From: Anne.Burnham@parsons.com
To: Anne.Burnham@parsons.com; Spellman, John (DEC)
Cc: lterrell@nyseg.com
Subject: RE: McMaster Street 2022 Report
Date: Friday, December 22, 2023 11:19:04 AM
Attachments: image001.png
image002.png
McMaster St_memo_2022_122223.pdf
McMaster St_memo_2022_122223 red line.pdf

John,

Apologies on the delay on this. Please see the attached clean version and redline.

Thanks,
Anne

From: Anne.Burnham@parsons.com <Anne.Burnham@parsons.com>
Sent: Wednesday, October 11, 2023 10:49 AM
To: Spellman, John (DEC) <john.spellman@dec.ny.gov>
Cc: TERRELL, LEVIA <lterrell@nyseg.com>
Subject: RE: McMaster Street 2022 Report

Hi John,

Yes, we will be submitting a revised report. We will address the typo as well.

Thank you,
Anne

From: Spellman, John (DEC) <john.spellman@dec.ny.gov>
Sent: Wednesday, October 11, 2023 10:48 AM
To: Burnham, Anne [US-US] <Anne.Burnham@parsons.com>
Cc: TERRELL, LEVIA <lterrell@nyseg.com>
Subject: [EXTERNAL] RE: McMaster Street 2022 Report

Hi Anne,

I would like to confirm Parsons will be submitting a revised report. Also, please note the typo error in

PARSONS

Phone: 315.451.9560
301 Plainfield Road, Suite 350 | Syracuse, New York 13212

MEMORANDUM

December 22, 2023

To: John Spellman, P.E., New York State Department of Environmental Conservation

From: Anne Burnham, Parsons, on behalf of New York State Electric and Gas Corporation

Subject: McMaster Street Former MGP Site- Quarterly NAPL Monitoring and Annual Sampling Update

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The McMaster Street Former Manufactured Gas Plant (MGP) Site (NYSDEC Site No. 7-06-010) (Site) is a 1.93-acre site in Auburn, New York (**Figure 1**) that has been remediated to commercial-use criteria in accordance with an Order on Consent (Index # DO-0002-9309) entered into by the New York State Electric and Gas Corporation (NYSEG) and the New York State Department of Environmental Conservation (NYSDEC). This memo serves as the Periodic Review Report, documenting the site activities that occurred in 2022 at the NYSEG McMaster Street Former MGP Site in Auburn, NY.

1.0 Background

Following the completion of remedial activities at the Site, the Site Management Plan (SMP) was developed to detail long-term monitoring at the Site, which began in 2021. Monitoring at the Site consists of three main components:

- Quarterly recovery of residual non-aqueous phase liquid (NAPL), or free product, to the extent practical. Three bedrock recovery wells were installed at the Site in 2021, as stipulated in the November 2009 Record of Decision (ROD) to recover residual NAPL. Additionally, two pre-existing onsite sumps will continue to be monitored for NAPL accumulation and removal as needed. NAPL removal efforts will be conducted on a quarterly basis for a minimum of two years, continuing until negligible quantities (<0.01 gallons) of NAPL are recovered for three successive collection events (quarters) for each well. Efforts started in July of 2021. Quarter two of 2023 will be the two-year mark of conducting NAPL removal at the site.
- In accordance with the SMP, a network of monitoring wells is being utilized for annual groundwater monitoring at the Site. Samples are submitted to an Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis. The Site's overburden groundwater monitoring network includes three existing monitoring wells (MW-06-09, MW-04-06, MW-06-10) and two new monitoring wells that were installed in 2021. Pre-existing monitoring well MW-06-09 is located at the southeastern border of the Site and serves as an upgradient well. Two new monitoring wells, MW-PAR-08 and MW-PAR-09, were installed along the southern bank of the Owasco Outlet during the spring of 2021. Groundwater samples are collected and analyzed for site-specific contaminants of concern (COCs), as discussed in Section 4.0. With the exception of MW-PAR-08, future groundwater sampling will be performed on an annual basis and will include analysis for site-specific COCs only. Based on results from the 2021 monitoring event, MW-PAR-08 was monitored quarterly starting in Q3 of 2022. The SMP does not set a duration of the annual groundwater monitoring program. Future recommendations on monitoring frequency will be developed in coordination with NYSDEC.

