix: Ground Water

Date Received: 08/28/20 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547332	08/29/20 18:29	WJD	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-9S

Date Collected: 08/27/20 12:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 18:25	JMM	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 08/27/20 00:00

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-7

Matrix: WQ

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	547332	08/29/20 18:52	WJD	TAL BUF

Client Sample ID: DUP-082720

Date Collected: 08/27/20 00:00

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	547332	08/29/20 19:15	WJD	TAL BUF
Total/NA	Prep	3510C			547410	08/31/20 07:45	SMP	TAL BUF
Total/NA	Analysis	8270D		1	547630	09/01/20 18:55	JMM	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc

Job ID: 480-174444-1

Project/Site: NYSEG - Elmira Madison Ave Former MGP

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-02-21

Method Summary

Client: ARCADIS U.S. Inc

Job ID: 480-174444-1

Project/Site: NYSEG - Elmira Madison Ave Former MGP

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-174444-1	MW-0404S	Ground Water	08/27/20 10:40	08/28/20 11:45	
480-174444-2	MW-0405S	Ground Water	08/27/20 09:25	08/28/20 11:45	
480-174444-3	MW-4S	Ground Water	08/27/20 09:20	08/28/20 11:45	
480-174444-4	MW-6S	Ground Water	08/27/20 11:50	08/28/20 11:45	
480-174444-5	MW-8S	Ground Water	08/27/20 11:15	08/28/20 11:45	
480-174444-6	MW-9S	Ground Water	08/27/20 12:50	08/28/20 11:45	
480-174444-7	TRIP BLANK	WQ	08/27/20 00:00	08/28/20 11:45	
480-174444-8	DUP-082720	Water	08/27/20 00:00	08/28/20 11:45	

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-174444-1

Login Number: 174444

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Sabuda, Brendan D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6 3.0 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Arcidas
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

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

Laboratory Job ID: 480-181264-1

Client Project/Site: NYSEG - Elmira Madison Ave Former MGP
Sampling Event: Groundwater Analysis

For:

ARCADIS U.S. Inc
100 Chestnut Street
Suite 1020
Rochester, New York 14604

Attn: Mr. Nicholas K Beyrle



Authorized for release by:

2/23/2021 10:32:44 AM

Rebecca Jones, Project Management Assistant I

Rebecca.Jones@Eurofinset.com

Designee for

John Schove, Project Manager II

(716)504-9838

John.Schove@Eurofinset.com

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Job ID: 480-181264-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-181264-1

Comments

No additional comments.

Receipt

The samples were received on 2/17/2021 5:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.3° C.

GC/MS VOA

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-8S (480-181264-5) and DUP - 021721 (480-181264-8). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

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

Organic Prep

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-181264-1

No Detections.

Client Sample ID: MW-0405S

Lab Sample ID: 480-181264-2

No Detections.

Client Sample ID: MW-4S

Lab Sample ID: 480-181264-3

No Detections.

Client Sample ID: MW-6S

Lab Sample ID: 480-181264-4

No Detections.

Client Sample ID: MW-8S

Lab Sample ID: 480-181264-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	6.9		5.0	0.41	ug/L	1		8270D	Total/NA
Anthracene	0.40	J	5.0	0.28	ug/L	1		8270D	Total/NA
Fluoranthene	1.6	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	5.8		5.0	0.36	ug/L	1		8270D	Total/NA
Pyrene	1.1	J	5.0	0.34	ug/L	1		8270D	Total/NA

Client Sample ID: MW-9S

Lab Sample ID: 480-181264-6

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-181264-7

No Detections.

Client Sample ID: DUP - 021721

Lab Sample ID: 480-181264-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	6.6		5.0	0.41	ug/L	1		8270D	Total/NA
Anthracene	0.30	J	5.0	0.28	ug/L	1		8270D	Total/NA
Fluoranthene	1.5	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	5.4		5.0	0.36	ug/L	1		8270D	Total/NA
Pyrene	1.1	J	5.0	0.34	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-181264-1

Date Collected: 02/17/21 12:05

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 13:09	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 13:09	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 13:09	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 13:09	1
4-Bromofluorobenzene (Surr)	101		73 - 120		02/18/21 13:09	1
Dibromofluoromethane (Surr)	100		75 - 123		02/18/21 13:09	1
Toluene-d8 (Surr)	101		80 - 120		02/18/21 13:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 18:43	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 18:43	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 18:43	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 18:43	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 18:43	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 18:43	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:43	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:43	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 18:43	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 18:43	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		48 - 120	02/18/21 15:36	02/19/21 18:43	1
Nitrobenzene-d5	91		46 - 120	02/18/21 15:36	02/19/21 18:43	1
p-Terphenyl-d14	85		60 - 148	02/18/21 15:36	02/19/21 18:43	1

Client Sample ID: MW-0405S

Lab Sample ID: 480-181264-2

Date Collected: 02/17/21 10:35

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 13:32	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 13:32	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 13:32	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 13:32	1
4-Bromofluorobenzene (Surr)	102		73 - 120		02/18/21 13:32	1
Dibromofluoromethane (Surr)	100		75 - 123		02/18/21 13:32	1
Toluene-d8 (Surr)	101		80 - 120		02/18/21 13:32	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-0405S

Lab Sample ID: 480-181264-2

Date Collected: 02/17/21 10:35

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 19:11	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 19:11	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 19:11	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 19:11	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 19:11	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 19:11	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:11	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:11	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 19:11	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 19:11	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		48 - 120				02/18/21 15:36	02/19/21 19:11	1
Nitrobenzene-d5	92		46 - 120				02/18/21 15:36	02/19/21 19:11	1
p-Terphenyl-d14	78		60 - 148				02/18/21 15:36	02/19/21 19:11	1

Client Sample ID: MW-4S

Lab Sample ID: 480-181264-3

Date Collected: 02/17/21 08:55

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0	F1	1.0	0.41	ug/L			02/18/21 13:55	1
Ethylbenzene	<1.0	F1	1.0	0.74	ug/L			02/18/21 13:55	1
Toluene	<1.0	F1	1.0	0.51	ug/L			02/18/21 13:55	1
Xylenes, Total	<2.0	F1	2.0	0.66	ug/L			02/18/21 13:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120					02/18/21 13:55	1
4-Bromofluorobenzene (Surr)	101		73 - 120					02/18/21 13:55	1
Dibromofluoromethane (Surr)	101		75 - 123					02/18/21 13:55	1
Toluene-d8 (Surr)	100		80 - 120					02/18/21 13:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 18:15	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 18:15	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 18:15	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 18:15	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 18:15	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-4S

Date Collected: 02/17/21 08:55

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-3

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 18:15	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:15	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:15	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 18:15	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 18:15	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	99		48 - 120	02/18/21 15:36	02/19/21 18:15	1
Nitrobenzene-d5	95		46 - 120	02/18/21 15:36	02/19/21 18:15	1
p-Terphenyl-d14	82		60 - 148	02/18/21 15:36	02/19/21 18:15	1

Client Sample ID: MW-6S

Date Collected: 02/17/21 08:50

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-4

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 14:18	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 14:18	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 14:18	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		02/18/21 14:18	1
4-Bromofluorobenzene (Surr)	103		73 - 120		02/18/21 14:18	1
Dibromofluoromethane (Surr)	99		75 - 123		02/18/21 14:18	1
Toluene-d8 (Surr)	101		80 - 120		02/18/21 14:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 19:40	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 19:40	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 19:40	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 19:40	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 19:40	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 19:40	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:40	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:40	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 19:40	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 19:40	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		48 - 120	02/18/21 15:36	02/19/21 19:40	1
Nitrobenzene-d5	89		46 - 120	02/18/21 15:36	02/19/21 19:40	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-6S

Date Collected: 02/17/21 08:50

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-4

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	76		60 - 148	02/18/21 15:36	02/19/21 19:40	1

Client Sample ID: MW-8S

Date Collected: 02/17/21 12:30

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-5

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<4.0		4.0	1.6	ug/L			02/18/21 14:41	4
Ethylbenzene	<4.0		4.0	3.0	ug/L			02/18/21 14:41	4
Toluene	<4.0		4.0	2.0	ug/L			02/18/21 14:41	4
Xylenes, Total	<8.0		8.0	2.6	ug/L			02/18/21 14:41	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		02/18/21 14:41	4
4-Bromofluorobenzene (Surr)	102		73 - 120		02/18/21 14:41	4
Dibromofluoromethane (Surr)	99		75 - 123		02/18/21 14:41	4
Toluene-d8 (Surr)	101		80 - 120		02/18/21 14:41	4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.9		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 20:08	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 20:08	1
Anthracene	0.40	J	5.0	0.28	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 20:08	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 20:08	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 20:08	1
Fluoranthene	1.6	J	5.0	0.40	ug/L		02/18/21 15:36	02/19/21 20:08	1
Fluorene	5.8		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:08	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:08	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 20:08	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 20:08	1
Pyrene	1.1	J	5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	101		48 - 120	02/18/21 15:36	02/19/21 20:08	1
Nitrobenzene-d5	97		46 - 120	02/18/21 15:36	02/19/21 20:08	1
p-Terphenyl-d14	69		60 - 148	02/18/21 15:36	02/19/21 20:08	1

Client Sample ID: MW-9S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-6

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 15:04	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 15:04	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-9S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-6

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 15:04	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 15:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120					02/18/21 15:04	1
4-Bromofluorobenzene (Surr)	102		73 - 120					02/18/21 15:04	1
Dibromofluoromethane (Surr)	102		75 - 123					02/18/21 15:04	1
Toluene-d8 (Surr)	100		80 - 120					02/18/21 15:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 20:36	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 20:36	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 20:36	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 20:36	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 20:36	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 20:36	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:36	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:36	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 20:36	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 20:36	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	102		48 - 120				02/18/21 15:36	02/19/21 20:36	1
Nitrobenzene-d5	97		46 - 120				02/18/21 15:36	02/19/21 20:36	1
p-Terphenyl-d14	90		60 - 148				02/18/21 15:36	02/19/21 20:36	1

Client Sample ID: TRIP BLANK

Date Collected: 02/17/21 00:00

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-7

Matrix: WQ

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 15:27	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 15:27	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 15:27	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 15:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120					02/18/21 15:27	1
4-Bromofluorobenzene (Surr)	101		73 - 120					02/18/21 15:27	1
Dibromofluoromethane (Surr)	100		75 - 123					02/18/21 15:27	1
Toluene-d8 (Surr)	100		80 - 120					02/18/21 15:27	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: DUP - 021721

Lab Sample ID: 480-181264-8

Date Collected: 02/17/21 00:00

Matrix: Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<4.0		4.0	1.6	ug/L			02/18/21 15:51	4
Ethylbenzene	<4.0		4.0	3.0	ug/L			02/18/21 15:51	4
Toluene	<4.0		4.0	2.0	ug/L			02/18/21 15:51	4
Xylenes, Total	<8.0		8.0	2.6	ug/L			02/18/21 15:51	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 15:51	4
4-Bromofluorobenzene (Surr)	101		73 - 120		02/18/21 15:51	4
Dibromofluoromethane (Surr)	100		75 - 123		02/18/21 15:51	4
Toluene-d8 (Surr)	100		80 - 120		02/18/21 15:51	4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.6		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 21:05	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 21:05	1
Anthracene	0.30	J	5.0	0.28	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 21:05	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 21:05	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 21:05	1
Fluoranthene	1.5	J	5.0	0.40	ug/L		02/18/21 15:36	02/19/21 21:05	1
Fluorene	5.4		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 21:05	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 21:05	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 21:05	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 21:05	1
Pyrene	1.1	J	5.0	0.34	ug/L		02/18/21 15:36	02/19/21 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		48 - 120	02/18/21 15:36	02/19/21 21:05	1
Nitrobenzene-d5	88		46 - 120	02/18/21 15:36	02/19/21 21:05	1
p-Terphenyl-d14	65		60 - 148	02/18/21 15:36	02/19/21 21:05	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-181264-1	MW-0404S	99	101	100	101
480-181264-2	MW-0405S	99	102	100	101
480-181264-3	MW-4S	99	101	101	100
480-181264-3 MS	MW-4S	97	104	100	101
480-181264-3 MSD	MW-4S	97	105	102	101
480-181264-4	MW-6S	98	103	99	101
480-181264-5	MW-8S	100	102	99	101
480-181264-6	MW-9S	100	102	102	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-181264-8	DUP - 021721	99	101	100	100
LCS 480-569908/5	Lab Control Sample	97	106	102	101
MB 480-569908/7	Method Blank	99	102	102	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: WQ

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-181264-7	TRIP BLANK	98	101	100	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (48-120)	NBZ (46-120)	TPHd14 (60-148)
480-181264-1	MW-0404S	96	91	85

Eurofins TestAmerica, Buffalo

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Ground Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (48-120)	NBZ (46-120)	TPHd14 (60-148)
480-181264-2	MW-0405S	96	92	78
480-181264-3	MW-4S	99	95	82
480-181264-3 MS	MW-4S	96	99	79
480-181264-3 MSD	MW-4S	98	99	83
480-181264-4	MW-6S	93	89	76
480-181264-5	MW-8S	101	97	69
480-181264-6	MW-9S	102	97	90

Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5

TPHd14 = p-Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (48-120)	NBZ (46-120)	TPHd14 (60-148)
480-181264-8	DUP - 021721	91	88	65
LCS 480-570020/2-A	Lab Control Sample	97	100	106
MB 480-570020/1-A	Method Blank	95	90	102

Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5

TPHd14 = p-Terphenyl-d14

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-569908/7

Matrix: Water

Analysis Batch: 569908

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 10:57	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 10:57	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 10:57	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 10:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 10:57	1
4-Bromofluorobenzene (Surr)	102		73 - 120		02/18/21 10:57	1
Dibromofluoromethane (Surr)	102		75 - 123		02/18/21 10:57	1
Toluene-d8 (Surr)	100		80 - 120		02/18/21 10:57	1

Lab Sample ID: LCS 480-569908/5

Matrix: Water

Analysis Batch: 569908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.5		ug/L		102	71 - 124
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
Toluene	25.0	25.3		ug/L		101	80 - 122
Xylenes, Total	50.0	51.2		ug/L		102	76 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		77 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 480-181264-3 MS

Matrix: Ground Water

Analysis Batch: 569908

Client Sample ID: MW-4S

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<1.0	F1	25.0	30.8		ug/L		123	71 - 124
Ethylbenzene	<1.0	F1	25.0	31.4	F1	ug/L		126	77 - 123
Toluene	<1.0	F1	25.0	31.4	F1	ug/L		125	80 - 122
Xylenes, Total	<2.0	F1	50.0	62.0	F1	ug/L		124	76 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		77 - 120
4-Bromofluorobenzene (Surr)	104		73 - 120
Dibromofluoromethane (Surr)	100		75 - 123
Toluene-d8 (Surr)	101		80 - 120

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-181264-3 MSD

Matrix: Ground Water

Analysis Batch: 569908

Client Sample ID: MW-4S

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0	F1	25.0	32.2	F1	ug/L		129	71 - 124	4	13
Ethylbenzene	<1.0	F1	25.0	32.7	F1	ug/L		131	77 - 123	4	15
Toluene	<1.0	F1	25.0	32.1	F1	ug/L		128	80 - 122	2	15
Xylenes, Total	<2.0	F1	50.0	64.8	F1	ug/L		130	76 - 122	4	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123
Toluene-d8 (Surr)	101		80 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-570020/1-A

Matrix: Water

Analysis Batch: 570149

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 570020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 16:19	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 16:19	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 16:19	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 16:19	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 16:19	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 16:19	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 16:19	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 16:19	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 16:19	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 16:19	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 16:19	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 16:19	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 16:19	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 16:19	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 16:19	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 16:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		48 - 120	02/18/21 15:36	02/19/21 16:19	1
Nitrobenzene-d5	90		46 - 120	02/18/21 15:36	02/19/21 16:19	1
p-Terphenyl-d14	102		60 - 148	02/18/21 15:36	02/19/21 16:19	1

Lab Sample ID: LCS 480-570020/2-A

Matrix: Water

Analysis Batch: 570149

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	32.0	30.9		ug/L		97	60 - 120
Acenaphthylene	32.0	32.3		ug/L		101	63 - 120
Anthracene	32.0	33.1		ug/L		103	67 - 120

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-570020/2-A

Matrix: Water

Analysis Batch: 570149

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 570020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benz(a)anthracene	32.0	34.2		ug/L		107	70 - 121
Benzo(a)pyrene	32.0	33.9		ug/L		106	60 - 123
Benzo(b)fluoranthene	32.0	34.6		ug/L		108	66 - 126
Benzo(g,h,i)perylene	32.0	35.6		ug/L		111	66 - 150
Benzo(k)fluoranthene	32.0	35.6		ug/L		111	65 - 124
Chrysene	32.0	33.8		ug/L		106	69 - 120
Dibenz(a,h)anthracene	32.0	35.5		ug/L		111	65 - 135
Fluoranthene	32.0	34.7		ug/L		109	69 - 126
Fluorene	32.0	32.4		ug/L		101	66 - 120
Indeno(1,2,3-c,d)pyrene	32.0	36.2		ug/L		113	69 - 146
Naphthalene	32.0	28.9		ug/L		90	57 - 120
Phenanthrene	32.0	32.6		ug/L		102	68 - 120
Pyrene	32.0	33.4		ug/L		104	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	97		48 - 120
Nitrobenzene-d5	100		46 - 120
p-Terphenyl-d14	106		60 - 148

Lab Sample ID: 480-181264-3 MS

Matrix: Ground Water

Analysis Batch: 570149

Client Sample ID: MW-4S

Prep Type: Total/NA

Prep Batch: 570020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	<5.0		32.0	30.2		ug/L		94	48 - 120
Acenaphthylene	<5.0		32.0	32.0		ug/L		100	63 - 120
Anthracene	<5.0		32.0	31.4		ug/L		98	65 - 122
Benz(a)anthracene	<5.0		32.0	31.5		ug/L		99	43 - 124
Benzo(a)pyrene	<5.0		32.0	28.8		ug/L		90	23 - 125
Benzo(b)fluoranthene	<5.0		32.0	29.9		ug/L		93	27 - 127
Benzo(g,h,i)perylene	<5.0		32.0	30.0		ug/L		94	16 - 147
Benzo(k)fluoranthene	<5.0		32.0	29.4		ug/L		92	20 - 124
Chrysene	<5.0		32.0	30.2		ug/L		94	44 - 122
Dibenz(a,h)anthracene	<5.0		32.0	29.5		ug/L		92	16 - 139
Fluoranthene	<5.0		32.0	32.4		ug/L		101	63 - 129
Fluorene	<5.0		32.0	31.6		ug/L		99	62 - 120
Indeno(1,2,3-c,d)pyrene	<5.0		32.0	30.3		ug/L		95	16 - 140
Naphthalene	<5.0		32.0	28.2		ug/L		88	45 - 120
Phenanthrene	<5.0		32.0	32.7		ug/L		102	65 - 122
Pyrene	<5.0		32.0	32.4		ug/L		101	58 - 128

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	96		48 - 120
Nitrobenzene-d5	99		46 - 120
p-Terphenyl-d14	79		60 - 148

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-181264-3 MSD

Matrix: Ground Water

Analysis Batch: 570149

Client Sample ID: MW-4S

Prep Type: Total/NA

Prep Batch: 570020

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	<5.0		32.0	31.0		ug/L		97	48 - 120	3	24
Acenaphthylene	<5.0		32.0	32.5		ug/L		101	63 - 120	1	18
Anthracene	<5.0		32.0	32.6		ug/L		102	65 - 122	4	15
Benz(a)anthracene	<5.0		32.0	32.8		ug/L		102	43 - 124	4	15
Benzo(a)pyrene	<5.0		32.0	30.4		ug/L		95	23 - 125	5	15
Benzo(b)fluoranthene	<5.0		32.0	31.4		ug/L		98	27 - 127	5	15
Benzo(g,h,i)perylene	<5.0		32.0	32.2		ug/L		101	16 - 147	7	15
Benzo(k)fluoranthene	<5.0		32.0	31.4		ug/L		98	20 - 124	6	22
Chrysene	<5.0		32.0	32.0		ug/L		100	44 - 122	6	15
Dibenz(a,h)anthracene	<5.0		32.0	31.7		ug/L		99	16 - 139	7	15
Fluoranthene	<5.0		32.0	33.1		ug/L		103	63 - 129	2	15
Fluorene	<5.0		32.0	32.0		ug/L		100	62 - 120	1	15
Indeno(1,2,3-c,d)pyrene	<5.0		32.0	32.2		ug/L		101	16 - 140	6	15
Naphthalene	<5.0		32.0	28.6		ug/L		89	45 - 120	1	29
Phenanthrene	<5.0		32.0	32.9		ug/L		103	65 - 122	1	15
Pyrene	<5.0		32.0	33.3		ug/L		104	58 - 128	3	19

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	98		48 - 120
Nitrobenzene-d5	99		46 - 120
p-Terphenyl-d14	83		60 - 148

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

GC/MS VOA

Analysis Batch: 569908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-181264-1	MW-0404S	Total/NA	Ground Water	8260C	
480-181264-2	MW-0405S	Total/NA	Ground Water	8260C	
480-181264-3	MW-4S	Total/NA	Ground Water	8260C	
480-181264-4	MW-6S	Total/NA	Ground Water	8260C	
480-181264-5	MW-8S	Total/NA	Ground Water	8260C	
480-181264-6	MW-9S	Total/NA	Ground Water	8260C	
480-181264-7	TRIP BLANK	Total/NA	WQ	8260C	
480-181264-8	DUP - 021721	Total/NA	Water	8260C	
MB 480-569908/7	Method Blank	Total/NA	Water	8260C	
LCS 480-569908/5	Lab Control Sample	Total/NA	Water	8260C	
480-181264-3 MS	MW-4S	Total/NA	Ground Water	8260C	
480-181264-3 MSD	MW-4S	Total/NA	Ground Water	8260C	

GC/MS Semi VOA

Prep Batch: 570020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-181264-1	MW-0404S	Total/NA	Ground Water	3510C	
480-181264-2	MW-0405S	Total/NA	Ground Water	3510C	
480-181264-3	MW-4S	Total/NA	Ground Water	3510C	
480-181264-4	MW-6S	Total/NA	Ground Water	3510C	
480-181264-5	MW-8S	Total/NA	Ground Water	3510C	
480-181264-6	MW-9S	Total/NA	Ground Water	3510C	
480-181264-8	DUP - 021721	Total/NA	Water	3510C	
MB 480-570020/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-570020/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-181264-3 MS	MW-4S	Total/NA	Ground Water	3510C	
480-181264-3 MSD	MW-4S	Total/NA	Ground Water	3510C	

Analysis Batch: 570149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-181264-1	MW-0404S	Total/NA	Ground Water	8270D	570020
480-181264-2	MW-0405S	Total/NA	Ground Water	8270D	570020
480-181264-3	MW-4S	Total/NA	Ground Water	8270D	570020
480-181264-4	MW-6S	Total/NA	Ground Water	8270D	570020
480-181264-5	MW-8S	Total/NA	Ground Water	8270D	570020
480-181264-6	MW-9S	Total/NA	Ground Water	8270D	570020
480-181264-8	DUP - 021721	Total/NA	Water	8270D	570020
MB 480-570020/1-A	Method Blank	Total/NA	Water	8270D	570020
LCS 480-570020/2-A	Lab Control Sample	Total/NA	Water	8270D	570020
480-181264-3 MS	MW-4S	Total/NA	Ground Water	8270D	570020
480-181264-3 MSD	MW-4S	Total/NA	Ground Water	8270D	570020