- Annual Site inspections and vegetation monitoring assess the status of invasive species at the Site and overall vegetative cover was completed in 2022 in accordance with the SMP.

2.0 Groundwater Flow Direction

2.1 Overburden Well Gauging Results – 2022

Water depths in overburden wells, or wells with their entire screen length above bedrock, were collected during the 2022 annual groundwater sampling event on September 21, 2022. The water depths for overburden wells are presented in **Table 1**.

2.2 Bedrock Well Gauging Results – 2022

Bedrock wells, or wells that are screened partially or completely within bedrock, were gauged during the 2022 annual groundwater sampling event on September 21, 2022. The water depths for bedrock wells are presented in **Table 1**.

2.3 Hydraulic Gradient

Overburden groundwater at the Site is expected to flow in a northerly to northwesterly direction and likely discharges into the Owasco Outlet (Arcadis, 2008)[1]. The presumed flow direction of overburden groundwater is shown on **Figure 2a**.

Bedrock groundwater flow at the Site likely occurs through a combination of interconnected fractures and bedding planes. The Site Remedial Investigation (RI) Report (Arcadis, 2008) indicates that "groundwater movement is likely to be more complex and interpretations of flow in general will be less certain, than those made for the overburden." However, the RI Report also states that "regional flow in the shallow bedrock unit is interpreted to be northward, toward the Outlet." In consideration of the information presented in the RI Report, and since the new recovery wells installed in the shallow bedrock unit are closely spaced and linearly oriented, no potentiometric map was generated for bedrock at the Site. The presumed groundwater flow direction in shallow bedrock is presented on **Figure 2b**.

3.0 Groundwater Sampling

The 2022 annual groundwater sampling event and the quarter three sampling for MW-PAR-08 was conducted on September 21, 2022. Groundwater samples collected during 2022 annual monitoring were analyzed for VOCs, specifically benzene, toluene, ethylbenzene, and xylenes (BTEX), and total polycyclic aromatic

[1] Arcadis, 2008. *Remedial Investigation Report*. McMaster Street Former Manufactured Gas Plan Site, Prepared for New York State Electric & Gas Corporation.

hydrocarbons (PAHs) as specified in the SMP. The quarter four sample at MW-PAR-08 was collected on November 28, 2022.

3.1 Groundwater Sampling Methods and Techniques

Groundwater samples were collected from MW-04-06, MW-06-09, MW-06-10, MW-PAR-08, and MW-PAR-09 during the annual monitoring event in September 2022. An additional quarterly sample was collected at MW-PAR-08 in November 2022, as recommended in the 2021 report.

Groundwater samples were collected using low-flow/low-stress techniques. The groundwater in each monitoring well was purged using a peristaltic pump and dedicated high-density polyethylene (HDPE) sample tubing. Water quality parameters were measured in 5-minute increments until the following stabilization criteria were met for three successive readings:

- Temperature ± 1°C
- Specific conductance ± 3%
- pH ± 0.1 units
- Dissolved oxygen ± 10%
- Turbidity ± 10%, or <10 nephelometric turbidity units (NTUs)

Water quality parameter measurements and field observations during sampling were recorded on groundwater sampling forms, which are provided in **Appendix A**.

Groundwater samples were collected directly from dedicated sample tubing into laboratory-supplied sample bottles. For quality assurance/quality control (QA/QC) purposes, a field blank, a trip blank, a field duplicate sample, and a matrix spike/matrix spike duplicate pair sample were collected. The samples were submitted to Eurofins Test America (Buffalo) for the following analyses:

- PFAS via method E537(M)
- 1,4-dioxane via method SW8270D SIM
- VOCs via method SW8260C
- PAHs via method 8270D

3.2 Groundwater Analytical Results – 2022

Groundwater samples were collected from MW-04-06, MW-06-09, MW-06-10, MW-PAR-08, and MW-PAR-09. The laboratory analytical results are presented in **Table 2** and **Figure 3**. VOC and semivolatile organic compound (SVOC) concentrations were compared to NYSDEC Class GA Ambient Water Quality Standards (AWQS), which are listed in the Division of Water Technical and Operational Guidance Series (1.1.1). The AWQS are referred to as "criteria" in the following paragraphs.