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-0404S

Date Collected: 02/17/21 12:05

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	569908	02/18/21 13:09	CRL	TAL BUF
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 18:43	PJQ	TAL BUF

Client Sample ID: MW-0405S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	569908	02/18/21 13:32	CRL	TAL BUF
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 19:11	PJQ	TAL BUF

Client Sample ID: MW-4S

Date Collected: 02/17/21 08:55

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	569908	02/18/21 13:55	CRL	TAL BUF
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 18:15	PJQ	TAL BUF

Client Sample ID: MW-6S

Date Collected: 02/17/21 08:50

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	569908	02/18/21 14:18	CRL	TAL BUF
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 19:40	PJQ	TAL BUF

Client Sample ID: MW-8S

Date Collected: 02/17/21 12:30

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	569908	02/18/21 14:41	CRL	TAL BUF
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 20:08	PJQ	TAL BUF

Client Sample ID: MW-9S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	569908	02/18/21 15:04	CRL	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-9S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 20:36	PJQ	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 02/17/21 00:00

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-7

Matrix: WQ

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	569908	02/18/21 15:27	CRL	TAL BUF

Client Sample ID: DUP - 021721

Date Collected: 02/17/21 00:00

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	569908	02/18/21 15:51	CRL	TAL BUF
Total/NA	Prep	3510C			570020	02/18/21 15:36	ATG	TAL BUF
Total/NA	Analysis	8270D		1	570149	02/19/21 21:05	PJQ	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: ARCADIS U.S. Inc

Job ID: 480-181264-1

Project/Site: NYSEG - Elmira Madison Ave Former MGP

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-181264-1	MW-0404S	Ground Water	02/17/21 12:05	02/17/21 17:15	
480-181264-2	MW-0405S	Ground Water	02/17/21 10:35	02/17/21 17:15	
480-181264-3	MW-4S	Ground Water	02/17/21 08:55	02/17/21 17:15	
480-181264-4	MW-6S	Ground Water	02/17/21 08:50	02/17/21 17:15	
480-181264-5	MW-8S	Ground Water	02/17/21 12:30	02/17/21 17:15	
480-181264-6	MW-9S	Ground Water	02/17/21 10:35	02/17/21 17:15	
480-181264-7	TRIP BLANK	WQ	02/17/21 00:00	02/17/21 17:15	
480-181264-8	DUP - 021721	Water	02/17/21 00:00	02/17/21 17:15	

Chain of Custody Record

Environment Testing
America

Client Information		Sampler: <u>A55/RDC</u>		Lab PM: <u>Schove, John R</u>	Carrier Tracking No(s):	COC No: <u>480-156134-33237.2</u>
Client Contact: <u>Nicholas Beyrle</u>		Phone: <u>585-880-7747</u>		E-Mail: <u>John.Schove@Eurofinset.com</u>	State of Origin: <u>NY</u>	Page: <u>1 of 2</u>
Company: <u>ARCADIS U.S., Inc.</u>		PWSID:		Job #:		
Address: <u>100 Chestnut St. Suite 1020</u>		Due Date Requested:		Analysis Requested		
City: <u>Rochester</u>		TAT Requested (days): <u>Standard</u>		Preservation Codes:		
State, Zip: <u>NY, 14604</u>		Compliance Project: <u>Yes</u> ☐ <u>No</u> ☐		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2SO4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		
Phone: <u>585-880-7747</u>		PO #: <u>30047228.1</u>		Other:		
Email: <u>nicholas.beyrle@arcadis-us.com</u>		WO #: <u>NYSEG-Elmira Madison Ave/John Ruspanitini</u>		8270D - PAH Semivolatiles		
Project Name: <u>NYSEG - Elmira Madison Ave Former MGP/ Event Desc: Ground</u>		Project #: <u>48004725</u>		8260C - BTEX		
Site: <u>New York</u>		SSOW#:		Field Filtered Sample (Yes or No)		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/leak, BT=tissue, A=air)	Preservation Code	Total Number of
<u>MW-65</u>	<u>2/17/21</u>	<u>0850</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>3</u>
<u>MW-04055</u>	<u>2/17/21</u>	<u>1035</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>3</u>
<u>MW-04045</u>	<u>2/17/21</u>	<u>1205</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>3</u>
<u>MW-45</u>	<u>2/17/21</u>	<u>0855</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>9</u>
<u>MW-95</u>	<u>2/17/21</u>	<u>1035</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>3</u>
<u>MW-85</u>	<u>2/17/21</u>	<u>1230</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>3</u>
<u>DUP-021721</u>	<u>2/17/21</u>	<u>—</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>3</u>
Special Instructions/Note:						
Possible Hazard Identification						
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological						
Deliverable Requested: I, II, III, IV, Other (specify)						
Empty Kit Relinquished by:						
Relinquished by: <u>Adam Svensson</u>						
Relinquished by: <u>Adam Svensson</u>						
Relinquished by: <u>Adam Svensson</u>						
Custody Seal Intact: <u>Yes</u> ☐ <u>No</u> ☐						
Custody Seal No.:						
Cooler Temperature(s) °C and Other Remarks: <u>2.3 #</u>						
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months						
Special Instructions/QC Requirements:						
Received by: <u>Adam Svensson</u>						
Received by: <u>Adam Svensson</u>						
Received by: <u>Adam Svensson</u>						
Date/Time: <u>2/17/21 1715</u>						
Date/Time: <u>2/17/21 1715</u>						
Date/Time: <u>2/17/21 1715</u>						
Company: <u>ARCADIS</u>						
Company: <u>ARCADIS</u>						
Company: <u>ARCADIS</u>						

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-181264-1

Login Number: 181264

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Sabuda, Brendan D

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

Appendix B

Data Usability Summary Reports

NYSEG Elmira Madison Avenue
Former MGP Site

DATA USABILITY SUMMARY REPORT (DUSR)

Elmira, New York

Volatile and Semivolatile Analysis

SDG #480-174444-1

Analyses Performed By:
Eurofins TestAmerica Laboratories
Amherst, New York

Report #38563R
Review Level: Tier III
Project: 30047228.00002



DATA USABILITY SUMMARY REPORT

SUMMARY

This data usability summary report (DUSR) summarizes the review of Sample Delivery Group (SDG) # 480-174444-1 for samples collected in association with the NYSEG Elmira Madison Avenue Former MGP Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
MW-0404S	480-174444-1	Water	08/27/2020		X	X			
MW-0405S	480-174444-2	Water	08/27/2020		X	X			
MW-4S	480-174444-3	Water	08/27/2020		X	X			
MW-6S	480-174444-4	Water	08/27/2020		X	X			
MW-8S	480-174444-5	Water	08/27/2020		X	X			
MW-9S	480-174444-6	Water	08/27/2020		X	X			
TRIP BLANK	480-174444-7	Water	08/27/2020		X				
DUP-082720	480-174444-8	Water	08/27/2020	MW-8S	X	X			

Note:

1. Matrix spike/matrix spike duplicate was performed on sample location MW-8S for VOCs and SVOCs.

DATA USABILITY SUMMARY REPORT

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

DATA USABILITY SUMMARY REPORT

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines (October 1999) and applicable Region II SOPs. USEPA NFGs and Region II SOPs were followed for qualification purposes.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA USABILITY SUMMARY REPORT

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

DATA USABILITY SUMMARY REPORT

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

DATA USABILITY SUMMARY REPORT

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8S/DUP-082720	All compounds	U	U	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

The laboratory noted: Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-8S (480-174444-5) and DUP-082720 (480-174444-8). Elevated reporting limits (RLs) are provided.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA USABILITY SUMMARY REPORT

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks					X	
C. Trip blanks		X		X		
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate(LCSD)						
LCS/LCSD Precision (RPD)						
Matrix Spike (MS)		X		X		
Matrix Spike Duplicate(MSD)		X		X		
MS/MSD Precision (RPD)		X		X		
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	
Tier III Validation						
System performance and column resolution		X		X		
Initial calibration %RSDs		X		X		
Continuing calibration RRFs		X		X		
Continuing calibration %Ds		X		X		
Instrument tune and performance check		X		X		
Ion abundance criteria for each instrument used		X		X		
Internal standard		X		X		
Compound identification and quantitation						
A. Reconstructed ion chromatograms		X		X		
B. Quantitation Reports		X		X		

DATA USABILITY SUMMARY REPORT

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA USABILITY SUMMARY REPORT

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

DATA USABILITY SUMMARY REPORT

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-8S	Phenanthrene	>UL	AC

Note:

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J

DATA USABILITY SUMMARY REPORT

Control Limit	Sample Result	Qualification
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
MW-8S	Phenanthrene

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

DATA USABILITY SUMMARY REPORT

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8S/DUP-082720	Acenaphthene	9.0	9.1	AC
	Anthracene	0.65 J	0.65 J	
	Fluoranthene	2.8 J	2.9 J	
	Fluorene	7.1	7.1	
	Phenanthrene	0.58 J	0.57 J	
	Pyrene	1.9 J	1.9 J	

Notes:

AC Acceptable

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA USABILITY SUMMARY REPORT

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks					X	
Laboratory Control Sample (LCS) %R		X		X		
Laboratory Control Sample Duplicate(LCSD) %R					X	
LCS/LCSD Precision (RPD)					X	
Matrix Spike (MS) %R		X	X			
Matrix Spike Duplicate(MSD) %R		X		X		
MS/MSD Precision (RPD)		X	X			
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	
Tier III Validation						
System performance and column resolution		X		X		
Initial calibration %RSDs		X		X		
Continuing calibration RRFs		X		X		
Continuing calibration %Ds		X		X		
Instrument tune and performance check		X		X		
Ion abundance criteria for each instrument used		X		X		
Internal standard		X		X		
Compound identification and quantitation						
F. Reconstructed ion chromatograms		X		X		
G. Quantitation Reports		X		X		
H. RT of sample compounds within the established RT windows		X		X		

DATA USABILITY SUMMARY REPORT

SVOCs: SW-846 8270		Reported		Performance Acceptable		Not Required
		No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
I.	Quantitation transcriptions/calculations		X		X	
J.	Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA USABILITY SUMMARY REPORT

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliance ¹					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
480-174444-1	08/27/2020	USEPA/SW846	MW-0404S	Water	Yes	Yes	--	--	--	
	08/27/2020	USEPA/SW846	MW-0405S	Water	Yes	Yes	--	--	--	
	08/27/2020	USEPA/SW846	MW-4S	Water	Yes	Yes	--	--	--	
	08/27/2020	USEPA/SW846	MW-6S	Water	Yes	Yes	--	--	--	
	08/27/2020	USEPA/SW846	MW-8S	Water	Yes	No	--	--	--	SVOC: MS % Recovery, MS/MSD RPD
	08/27/2020	USEPA/SW846	MW-9S	Water	Yes	Yes	--	--	--	
	08/27/2020	USEPA/SW846	TRIP BLANK	Water	Yes	--	--	--	--	
	08/27/2020	USEPA/SW846	DUP-082720	Water	Yes	Yes	--	--	--	

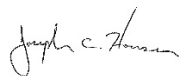
Note:

- 1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

DATA USABILITY SUMMARY REPORT

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:



DATE: October 7, 2020

PEER REVIEW: Dennis Capria

DATE: October 12, 2020

CHAIN OF CUSTODY

**CORRECTED SAMPLE ANALYSIS DATA
SHEETS**



Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-174444-1

Date Collected: 08/27/20 10:40

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 16:33	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 16:33	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 16:33	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		08/29/20 16:33	1
4-Bromofluorobenzene (Surr)	96		73 - 120		08/29/20 16:33	1
Dibromofluoromethane (Surr)	101		75 - 123		08/29/20 16:33	1
Toluene-d8 (Surr)	100		80 - 120		08/29/20 16:33	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 16:27	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 16:27	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 16:27	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 16:27	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 16:27	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 16:27	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 16:27	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:27	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:27	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 16:27	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 16:27	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	100		48 - 120	08/31/20 07:45	09/01/20 16:27	1
Nitrobenzene-d5	89		46 - 120	08/31/20 07:45	09/01/20 16:27	1
p-Terphenyl-d14	87		60 - 148	08/31/20 07:45	09/01/20 16:27	1

Client Sample ID: MW-0405S

Lab Sample ID: 480-174444-2

Date Collected: 08/27/20 09:25

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 16:56	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 16:56	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 16:56	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/29/20 16:56	1
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 16:56	1
Dibromofluoromethane (Surr)	102		75 - 123		08/29/20 16:56	1
Toluene-d8 (Surr)	101		80 - 120		08/29/20 16:56	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-0405S

Lab Sample ID: 480-174444-2

Date Collected: 08/27/20 09:25

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 16:56	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 16:56	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 16:56	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 16:56	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 16:56	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 16:56	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 16:56	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 16:56	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 16:56	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 16:56	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 16:56	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 16:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	99		48 - 120				08/31/20 07:45	09/01/20 16:56	1
Nitrobenzene-d5	90		46 - 120				08/31/20 07:45	09/01/20 16:56	1
p-Terphenyl-d14	100		60 - 148				08/31/20 07:45	09/01/20 16:56	1

Client Sample ID: MW-4S

Lab Sample ID: 480-174444-3

Date Collected: 08/27/20 09:20

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 17:19	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 17:19	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 17:19	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					08/29/20 17:19	1
4-Bromofluorobenzene (Surr)	98		73 - 120					08/29/20 17:19	1
Dibromofluoromethane (Surr)	101		75 - 123					08/29/20 17:19	1
Toluene-d8 (Surr)	100		80 - 120					08/29/20 17:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.3		5.3	0.44	ug/L		08/31/20 07:45	09/01/20 17:26	1
Acenaphthylene	<5.3		5.3	0.40	ug/L		08/31/20 07:45	09/01/20 17:26	1
Anthracene	<5.3		5.3	0.30	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benz(a)anthracene	<5.3		5.3	0.38	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(a)pyrene	<5.3		5.3	0.50	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(b)fluoranthene	<5.3		5.3	0.36	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(g,h,i)perylene	<5.3		5.3	0.37	ug/L		08/31/20 07:45	09/01/20 17:26	1
Benzo(k)fluoranthene	<5.3		5.3	0.78	ug/L		08/31/20 07:45	09/01/20 17:26	1
Chrysene	<5.3		5.3	0.35	ug/L		08/31/20 07:45	09/01/20 17:26	1
Dibenz(a,h)anthracene	<5.3		5.3	0.45	ug/L		08/31/20 07:45	09/01/20 17:26	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-4S

Date Collected: 08/27/20 09:20

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-3

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<5.3		5.3	0.43	ug/L		08/31/20 07:45	09/01/20 17:26	1
Fluorene	<5.3		5.3	0.38	ug/L		08/31/20 07:45	09/01/20 17:26	1
Indeno(1,2,3-c,d)pyrene	<5.3		5.3	0.50	ug/L		08/31/20 07:45	09/01/20 17:26	1
Naphthalene	<5.3		5.3	0.81	ug/L		08/31/20 07:45	09/01/20 17:26	1
Phenanthrene	<5.3		5.3	0.47	ug/L		08/31/20 07:45	09/01/20 17:26	1
Pyrene	<5.3		5.3	0.36	ug/L		08/31/20 07:45	09/01/20 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		48 - 120	08/31/20 07:45	09/01/20 17:26	1
Nitrobenzene-d5	81		46 - 120	08/31/20 07:45	09/01/20 17:26	1
p-Terphenyl-d14	83		60 - 148	08/31/20 07:45	09/01/20 17:26	1

Client Sample ID: MW-6S

Date Collected: 08/27/20 11:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-4

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 17:42	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 17:42	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 17:42	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		08/29/20 17:42	1
4-Bromofluorobenzene (Surr)	96		73 - 120		08/29/20 17:42	1
Dibromofluoromethane (Surr)	101		75 - 123		08/29/20 17:42	1
Toluene-d8 (Surr)	100		80 - 120		08/29/20 17:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 17:56	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 17:56	1
Anthracene	<5.0		5.0	0.28	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 17:56	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 17:56	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 17:56	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 17:56	1
Fluoranthene	<5.0		5.0	0.40	ug/L		08/31/20 07:45	09/01/20 17:56	1
Fluorene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 17:56	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 17:56	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 17:56	1
Phenanthrene	<5.0		5.0	0.44	ug/L		08/31/20 07:45	09/01/20 17:56	1
Pyrene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		48 - 120	08/31/20 07:45	09/01/20 17:56	1
Nitrobenzene-d5	85		46 - 120	08/31/20 07:45	09/01/20 17:56	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-6S

Date Collected: 08/27/20 11:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-4

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	79		60 - 148	08/31/20 07:45	09/01/20 17:56	1

Client Sample ID: MW-8S

Date Collected: 08/27/20 11:15

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-5

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	2.1	ug/L			08/29/20 18:06	5
Ethylbenzene	<5.0		5.0	3.7	ug/L			08/29/20 18:06	5
Toluene	<5.0		5.0	2.6	ug/L			08/29/20 18:06	5
Xylenes, Total	<10		10	3.3	ug/L			08/29/20 18:06	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/29/20 18:06	5
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 18:06	5
Dibromofluoromethane (Surr)	102		75 - 123		08/29/20 18:06	5
Toluene-d8 (Surr)	100		80 - 120		08/29/20 18:06	5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.0		5.0	0.41	ug/L		08/31/20 07:45	09/01/20 15:28	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		08/31/20 07:45	09/01/20 15:28	1
Anthracene	0.65	J	5.0	0.28	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		08/31/20 07:45	09/01/20 15:28	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		08/31/20 07:45	09/01/20 15:28	1
Chrysene	<5.0		5.0	0.33	ug/L		08/31/20 07:45	09/01/20 15:28	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		08/31/20 07:45	09/01/20 15:28	1
Fluoranthene	2.8	J	5.0	0.40	ug/L		08/31/20 07:45	09/01/20 15:28	1
Fluorene	7.1		5.0	0.36	ug/L		08/31/20 07:45	09/01/20 15:28	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		08/31/20 07:45	09/01/20 15:28	1
Naphthalene	<5.0		5.0	0.76	ug/L		08/31/20 07:45	09/01/20 15:28	1
Phenanthrene	0.58	J F1 F2	5.0	0.44	ug/L		08/31/20 07:45	09/01/20 15:28	1
Pyrene	1.9	J	5.0	0.34	ug/L		08/31/20 07:45	09/01/20 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		48 - 120	08/31/20 07:45	09/01/20 15:28	1
Nitrobenzene-d5	79		46 - 120	08/31/20 07:45	09/01/20 15:28	1
p-Terphenyl-d14	75		60 - 148	08/31/20 07:45	09/01/20 15:28	1

Client Sample ID: MW-9S

Date Collected: 08/27/20 12:50

Date Received: 08/28/20 11:45

Lab Sample ID: 480-174444-6

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 18:29	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 18:29	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: MW-9S

Lab Sample ID: 480-174444-6

Date Collected: 08/27/20 12:50

Matrix: Ground Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 18:29	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					08/29/20 18:29	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/29/20 18:29	1
Dibromofluoromethane (Surr)	101		75 - 123					08/29/20 18:29	1
Toluene-d8 (Surr)	99		80 - 120					08/29/20 18:29	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.2		5.2	0.43	ug/L		08/31/20 07:45	09/01/20 18:25	1
Acenaphthylene	<5.2		5.2	0.40	ug/L		08/31/20 07:45	09/01/20 18:25	1
Anthracene	<5.2		5.2	0.29	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benz(a)anthracene	<5.2		5.2	0.38	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(a)pyrene	<5.2		5.2	0.49	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(b)fluoranthene	<5.2		5.2	0.35	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(g,h,i)perylene	<5.2		5.2	0.36	ug/L		08/31/20 07:45	09/01/20 18:25	1
Benzo(k)fluoranthene	<5.2		5.2	0.76	ug/L		08/31/20 07:45	09/01/20 18:25	1
Chrysene	<5.2		5.2	0.34	ug/L		08/31/20 07:45	09/01/20 18:25	1
Dibenz(a,h)anthracene	<5.2		5.2	0.44	ug/L		08/31/20 07:45	09/01/20 18:25	1
Fluoranthene	<5.2		5.2	0.42	ug/L		08/31/20 07:45	09/01/20 18:25	1
Fluorene	<5.2		5.2	0.38	ug/L		08/31/20 07:45	09/01/20 18:25	1
Indeno(1,2,3-c,d)pyrene	<5.2		5.2	0.49	ug/L		08/31/20 07:45	09/01/20 18:25	1
Naphthalene	<5.2		5.2	0.79	ug/L		08/31/20 07:45	09/01/20 18:25	1
Phenanthrene	<5.2		5.2	0.46	ug/L		08/31/20 07:45	09/01/20 18:25	1
Pyrene	<5.2		5.2	0.35	ug/L		08/31/20 07:45	09/01/20 18:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		48 - 120				08/31/20 07:45	09/01/20 18:25	1
Nitrobenzene-d5	87		46 - 120				08/31/20 07:45	09/01/20 18:25	1
p-Terphenyl-d14	92		60 - 148				08/31/20 07:45	09/01/20 18:25	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-174444-7

Date Collected: 08/27/20 00:00

Matrix: WQ

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			08/29/20 18:52	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			08/29/20 18:52	1
Toluene	<1.0		1.0	0.51	ug/L			08/29/20 18:52	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			08/29/20 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					08/29/20 18:52	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/29/20 18:52	1
Dibromofluoromethane (Surr)	103		75 - 123					08/29/20 18:52	1
Toluene-d8 (Surr)	101		80 - 120					08/29/20 18:52	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-174444-1

Client Sample ID: DUP-082720

Lab Sample ID: 480-174444-8

Date Collected: 08/27/20 00:00

Matrix: Water

Date Received: 08/28/20 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0	2.1	ug/L			08/29/20 19:15	5
Ethylbenzene	<5.0		5.0	3.7	ug/L			08/29/20 19:15	5
Toluene	<5.0		5.0	2.6	ug/L			08/29/20 19:15	5
Xylenes, Total	<10		10	3.3	ug/L			08/29/20 19:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		08/29/20 19:15	5
4-Bromofluorobenzene (Surr)	97		73 - 120		08/29/20 19:15	5
Dibromofluoromethane (Surr)	101		75 - 123		08/29/20 19:15	5
Toluene-d8 (Surr)	100		80 - 120		08/29/20 19:15	5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.1		5.4	0.45	ug/L		08/31/20 07:45	09/01/20 18:55	1
Acenaphthylene	<5.4		5.4	0.41	ug/L		08/31/20 07:45	09/01/20 18:55	1
Anthracene	0.65	J	5.4	0.30	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benz(a)anthracene	<5.4		5.4	0.39	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(a)pyrene	<5.4		5.4	0.51	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(b)fluoranthene	<5.4		5.4	0.37	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(g,h,i)perylene	<5.4		5.4	0.38	ug/L		08/31/20 07:45	09/01/20 18:55	1
Benzo(k)fluoranthene	<5.4		5.4	0.79	ug/L		08/31/20 07:45	09/01/20 18:55	1
Chrysene	<5.4		5.4	0.36	ug/L		08/31/20 07:45	09/01/20 18:55	1
Dibenz(a,h)anthracene	<5.4		5.4	0.46	ug/L		08/31/20 07:45	09/01/20 18:55	1
Fluoranthene	2.9	J	5.4	0.43	ug/L		08/31/20 07:45	09/01/20 18:55	1
Fluorene	7.1		5.4	0.39	ug/L		08/31/20 07:45	09/01/20 18:55	1
Indeno(1,2,3-c,d)pyrene	<5.4		5.4	0.51	ug/L		08/31/20 07:45	09/01/20 18:55	1
Naphthalene	<5.4		5.4	0.83	ug/L		08/31/20 07:45	09/01/20 18:55	1
Phenanthrene	0.57	J	5.4	0.48	ug/L		08/31/20 07:45	09/01/20 18:55	1
Pyrene	1.9	J	5.4	0.37	ug/L		08/31/20 07:45	09/01/20 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	102		48 - 120	08/31/20 07:45	09/01/20 18:55	1
Nitrobenzene-d5	91		46 - 120	08/31/20 07:45	09/01/20 18:55	1
p-Terphenyl-d14	78		60 - 148	08/31/20 07:45	09/01/20 18:55	1