Groundwater analytical results for target VOCs exceeded criteria in MW-PAR-08. The highest detection for a single analyte was 51 micrograms per liter (ug/L) of benzene in MW-PAR-08. VOCs concentrations in MW-04-06, MW-06-09, MW-06-10, and MW-PAR-09 were below detection limits.

The concentrations of BTEX were summed for each of the groundwater samples collected. The highest concentrations of BTEX was 63.4 ug/L in MW-PAR-08.

Groundwater analytical results for target PAHs did not exceed criteria in any of the monitoring wells. The highest detection for a single analyte was 9.0 ug/L of acenaphthene in MW-PAR-08.

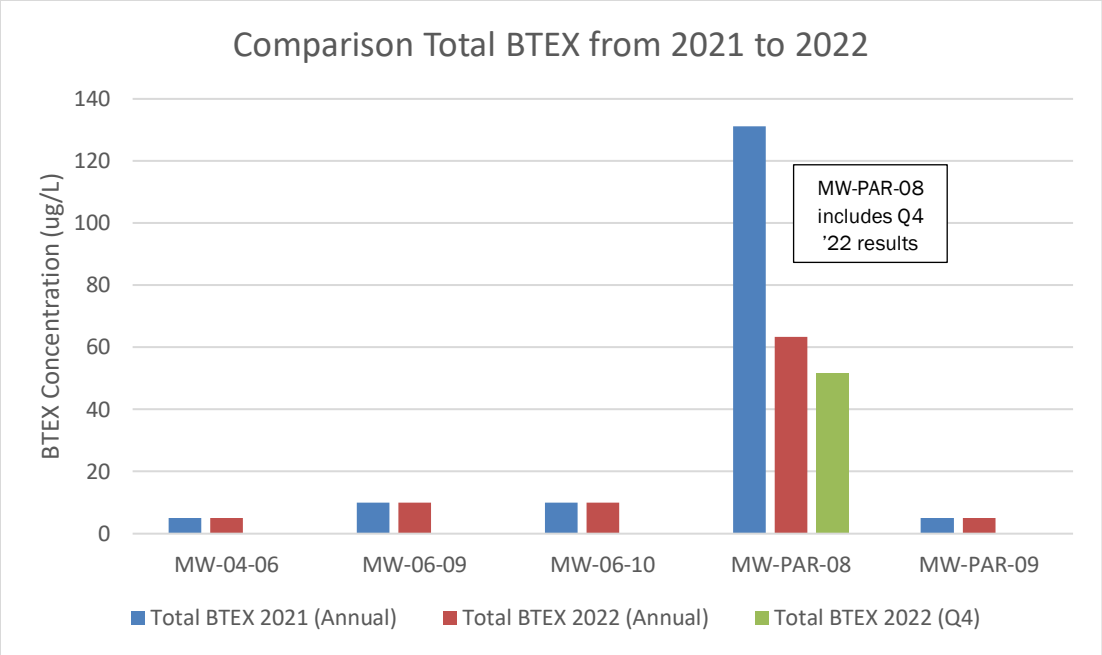
3.3 Quality Control and Data Validation

Data validation was performed on the groundwater samples referenced above in accordance with the analytical methodologies and USEPA Standard Operating Procedures (SOPs). All data were considered usable following data validation.

Validated analytical results from QA/QC samples are included in **Table 2**. A Data Usability and Summary Report (DUSR) has been prepared for this Site and is included as **Appendix B**. Individual laboratory reports are included in **Appendix C.**

3.4 Next Steps

Site COCs were observed to exceed criteria in analytical results from MW-PAR-08, however BTEX concentrations appear to be decreasing since the initial groundwater sampling event in 2021, as shown in the bar chart below. Parsons recommends continuing sampling MW-PAR-08 on a quarterly basis to evaluate the nature of BTEX concentrations in the well. Quarterly monitoring will continue in 2023.



Groundwater sampling of the remaining monitoring wells will remain consistent with the SMP and continue on an annual basis. The next annual groundwater sampling event is expected to occur late in the third quarter or early in the fourth quarter of 2023.

4.0 NAPL Removal

Absorbent socks are being used to recover NAPL within all recovery wells and the two collection sumps that are part of the collection trench[1] at the Site. NAPL accumulation is measured using an electronic oil-water interface probe (EIP), and absorbent socks are visually inspected for indications of free product during sock removal and replacement. The amount of NAPL accumulating within each recovery well and the sumps appear to be minimal since no smearing or staining has been observed on the absorbent socks during replacement events. This is consistent with observations during well installation, with no evidence of NAPL observed during bedrock core evaluation.

Absorbent socks were replaced in January 2022, May 2022, September 2022, and November 2022. Future absorbent sock replacement will continue to occur on a quarterly basis. Initially, absorbent socks were 3 inches in diameter and 5 feet long, and were deployed such that the top of the absorbent sock extended approximately six inches above the top of the sump. The sock dimensions changed in September 2022 to be 1.5 inches in diameter and 2 feet in length during the quarter three removal event. The new sock dimensions allow for more effective sock deployment and recovery and are sufficient for the smaller quantities of NAPL observed in the wells at the Site.

NAPL accumulation in each recovery well will continue to be monitored periodically via gauging with an EIP. Absorbent socks will be removed from each well several days in advance of gauging activities to allow water levels to recover to static levels and allow time for NAPL to accumulate within the sump. Should NAPL accumulation appear to increase during future monitoring events, alternative NAPL removal methods will be evaluated and implemented as necessary.

5.0 Monitoring and Maintenance

5.1 Vegetation Monitoring and Invasive Species Treatment

Monitoring activities performed included a comprehensive vegetation plot analysis, which indicated that Site is currently meeting performance goals for perennial vegetative cover. Maintenance activities performed in 2022 included treatment of isolated patches of Japanese knotweed (*Reynoutria japonica*), an invasive species. Specific efforts that were completed in 2022 include the summarized activities below and are represented in a photographic log provided in **Appendix D.**

- July 9, 2022: An invasive species reconnaissance Site visit was performed. Several isolated patches of Japanese knotweed were identified.
- August 26, 2022: A comprehensive vegetation assessment was performed.
- September 23, 2022: The herbicide Rodeo® was applied at two percent concentration to isolated patches of Japanese knotweed (**Figure 4**) that were observed during the June reconnaissance.

[1] A NAPL collection trench was installed on the south bank of the Owasco Outlet and within the outlet at the interface where excavation was completed to competent bedrock and where excavation was completed to fractured bedrock.

The third year of comprehensive vegetation assessment was performed on August 26, 2022 to determine whether seeded and planted areas of the Site are on track to meet performance goals. Five 1-square-meter (m^2) plots were selected across the Site to represent the plant community as accurately as possible (**Figure 4**). Vegetation plots surveyed commonly contained the perennial native grasses Canada wildrye (*Elymus canadensis*) and switchgrass (*Panicum virgatum*). Overall percent cover of seeded areas was 95 percent, exceeding the performance goal of 85 percent cover.

Trees and shrubs that were planted in 2018 were also inventoried to determine survival rates. Overall, 37 percent of planted shrubs were found surviving on Site. Based on Site conditions and typical outcomes for small potted woody plantings, this rate of survival is consistent with expectations. Red chokeberry (Aronia arbutifolia) had the highest rate of survival at 53 percent and speckled alder (*AInus incana* ssp. *rugosa*) had the lowest rate of survival at 7 percent. Overall, 10 percent of planted trees were found surviving on Site. Black willow (*Salix nigra*) and silver maple (*Acer saccharinum*) had the highest rate of survival at 20 percent and cottonwood (*Populus deltoides*) and red maple (*Acer rubrum*) had the lowest rate of survival at zero percent.