Client Information Client Contact: Nicholas Beyrle Company: AARCADIS U.S., Inc. Address: 100 Chestnut St. Suite 304 City: Rochester, NY 14604 State: NY Zip: 14604 Phone: 14604		Lab PM: R. Clare & S. Galkowski Schove, John R E-Mail: John.Schove@Eurofinset.com Phone: 585-880-7747		Carrier Tracking No(s): 480-149383-33237.1 Page: Page 1 of 1 Job #:	
Due Date Requested: Standard TAT Requested (days): 10 days		Analysis Requested			
PO #: 30047228.00001 WO #: NYSEG-Elmira Madison Ave/John Ruspantini Project #: 48004725 SSOW#:		Preservation Codes: A - HCL NaOH Zn Acetate Nitric Acid NaHSO4 FeOH mchlor carbic Acid U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:			
Sample Identification TRIP BLANK MW-4S MW-6S MW-8S MW-9S MW-0404S MW-0405S DUP-082720		Sample Date 8/27/20 8/27/20 8/27/20 8/27/20 8/27/20 8/27/20 8/27/20		Sample Type (C=comp, G=grab) - G G G G G G	
Matrix (W=water, S=solid, O=organic, BI=tissue, A=air) Water Water Water Water Water Water Water		Preservation Code: - G G G G G G		Field Filtered Sample (Yes or No) X X X X X X X	
Perform MS/MSD (Yes or No) X X X X X X X		8260C - BTEX X X X X X X		8270D - PAH Semivolatiles N X X X X X X	
Total Number of containers X 2 5 5 15 5 5 5		Special Instructions/Note: MS/MSD		Special Instructions/Note:	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements:					
Empty Kit Relinquished by:					
Relinquished by: Ryan Clare Relinquished by:		Date: 8/27/20 Date/Time:		Company: Aarcadis Company:	
Relinquished by:		Date:		Company:	
Relinquished by:		Date:		Company:	
Custody Seals Intact: Yes ☒ No ☐		Cooler Temperature(s) °C and Other Remarks: 2.6 3.0		Method of Shipment:	

NYSEG Elmira Madison Avenue
Former MGP Site

DATA USABILITY SUMMARY REPORT (DUSR)

Elmira, New York

Volatile and Semivolatile Analysis

SDG #480-181264-1

Analyses Performed By:
Eurofins TestAmerica Laboratories
Amherst, New York

Report #40447R
Review Level: Tier III
Project: 30077322.00002



DATA USABILITY SUMMARY REPORT

SUMMARY

This data usability summary report (DUSR) summarizes the review of Sample Delivery Group (SDG) # 480-181264-1 for samples collected in association with the NYSEG Elmira Madison Avenue Former MGP Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
MW-0404S	480-181264-1	Water	02/17/2021		X	X			
MW-0405S	480-181264-2	Water	02/17/2021		X	X			
MW-4S	480-181264-3	Water	02/17/2021		X	X			
MW-6S	480-181264-4	Water	02/17/2021		X	X			
MW-8S	480-181264-5	Water	02/17/2021		X	X			
MW-9S	480-181264-6	Water	02/17/2021		X	X			
TRIP BLANK	480-181264-7	Water	02/17/2021		X				
DUP - 021721	480-181264-8	Water	02/17/2021	MW-8S	X	X			

Note:

1. Matrix spike/matrix spike duplicate was performed on sample location MW-4S for VOCs and SVOCs.

DATA USABILITY SUMMARY REPORT

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

DATA USABILITY SUMMARY REPORT

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines (October 1999) and applicable Region II SOPs. USEPA NFGs and Region II SOPs were followed for qualification purposes.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA USABILITY SUMMARY REPORT

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

DATA USABILITY SUMMARY REPORT

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-4S	Benzene	AC	>UL
	Ethylbenzene	>UL	>UL
	Toluene	>UL	>UL
	Xylenes, Total	>UL	>UL

Note:

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

DATA USABILITY SUMMARY REPORT

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8S/DUP - 021721	All compounds	U	U	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

DATA USABILITY SUMMARY REPORT

11. System Performance and Overall Assessment

The laboratory noted: Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-8S (480-181264-5) and DUP - 021721 (480-181264-8). Elevated reporting limits (RLs) are provided.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA USABILITY SUMMARY REPORT

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks					X	
C. Trip blanks		X		X		
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate(LCSD)						
LCS/LCSD Precision (RPD)						
Matrix Spike (MS)		X	X			
Matrix Spike Duplicate(MSD)		X	X			
MS/MSD Precision (RPD)		X		X		
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	
Tier III Validation						
System performance and column resolution		X		X		
Initial calibration %RSDs		X		X		
Continuing calibration RRFs		X		X		
Continuing calibration %Ds		X		X		
Instrument tune and performance check		X		X		
Ion abundance criteria for each instrument used		X		X		
Internal standard		X		X		
Compound identification and quantitation						
A. Reconstructed ion chromatograms		X		X		
B. Quantitation Reports		X		X		

DATA USABILITY SUMMARY REPORT

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA USABILITY SUMMARY REPORT

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

DATA USABILITY SUMMARY REPORT

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

DATA USABILITY SUMMARY REPORT

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8S/DUP - 021721	Acenaphthene	6.9	6.6	AC
	Anthracene	0.40 J	0.30 J	
	Fluoranthene	1.6 J	1.5 J	
	Fluorene	5.8	5.4	
	Pyrene	1.1 J	1.1 J	

Notes:

AC Acceptable

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA USABILITY SUMMARY REPORT

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks					X	
Laboratory Control Sample (LCS) %R		X		X		
Laboratory Control Sample Duplicate(LCSD) %R					X	
LCS/LCSD Precision (RPD)					X	
Matrix Spike (MS) %R		X		X		
Matrix Spike Duplicate(MSD) %R		X		X		
MS/MSD Precision (RPD)		X		X		
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	X				X	
Tier III Validation						
System performance and column resolution		X		X		
Initial calibration %RSDs		X		X		
Continuing calibration RRFs		X		X		
Continuing calibration %Ds		X		X		
Instrument tune and performance check		X		X		
Ion abundance criteria for each instrument used		X		X		
Internal standard		X		X		
Compound identification and quantitation						
F. Reconstructed ion chromatograms		X		X		
G. Quantitation Reports		X		X		
H. RT of sample compounds within the established RT windows		X		X		

DATA USABILITY SUMMARY REPORT

SVOCs: SW-846 8270		Reported		Performance Acceptable		Not Required
		No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
I.	Quantitation transcriptions/calculations		X		X	
J.	Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA USABILITY SUMMARY REPORT

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliance ¹					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
480-181264-1	02/17/2021	USEPA/SW846	MW-0404S	Water	Yes	Yes	--	--	--	
	02/17/2021	USEPA/SW846	MW-0405S	Water	Yes	Yes	--	--	--	
	02/17/2021	USEPA/SW846	MW-4S	Water	No	Yes	--	--	--	VOC: MS/MSD % Recovery
	02/17/2021	USEPA/SW846	MW-6S	Water	Yes	Yes	--	--	--	
	02/17/2021	USEPA/SW846	MW-8S	Water	Yes	Yes	--	--	--	
	02/17/2021	USEPA/SW846	MW-9S	Water	Yes	Yes	--	--	--	
	02/17/2021	USEPA/SW846	TRIP BLANK	Water	Yes	--	--	--	--	
	02/17/2021	USEPA/SW846	DUP - 021721	Water	Yes	Yes	--	--	--	

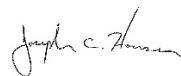
Note:

- 1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

DATA USABILITY SUMMARY REPORT

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:



DATE: March 5, 2021

PEER REVIEW: Dennis Capria

DATE: March 22, 2021

CHAIN OF CUSTODY

**CORRECTED SAMPLE ANALYSIS DATA
SHEETS**



Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-0404S

Lab Sample ID: 480-181264-1

Date Collected: 02/17/21 12:05

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 13:09	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 13:09	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 13:09	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 13:09	1
4-Bromofluorobenzene (Surr)	101		73 - 120		02/18/21 13:09	1
Dibromofluoromethane (Surr)	100		75 - 123		02/18/21 13:09	1
Toluene-d8 (Surr)	101		80 - 120		02/18/21 13:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 18:43	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 18:43	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 18:43	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 18:43	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 18:43	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 18:43	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 18:43	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:43	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:43	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 18:43	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 18:43	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		48 - 120	02/18/21 15:36	02/19/21 18:43	1
Nitrobenzene-d5	91		46 - 120	02/18/21 15:36	02/19/21 18:43	1
p-Terphenyl-d14	85		60 - 148	02/18/21 15:36	02/19/21 18:43	1

Client Sample ID: MW-0405S

Lab Sample ID: 480-181264-2

Date Collected: 02/17/21 10:35

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 13:32	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 13:32	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 13:32	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 13:32	1
4-Bromofluorobenzene (Surr)	102		73 - 120		02/18/21 13:32	1
Dibromofluoromethane (Surr)	100		75 - 123		02/18/21 13:32	1
Toluene-d8 (Surr)	101		80 - 120		02/18/21 13:32	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-0405S

Lab Sample ID: 480-181264-2

Date Collected: 02/17/21 10:35

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 19:11	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 19:11	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 19:11	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 19:11	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 19:11	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 19:11	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 19:11	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:11	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:11	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 19:11	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 19:11	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		48 - 120				02/18/21 15:36	02/19/21 19:11	1
Nitrobenzene-d5	92		46 - 120				02/18/21 15:36	02/19/21 19:11	1
p-Terphenyl-d14	78		60 - 148				02/18/21 15:36	02/19/21 19:11	1

Client Sample ID: MW-4S

Lab Sample ID: 480-181264-3

Date Collected: 02/17/21 08:55

Matrix: Ground Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0	F1	1.0	0.41	ug/L			02/18/21 13:55	1
Ethylbenzene	<1.0	F1	1.0	0.74	ug/L			02/18/21 13:55	1
Toluene	<1.0	F1	1.0	0.51	ug/L			02/18/21 13:55	1
Xylenes, Total	<2.0	F1	2.0	0.66	ug/L			02/18/21 13:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120					02/18/21 13:55	1
4-Bromofluorobenzene (Surr)	101		73 - 120					02/18/21 13:55	1
Dibromofluoromethane (Surr)	101		75 - 123					02/18/21 13:55	1
Toluene-d8 (Surr)	100		80 - 120					02/18/21 13:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 18:15	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 18:15	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 18:15	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 18:15	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 18:15	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 18:15	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-4S

Date Collected: 02/17/21 08:55

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-3

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 18:15	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 18:15	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 18:15	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 18:15	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 18:15	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	99		48 - 120	02/18/21 15:36	02/19/21 18:15	1
Nitrobenzene-d5	95		46 - 120	02/18/21 15:36	02/19/21 18:15	1
p-Terphenyl-d14	82		60 - 148	02/18/21 15:36	02/19/21 18:15	1

Client Sample ID: MW-6S

Date Collected: 02/17/21 08:50

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-4

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 14:18	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 14:18	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 14:18	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		02/18/21 14:18	1
4-Bromofluorobenzene (Surr)	103		73 - 120		02/18/21 14:18	1
Dibromofluoromethane (Surr)	99		75 - 123		02/18/21 14:18	1
Toluene-d8 (Surr)	101		80 - 120		02/18/21 14:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 19:40	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 19:40	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 19:40	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 19:40	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 19:40	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 19:40	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 19:40	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 19:40	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 19:40	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 19:40	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 19:40	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		48 - 120	02/18/21 15:36	02/19/21 19:40	1
Nitrobenzene-d5	89		46 - 120	02/18/21 15:36	02/19/21 19:40	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-6S