In accordance with the SMP, invasive species control will continue at the Site through 2024. The isolated patches of Japanese knotweed that were treated in 2022 were significantly smaller than those treated in 2021, showing that invasive species control efforts have been effective in reducing invasive species on the Site. Following the invasive species treatment performed in 2022, It is expected that invasive species cover will continue to decrease. In addition, the annual vegetation survey results show that the ecological buffer zone is already exceeding the vegetation performance goal of 85 percent cover. In accordance with the SMP, the annual vegetation survey will be conducted annually through 2024.

5.2 Erosion Inspection

In accordance with the SMP, a sitewide inspection was performed on August 26, 2022, to assess the general conditions of the Site, the condition and effectiveness of the engineering controls, and compliance with the institutional controls. The Site was observed to be in good condition, with no bare areas or erosion. No maintenance or follow up actions are recommended. The inspection form is included as **Appendix E** of this document.

Encl: Figure 1 – Site Layout
Figure 2a – Groundwater Flow Direction (Overburden)
Figure 2b – Groundwater Flow Direction (Bedrock)
Figure 3 – Groundwater Sampling Results
Figure 4 – Vegetation Plots and Invasive Species Areas
Table 1 – Well Gaging Data (2022)
Table 2 – Groundwater and QC Analytical Result Summary (2022)

Appendix A – Groundwater Sampling Logs
Appendix B – Data Usability Summary Report (2022)
Appendix C – Eurofins TestAmerica Level 2 Laboratory Analytical Reports
Appendix D –Photographic Log
Appendix E –Site Management Forms

PARSONS

cc:

Ray D'Hollander (Parsons)
Zack Cornish (Parsons)

Figures

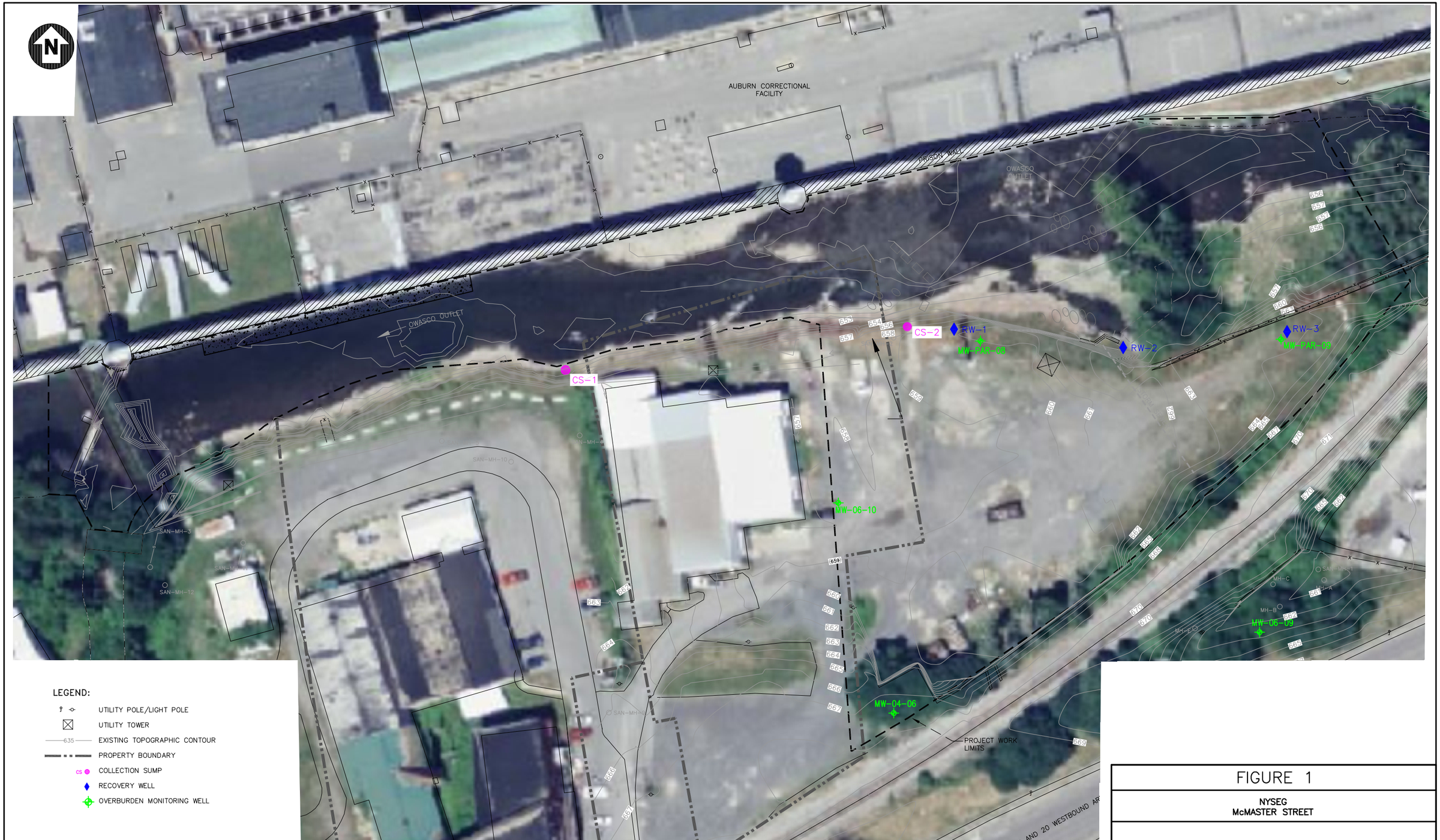


FIGURE 1

NYSEG
McMASTER STREET

SITE LAYOUT

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\IBERDROLA_AVANGRID\452562 & 452563 AUBURN CLARK & MCMASTER STREETS\07 CAD\MCMASTER\O&M-2022\452563-OM-001.DWG
PLOT DATE: 2/9/2022 4:13 PM PLOTTED BY: RUSSO, JILL [US-US]

LEGEND:

- UTILITY POLE/LIGHT POLE
- UTILITY TOWER
- 635 EXISTING TOPOGRAPHIC CONTOUR
- PROPERTY BOUNDARY
- CS COLLECTION SUMP
- RECOVERY WELL
- OVERBURDEN MONITORING WELL

NOTE:

1. THE REFERENCE ELEVATION FOR MW-06-10 WAS ESTIMATED FROM A DIGITAL ELEVATION MODEL FROM CORNELL UNIVERSITY OF GEOSPATIAL INFORMATION REPOSITORY.

60 30 0 60 120

SCALE: 1"=60'

FIGURE 2A

NYSEG
McMASTER STREET

GROUNDWATER FLOW DIRECTION (OVERBURDEN)

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\IBERDROLA_AVANGRID\452562 & 452563 AUBURN CLARK & MCMASTER STREETS\07 CAD\MCMASTER\O&M-2023\452563-OM-2023-OB.DWG
PLOT DATE: 4/25/2023 11:34 AM PLOTTED BY: RUSSO, JILL [US-US]

60 30 0 60 120

SCALE: 1"=60'

FIGURE 2B

NYSEG
McMASTER STREET

GROUNDWATER FLOW DIRECTION (BEDROCK)

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\IBERDROLA_AVANGRID\452562 & 452563 AUBURN CLARK & MCMASTER STREETS\07 CAD\MCMASTER\O&M-2022\452563-OM-004.DWG
PLOT DATE: 7/27/2023 11:42 AM PLOTTED BY: RUSSO, JILL [US-US]

Sample ID	MW-PAR-08		MW-PAR-08	
Matrix	WG		WG	
Sample Date	9/21/2022		11/28/2022	
Volatile Organics (BTEX)				
Benzene	51		42	
Ethylbenzene	5.1		4.2	
Toluene	1.3	J	1.1	
Xylenes	6		4.5	
Semivolatile Organics (PAHs)				
Naphthalene	1.9	J	14	