Date Collected: 02/17/21 08:50

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-4

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	76		60 - 148	02/18/21 15:36	02/19/21 19:40	1

Client Sample ID: MW-8S

Date Collected: 02/17/21 12:30

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-5

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<4.0		4.0	1.6	ug/L			02/18/21 14:41	4
Ethylbenzene	<4.0		4.0	3.0	ug/L			02/18/21 14:41	4
Toluene	<4.0		4.0	2.0	ug/L			02/18/21 14:41	4
Xylenes, Total	<8.0		8.0	2.6	ug/L			02/18/21 14:41	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		02/18/21 14:41	4
4-Bromofluorobenzene (Surr)	102		73 - 120		02/18/21 14:41	4
Dibromofluoromethane (Surr)	99		75 - 123		02/18/21 14:41	4
Toluene-d8 (Surr)	101		80 - 120		02/18/21 14:41	4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.9		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 20:08	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 20:08	1
Anthracene	0.40	J	5.0	0.28	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 20:08	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 20:08	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 20:08	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 20:08	1
Fluoranthene	1.6	J	5.0	0.40	ug/L		02/18/21 15:36	02/19/21 20:08	1
Fluorene	5.8		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:08	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:08	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 20:08	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 20:08	1
Pyrene	1.1	J	5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	101		48 - 120	02/18/21 15:36	02/19/21 20:08	1
Nitrobenzene-d5	97		46 - 120	02/18/21 15:36	02/19/21 20:08	1
p-Terphenyl-d14	69		60 - 148	02/18/21 15:36	02/19/21 20:08	1

Client Sample ID: MW-9S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-6

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 15:04	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 15:04	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: MW-9S

Date Collected: 02/17/21 10:35

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-6

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 15:04	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 15:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120					02/18/21 15:04	1
4-Bromofluorobenzene (Surr)	102		73 - 120					02/18/21 15:04	1
Dibromofluoromethane (Surr)	102		75 - 123					02/18/21 15:04	1
Toluene-d8 (Surr)	100		80 - 120					02/18/21 15:04	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<5.0		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 20:36	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 20:36	1
Anthracene	<5.0		5.0	0.28	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 20:36	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 20:36	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 20:36	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 20:36	1
Fluoranthene	<5.0		5.0	0.40	ug/L		02/18/21 15:36	02/19/21 20:36	1
Fluorene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 20:36	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 20:36	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 20:36	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 20:36	1
Pyrene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	102		48 - 120				02/18/21 15:36	02/19/21 20:36	1
Nitrobenzene-d5	97		46 - 120				02/18/21 15:36	02/19/21 20:36	1
p-Terphenyl-d14	90		60 - 148				02/18/21 15:36	02/19/21 20:36	1

Client Sample ID: TRIP BLANK

Date Collected: 02/17/21 00:00

Date Received: 02/17/21 17:15

Lab Sample ID: 480-181264-7

Matrix: WQ

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.41	ug/L			02/18/21 15:27	1
Ethylbenzene	<1.0		1.0	0.74	ug/L			02/18/21 15:27	1
Toluene	<1.0		1.0	0.51	ug/L			02/18/21 15:27	1
Xylenes, Total	<2.0		2.0	0.66	ug/L			02/18/21 15:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120					02/18/21 15:27	1
4-Bromofluorobenzene (Surr)	101		73 - 120					02/18/21 15:27	1
Dibromofluoromethane (Surr)	100		75 - 123					02/18/21 15:27	1
Toluene-d8 (Surr)	100		80 - 120					02/18/21 15:27	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSEG - Elmira Madison Ave Former MGP

Job ID: 480-181264-1

Client Sample ID: DUP - 021721

Lab Sample ID: 480-181264-8

Date Collected: 02/17/21 00:00

Matrix: Water

Date Received: 02/17/21 17:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<4.0		4.0	1.6	ug/L			02/18/21 15:51	4
Ethylbenzene	<4.0		4.0	3.0	ug/L			02/18/21 15:51	4
Toluene	<4.0		4.0	2.0	ug/L			02/18/21 15:51	4
Xylenes, Total	<8.0		8.0	2.6	ug/L			02/18/21 15:51	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/18/21 15:51	4
4-Bromofluorobenzene (Surr)	101		73 - 120		02/18/21 15:51	4
Dibromofluoromethane (Surr)	100		75 - 123		02/18/21 15:51	4
Toluene-d8 (Surr)	100		80 - 120		02/18/21 15:51	4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.6		5.0	0.41	ug/L		02/18/21 15:36	02/19/21 21:05	1
Acenaphthylene	<5.0		5.0	0.38	ug/L		02/18/21 15:36	02/19/21 21:05	1
Anthracene	0.30	J	5.0	0.28	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benz(a)anthracene	<5.0		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(a)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(b)fluoranthene	<5.0		5.0	0.34	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(g,h,i)perylene	<5.0		5.0	0.35	ug/L		02/18/21 15:36	02/19/21 21:05	1
Benzo(k)fluoranthene	<5.0		5.0	0.73	ug/L		02/18/21 15:36	02/19/21 21:05	1
Chrysene	<5.0		5.0	0.33	ug/L		02/18/21 15:36	02/19/21 21:05	1
Dibenz(a,h)anthracene	<5.0		5.0	0.42	ug/L		02/18/21 15:36	02/19/21 21:05	1
Fluoranthene	1.5	J	5.0	0.40	ug/L		02/18/21 15:36	02/19/21 21:05	1
Fluorene	5.4		5.0	0.36	ug/L		02/18/21 15:36	02/19/21 21:05	1
Indeno(1,2,3-c,d)pyrene	<5.0		5.0	0.47	ug/L		02/18/21 15:36	02/19/21 21:05	1
Naphthalene	<5.0		5.0	0.76	ug/L		02/18/21 15:36	02/19/21 21:05	1
Phenanthrene	<5.0		5.0	0.44	ug/L		02/18/21 15:36	02/19/21 21:05	1
Pyrene	1.1	J	5.0	0.34	ug/L		02/18/21 15:36	02/19/21 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	91		48 - 120	02/18/21 15:36	02/19/21 21:05	1
Nitrobenzene-d5	88		46 - 120	02/18/21 15:36	02/19/21 21:05	1
p-Terphenyl-d14	65		60 - 148	02/18/21 15:36	02/19/21 21:05	1

Chain of Custody Record

Environment Testing
America

Client Information		Sampler: <u>A55/RDC</u>		Lab PM: <u>Schove, John R</u>	Carrier Tracking No(s):	COC No: <u>480-156134-33237.2</u>					
Client Contact: <u>Nicholas Beyrle</u>		Phone: <u>585-880-7747</u>		E-Mail: <u>John.Schove@Eurofinset.com</u>	State of Origin: <u>NY</u>	Page: <u>1 of 2</u>					
Company: <u>ARCADIS U.S., Inc.</u>		PWSID:		Job #:							
Address: <u>100 Chestnut St. Suite 1020</u>		Due Date Requested:		Analysis Requested							
City: <u>Rochester</u>		TAT Requested (days): <u>Standard</u>		Preservation Codes:							
State, Zip: <u>NY, 14604</u>		Compliance Project: <u>Yes</u> ☐ <u>No</u> ☐		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2SO4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)							
Phone: <u>585-880-7747</u>		PO #: <u>30047228.1</u>		Other:							
Email: <u>nicholas.beyrle@arcadis-us.com</u>		WO #: <u>NYSEG-Elmira Madison Ave/John Ruspanitini</u>		8270D - PAH Semivolatiles							
Project Name: <u>NYSEG - Elmira Madison Ave Former MGP/ Event Desc: Ground</u>		Project #: <u>48004725</u>		8260C - BTEX							
Site: <u>New York</u>		SSOW#:		Field Filtered Sample (Yes or No)							
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=tissue, A=air)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - PAH Semivolatiles	8260C - BTEX	Total Number of	Special Instructions/Note:
<u>MW-65</u>	<u>2/17/21</u>	<u>0850</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>3</u>	<u>2</u>	<u>5</u>	
<u>MW-04055</u>	<u>2/17/21</u>	<u>1035</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>3</u>	<u>2</u>	<u>5</u>	
<u>MW-04045</u>	<u>2/17/21</u>	<u>1205</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>3</u>	<u>2</u>	<u>5</u>	
<u>MW-45</u>	<u>2/17/21</u>	<u>0855</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>9</u>	<u>6</u>	<u>15</u>	<u>MS/MSD</u>
<u>MW-95</u>	<u>2/17/21</u>	<u>1035</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>3</u>	<u>2</u>	<u>5</u>	
<u>MW-85</u>	<u>2/17/21</u>	<u>1230</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>3</u>	<u>2</u>	<u>5</u>	
<u>DUP-021721</u>	<u>2/17/21</u>	<u>—</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>3</u>	<u>2</u>	<u>5</u>	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months											
Special Instructions/QC Requirements: Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <u>Adam Svensson</u> Date/Time: <u>2/17/21/ 1715</u> Company: <u>Arcadis</u> Relinquished by: _____ Date/Time: _____ Company: _____ Relinquished by: _____ Date/Time: _____ Company: _____ Custody Seal No.: _____ Custody Seals Intact: ☐ Yes ☐ No Cooler Temperature(s) °C and Other Remarks: <u>2.3 #</u>											