Sample ID	MW-PAR-09	
Matrix	WG	
Sample Date	9/21/2022	
Volatile Organics (BTEX)		
Benzene	1	U
Ethylbenzene	1	U
Toluene	1	U
Xylenes	2	U
Semivolatile Organics (PAHs)		
Naphthalene	5	U

Sample ID	MW-06-10		MW-06-10	
Matrix	WG		WG	
Sample Date	9/21/2022		9/21/2022	
Volatile Organics (BTEX)				
Benzene	2	U	2	U
Ethylbenzene	2	U	2	U
Toluene	2	U	2	U
Xylenes	4	U	4	U
Semivolatile Organics (PAHs)				
Naphthalene	0.89	J	0.98	J

Sample ID	MW-06-09	
Matrix	WG	
Sample Date	9/21/2022	
Volatile Organics (BTEX)		
Benzene	2	U
Ethylbenzene	2	U
Toluene	2	U
Xylenes	4	U
Semivolatile Organics (PAHs)		
Naphthalene	5.4	U

Sample ID	MW-04-06
Matrix	WG
Sample Date	9/21/2022
Volatile Organics (BTEX)	
Benzene	1 U
Ethylbenzene	1 U
Toluene	1 U
Xylenes	2 U
Semivolatile Organics (PAHs)	
Naphthalene	5 U

LEGEND:

- UTILITY POLE/LIGHT POLE
- UTILITY TOWER
- 635 EXISTING TOPOGRAPHIC CONTOUR
- PROPERTY BOUNDARY
- OVERBURDEN MONITORING WELL

60 30 0 60 120

SCALE: 1"=60'

FIGURE 3

NYSEG
McMASTER STREET

GROUNDWATER ANALYTICAL RESULTS SUMMARY

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\IBERDROLA_AVANGRID\452562 & 452563 AUBURN CLARK & MCMASTER STREETS\07 CAD\MCMASTER\O&M-2022\452563-OM-001-2022.DWG
PLOT DATE: 12/7/2022 3:27 PM PLOTTED BY: RUSSO, JILL [US-US]

NOTES:

1. SURFACE SHOWN PROVIDED BY THEW ASSOC. PHASE IV FINISH GRADE.

LEGEND:

- EDGE OF WATER
- EXISTING TOPOGRAPHIC CONTOUR
- SITE BOUNDARY
- UTILITY TOWER
- AREA OF INVASIVE SPECIES MANAGEMENT
- AREAS TREATED IN 2022
- VEGETATION PLOT
- BANK STONE
- BANK TOE PROTECTION
- VEGETATED BANK

FIGURE 4

NYSEG
McMASTER STREET FORMER MGP SITE
AUBURN, NEW YORK

VEGETATION PLOTS AND INVASIVE SPECIES TREATMENT AREAS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\IBERDROLA_AVANGRID\449526 AUBURN MCMASTER STREET 2018\07 CAD ASBUILT SURVEYS\CAD\MCMASTER-VEG-PLOT-2022.DWG
PLOT DATE: 10/28/2022 4:51 PM PLOTTED BY: RUSSO, JILL [US-US]

Tables

Table 1 Well Gauging Data (2022)

Well ID	TOC Elevation (ft)	Screened Interval (feet bgs)	Sump Interval (feet)	Hydrologic Unit Code [3]	Water Depth (ft btoc) January 2022	Product Thickness (ft) January 2022	Water Depth (ft btoc) May 2022	Product Thickness (ft) May 2022	Water Depth (ft btoc) September 2022	Product Thickness (ft) September 2022	Water Depth (ft btoc) November 2022	Product Thickness (ft) November 2022
RW-01	658.81 [1]	9.8 - 19.8	19.8 - 25.1	BR	7.9	-	7.91	-	5.75	-	5.75	-
RW-02	659.59 [1]	6.9 - 16.9	16.9 - 22.3	BR	6.65	-	7.04	-	5.95	-	5.79	-
RW-03	663.4 [1]	8.1 - 18.1	18.1 - 23.2	BR	9.8	-	9.6	-	8.9	-	9.23	-
MW-PAR-08	658.53 [1]	6.5 - 11.5	NA	OB	NM*	NM*	NM*	NM*	5.14	NM*	NM*	NM*
MW-PAR-09	663.22 [1]	6.0 - 16.0	NA	OB	NM*	NM*	NM*	NM*	8.93	NM*	NM*	NM*
MW-04-06	668.07 [2]	4.9 - 14.9	NA	OB	NM*	NM*	NM*	NM*	9.1	NM*	NM*	NM*
MW-06-09	662.34 [2]	5.2 - 15.2	NA	OB	NM*	NM*	NM*	NM*	6.52	NM*	NM*	NM*
MW-06-10	675.76 [2]	3.0 - 8.0	NA	OB	NM*	NM*	NM*	NM*	2.5	NM*	NM*	NM*