Appendix C

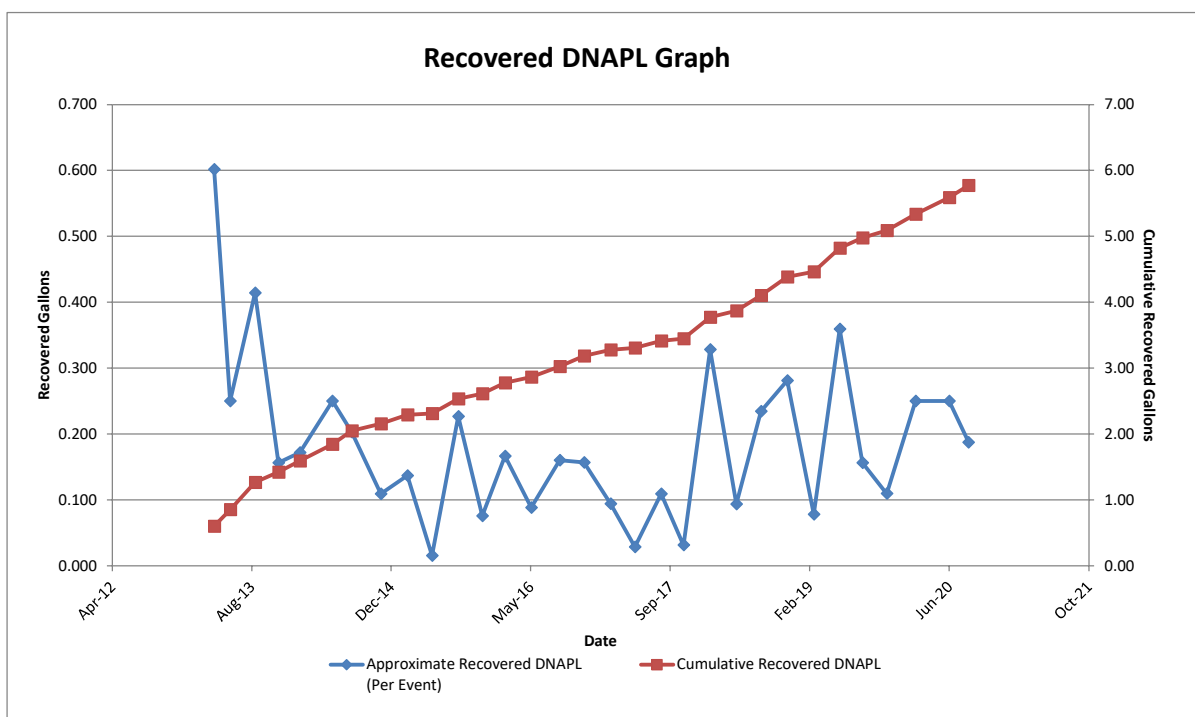
DNAPL Recovery Summary Table and Graph

**Appendix C
DNAPL Recovery Summary**

**Annual Periodic Review Report
Madison Avenue Former MGP Site, Elmira, New York**

Date	AW-17			NRW-2			NMW-0402S			Totals		
	Recovered DNAPL (gal)	Total (gal)	Cumulative (gal)	Recovered DNAPL (gal)	Total (gal)	Cumulative (gal)	Recovered DNAPL (gal)	Total (gal)	Cumulative (gal)	Recovered DNAPL (gal)	Total (gal)	Cumulative (gal)
4/1/2013	--	--	--	0.008	0.24	0.01	0.594	1.35	0.59	0.602	1.59	0.60
5/28/2013	--		--	0.000		0.01	0.250		0.84	0.250		0.85
8/26/2013	--		--	0.188		0.20	0.227		1.07	0.414		1.27
11/18/2013	--		--	0.031		0.23	0.125		1.20	0.156		1.42
2/3/2014	--	--	--	0.016	0.17	0.24	0.156	0.53	1.35	0.172	0.70	1.59
5/30/2014	--		--	0.000		0.24	0.250		1.60	0.250		1.84
8/7/2014	--		--	0.109		0.35	0.094		1.70	0.203		2.05
11/20/2014	--		--	0.047		0.40	0.063		1.76	0.109		2.16
2/23/2015	--	0.02	--	0.012	0.35	0.41	0.125	0.11	1.88	0.137	0.48	2.29
5/22/2015	--		--	0.000		0.41	0.016		1.90	0.016		2.31
8/24/2015	0.008		0.01	0.188		0.60	0.031		1.93	0.227		2.54
11/18/2015	0.008		0.02	0.021		0.62	0.047		1.98	0.076		2.61
2/8/2016	0	0.00	0.02	0.146	0.45	0.76	0.021	0.05	2.00	0.167	0.50	2.78
5/12/2016	0		0.02	0.078		0.84	0.010		2.01	0.088		2.87
8/22/2016	0		0.02	0.156		1.00	0.004		2.01	0.160		3.03
11/17/2016	0		0.02	0.141		1.14	0.016		2.03	0.157		3.18
2/20/2017	0	0.00	0.02	0.078	0.41	1.22	0.016	0.09	2.04	0.094	0.50	3.28
5/18/2017	0		0.02	0.021		1.24	0.008		2.05	0.029		3.31
8/21/2017	0		0.02	0.094		1.33	0.016		2.07	0.109		3.41
11/9/2017	0		0.02	0.000		1.33	0.031		2.10	0.031		3.45
2/12/2018	0	0.00	0.02	0.297	0.53	1.63	0.031	0.16	2.13	0.328	0.69	3.77
5/17/2018	0		0.02	0.047		1.68	0.047		2.18	0.094		3.87
8/13/2018	0		0.02	0.172		1.85	0.063		2.24	0.234		4.10
11/15/2018	0		0.02	0.250		2.10	0.031		2.27	0.281		4.38
2/19/2019	0	0.00	0.02	0.063	0.72	2.16	0.016	0.16	2.29	0.078	0.88	4.46
5/23/2019	0		0.02	0.313		2.47	0.047		2.33	0.359		4.82
8/12/2019	0		0.02	0.125		2.60	0.031		2.36	0.156		4.98
11/7/2019	0		0.02	0.094		2.69	0.016		2.38	0.109		5.09
2/18/2020	0	0.00	0.02	0.188	0.47	2.88	0.063	0.14	2.44	0.250	0.61	5.34
6/18/2020	0		0.02	0.203		3.08	0.047		2.49	0.250		5.59
8/26/2020	0		0.02	0.188		3.27	0.000		2.49	0.188		5.77
11/19/2021	0		0.02	0.063		3.33	0.000		2.49	0.063		5.84
2/16/2021	0		0.02	0.016		3.35	0.094		2.58	0.109		5.95

1. A value of zero for 'Recovered DNAPL' indicates DNAPL was observed but not recoverable.
2. -- for 'Recovered DNAPL' indicates DNAPL was not observed.
3. DNAPL was first observed in AW-17 during the August 24, 2015 site visit. AW-17 is now included in quarterly NAPL gauging schedule.



Appendix D

Well Inspection Photographic Log

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 1

Well ID:

MW-1S

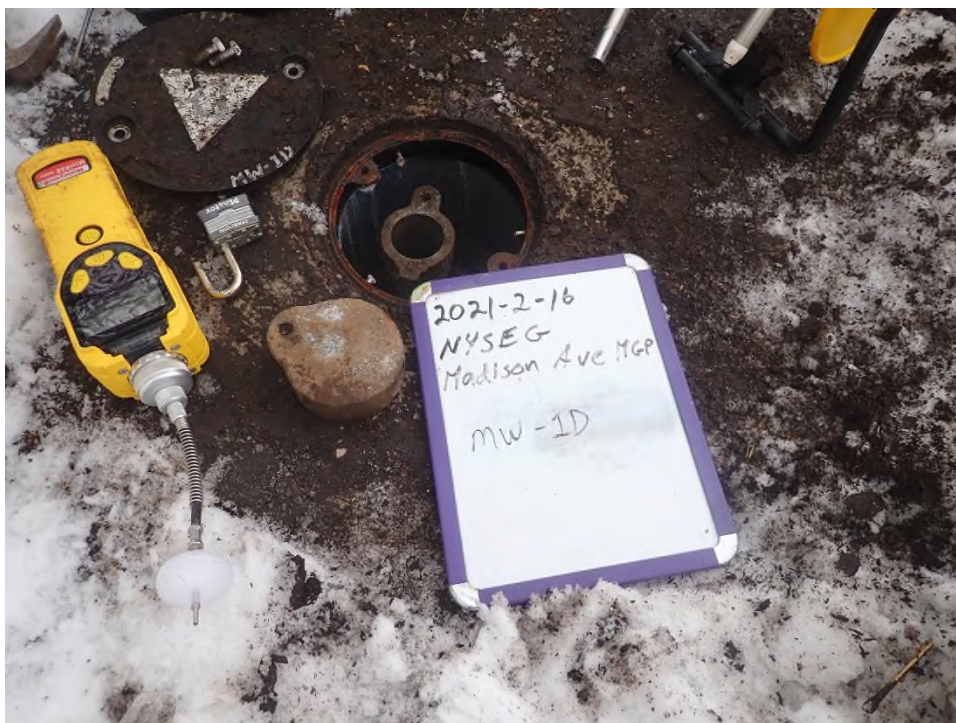
Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 2

Well ID:

MW -1D

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 3

Well ID:

MW-2S

Description:

Monitoring well (stick-up) with secure cap and lockable lid is in good condition. Lid mounting ring is cracked, but competent.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 4

Well ID:

MW-2D

Description:

Monitoring well (stick-up) with secure cap and lockable lid is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 5

Well ID:

MW-4S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 6

Well ID:

MW-6S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 7

Well ID:

MW-7

Description:

Monitoring well (stick-up) with secure cap and lockable lid is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 8

Well ID:

MW-8S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 9

Well ID:

MW-8D

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 10

Well ID:

MW-9S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 11

Well ID:

MW-9D

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 12

Well ID:

MW-0304D

Description:

Monitoring well with lockable cap is in fair condition. Well cover is cracked and in need of replacement.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 13

Well ID:

MW-0402S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 14

Well ID:

MW-0403S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322
Elmira, New York



Photograph: 15

Well ID:

MW-0404S

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 16

Well ID:

MW-0404D

Description:

Monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 17

Well ID:

MW-0405S

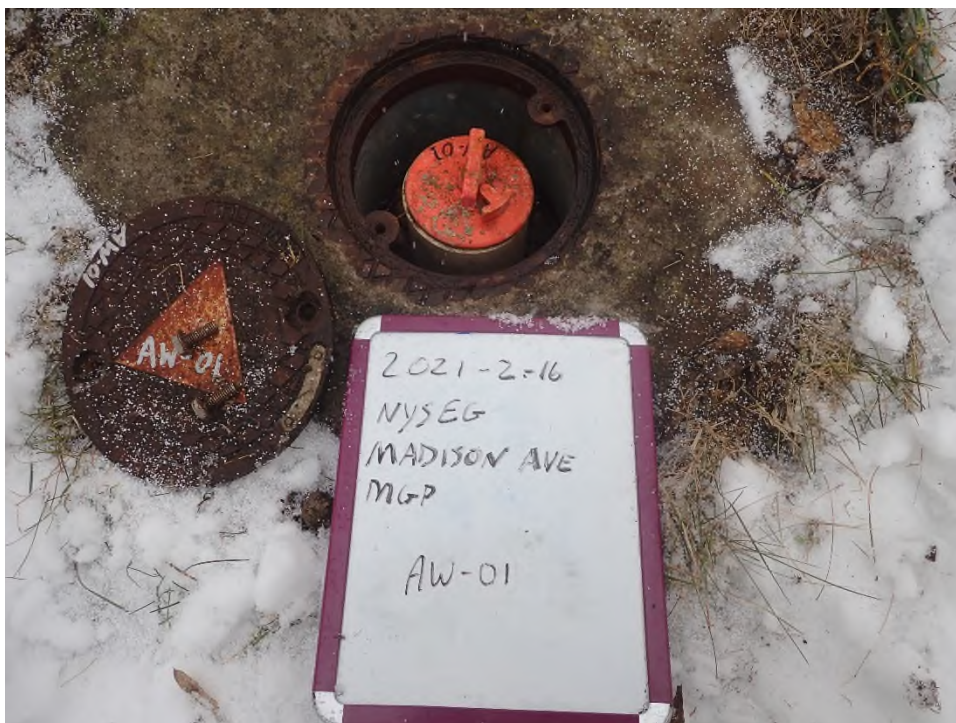
Description:

Monitoring well with lockable cap is in good condition. Surrounding concrete flags are cracked, but road box is secure.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 18

Well ID:

AW-01

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 19

Well ID:

AW-02

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 20

Well ID:

AW-03

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 21

Well ID:

AW-04

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 22

Well ID:

AW-05

Description:

Application well with lockable cap is in good condition. Heaving bentonite and concrete seal.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 23

Well ID:

AW-06

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 24

Well ID:

AW-07

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 25

Well ID:

AW-08

Description:

Application well with lockable cap is in good condition. Heaving bentonite and concrete seal.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 26

Well ID:

AW-09

Description:

Application well with lockable cap is in good condition. Two broken tabs on road box.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 27

Well ID:

AW-10

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 28

Well ID:

AW-11

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

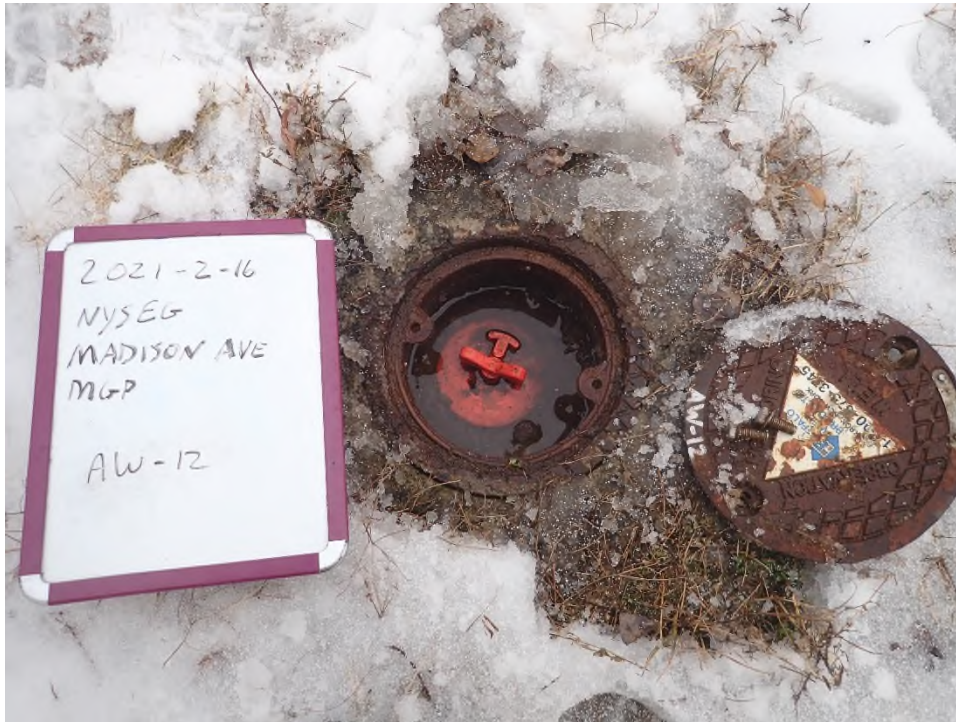
Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 29

Well ID:

AW-12

Description:

Application well with lockable cap is in good condition. Broken well pad, however not structurally deficient.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 30

Well ID:

AW-13

Description:

Application well with lockable cap is in good condition. Broken tab on well skirt.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 31

Well ID:

AW-14

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 32

Well ID:

AW-15

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 33

Well ID:

AW-16

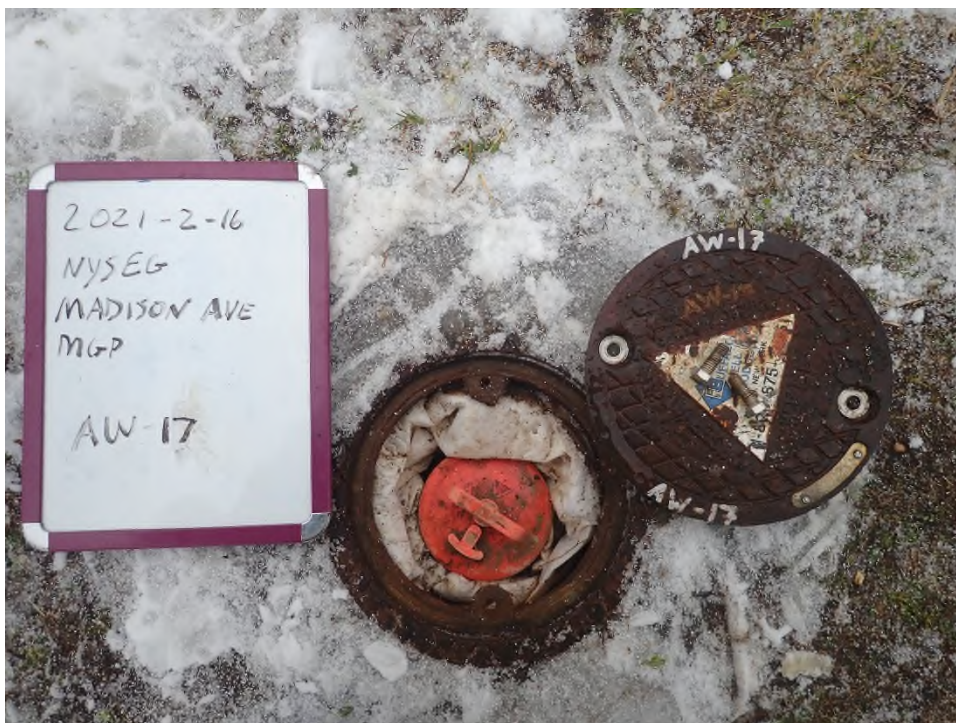
Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 34

Well ID:

AW-17

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 35

Well ID:

AW-18

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 36

Well ID:

AW-19

Description:

Application well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 37

Well ID:

PMW-01

Description:

Performance monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 38

Well ID:

PMW-02

Description:

Performance monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 39

Well ID:

PMW-03

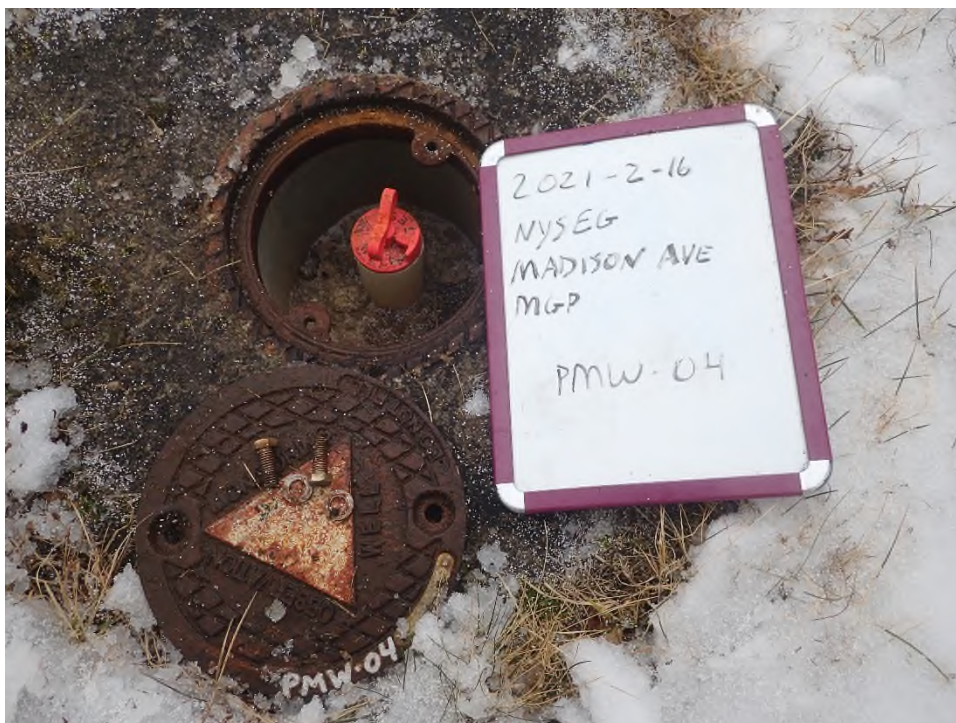
Description:

Performance monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 40

Well ID:

PMW-04

Description:

Performance monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 41

Well ID:

PMW-05

Description:

Performance monitoring well with lockable cap is in poor condition. Flush-mounted road box skirt is caving in and concrete seal is heaved.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 42

Well ID:

PMW-06

Description:

Performance monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 43

Well ID:

NRW-01

Description:

NAPL recovery well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 44

Well ID:

NRW-02

Description:

NAPL recovery well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 45

Well ID:

NRW-03

Description:

NAPL recovery well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021



Photograph: 46

Well ID:

NRW-04

Description:

NAPL recovery well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

APPENDIX D – WELL INSPECTION PHOTOGRAPH LOG

NYSEG

Madison Avenue Former MGP Site / 30077322

Elmira, New York



Photograph: 47

Well ID:

NMW-0402S

Description:

NAPL monitoring well with lockable cap is in good condition.

Photograph taken by:

AJS

Date: 2/16/2021

Appendix E

Site Inspection Form

Site Inspection Form

Madison Avenue Former MGP Site - Elmira, New York

Date/Time: 2/17/2021 10:00

Weather: Sunny

Personnel: Ryan Clare

Temperature: 18° F

General Requirements

**Photographs will be attached to document the condition of each inspection item identified below.
A written description of any item(s) that is considered to be in poor condition is required.**

1. General Site Conditions:

Monitoring wells	☒ Good	☐ Poor*
Application wells	☒ Good	☐ Poor*
Performance Monitoring wells	☒ Good	☐ Poor*
NAPL Monitoring/Recovery wells	☒ Good	☐ Poor*
Cover Areas (Grass and Stone)	☒ Good	☐ Poor*
Signs of intrusive activities	☒ No	☐ Yes*
Evidence of Settlement	☒ No	☐ Yes*

Note:

-Cover area inspection is to determine if intrusive activities may have occurred since the previous site visit.

2. Site Cover Systems:

Borrowing/Depressions	☒ No	☐ Yes*
Standing Water	☒ No	☐ Yes*
Missing Stone	☒ No	☐ Yes*
Vegetative Growth	☒ No	☐ Yes*
Evidence of Settlement	☒ No	☐ Yes*
Sedimentation	☒ No	☐ Yes*
Damage/Failure	☒ No	☐ Yes*

3. Notes: Site was covered by 4"-12" of snow and ice. Inspection of general site cover an intrusive activities was not possible. However, intrusive activities are not likely and nothing was observed that would indicate issues with grass/stone cover areas.

* Indicates condition should be reported to NYSEG Project Manager/OM&M Coordinator.

Appendix F

Site Inspection Photographic Log

Appendix F – Site Inspection

Photograph Log

NYSEG
Madison Avenue Former MGP Site / 30077322
Elmira, New York



Photograph: 1

Description:

Stone coverage (snow covered) over former manufactured gas plant (MGP) area; cover in good condition; no repair needed.

Direction:

SE

Photograph taken by:

RDC

Date: February 17, 2021



Photograph: 2

Description:

Stone coverage (snow covered) over former MGP area; cover in good condition; no repair needed.

Direction:

E

Photograph taken by:

RDC

Date: February 17, 2021

Appendix F – Site Inspection

Photograph Log

NYSEG
Madison Avenue Former MGP Site / 30077322
Elmira, New York



Photograph: 3

Description:

Stone coverage (snow covered) over former MGP area; cover in good condition; no repair needed. Portion of area currently used for material staging.

Direction:

NW

Photograph taken by:

RDC

Date: February 17,
2021



Photograph: 4

Description:

Stone coverage (snow covered) over former MGP area; cover in good condition; no repair needed. Portion of area currently used for material staging.

Direction:

N

Photograph taken by:

RDC

Date: February 17,
2021

Appendix F – Site Inspection

Photograph Log

NYSEG
Madison Avenue Former MGP Site / 30077322
Elmira, New York



Photograph: 5

Description:

Stone coverage and vegetation (snow covered) over PCB IRM (1997) and purifier waste (2011) removal areas; cover in good condition; no repair needed. Sheet pile currently staged here.

Direction:

NE

Photograph taken by:

RDC

Date: February 17, 2021



Photograph: 6

Description:

Stone coverage and stockpiled materials (snow covered) over ISS area; cover in good condition; no repair needed.

Direction:

E

Photograph taken by:

RDC

Date: February 17, 2021

Appendix F – Site Inspection

Photograph Log

NYSEG
Madison Avenue Former MGP Site / 30077322
Elmira, New York



Photograph: 7

Description:

Grass area and stone coverage (snow covered) over ISS area, purifier waste IRM removal area (2004) and purifier waste removal area (2011); cover in good condition. No repair needed.

Direction:

SW

Photograph taken by:

RDC

Date: February 17, 2021



Photograph: 8

Description:

Stone coverage and vegetation (snow covered) over treatment system area; cover in good condition; no repair needed.

Direction:

WSW

Photograph taken by:

RDC

Date: February 17, 2021

Appendix G

NYSEG Certification Statement



Appendix G

Certification Statement

Based on information provided to NYSEG, NYSEG verifies that the site engineering controls described in the ROD (NYSDEC 2008) were in place during the reporting period, and has no knowledge that changes have occurred at the Madison Avenue Former MGP Site that would impair the ability of the engineering controls to protect public health and the environment, or constitute a violation or failure to comply with the operation and maintenance plan described in the *Site Management Plan*.

During the reporting period, NYSDEC, NYSEG and the City of Elmira have worked to define and are working to establish Institutional Controls at the Site that would further protect public health and safety.

Date 4-23-21

John J. Ruspantini, CHMM, PMP
NYSEG, Manager – Programs/Projects

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