Notes:
1. Top of Casing (TOC) elevation was surveyed using the North American Vertical Datum of 1988 (NAVD88)
2. Top of Casing (TOC) elevation was surveyed in feet above mean sea level (amsl)
3. Hydrologic Unit Code refers to aquifer well is screened/set in, overburden (OB) or bedrock (BR).
4. No product has been observed or measured in any recovery/monitoring wells during periodic monitoring activities
5. NM*- Not Measured

Table 2 Analytical and QC Summary (2022)

				Location ID	EB-09212022		TRIP BLANK-09212022-3		MW-04-06		MW-06-09		MW-06-10	
				Field Sample ID	WQ		WQ		MW-04-06-09212022		MW-06-09-09212022		BD-09212022	
				Matrix	480-201944-7		480-201944-8		WG		WG		WG	
				Lab Sample ID	4802019441		4802019441		480-201944-5		480-201944-6		480-201944-2	
				SDG	9/21/2022		9/21/2022		4802019441		4802019441		4802019441	
				Sample Date	EB		TB		9/21/2022		9/21/2022		9/21/2022	
				Sample Type Code					N		N		FD	
Analytical Method	Chemical Name	CAS_RN	Unit	NYSDEC Class GA										
SW8260C	Benzene	71-43-2	ug/L	1	1	U	1	U	1	U	2	U	2	U
SW8260C	Ethylbenzene	100-41-4	ug/L	5	1	U	1	U	1	U	2	U	2	U
SW8260C	Toluene	108-88-3	ug/L	5	1	U	1	U	1	U	2	U	2	U
SW8260C	Xylenes	1330-20-7	ug/L	5	2	U	2	U	2	U	4	U	4	U
SW8270D	Acenaphthene	83-32-9	ug/L	20	5.4	U			5	U	5.4	U	1.8	J
SW8270D	Acenaphthylene	208-96-8	ug/L		5.4	U			5	U	5.4	U	5.4	U
SW8270D	Anthracene	120-12-7	ug/L	50	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Benzo(A)Anthracene	56-55-3	ug/L	0.002	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Benzo(A)Pyrene	50-32-8	ug/L	0	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Benzo(B)Fluoranthene	205-99-2	ug/L	0.002	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Benzo(G,H,I)Perylene	191-24-2	ug/L		5.4	U			5	U	5.4	U	5.4	U
SW8270D	Benzo(K)Fluoranthene	207-08-9	ug/L	0.002	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Chrysene	218-01-9	ug/L	0.002	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Dibenz(A,H)Anthracene	53-70-3	ug/L		5.4	U			5	U	5.4	U	5.4	U
SW8270D	Fluoranthene	206-44-0	ug/L	50	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Fluorene	86-73-7	ug/L	50	5.4	U			5	U	5.4	U	1	J
SW8270D	Indeno(1,2,3-C,D)Pyrene	193-39-5	ug/L	0.002	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Naphthalene	91-20-3	ug/L	10	5.4	U			5	U	5.4	U	0.89	J
SW8270D	Phenanthrene	85-01-8	ug/L	50	5.4	U			5	U	5.4	U	5.4	U
SW8270D	Pyrene	129-00-0	ug/L		5.4	U			5	U	5.4	U	5.4	U

Table 2 Analytical and QC Summary (2022)

				Location ID	MW-06-10		MW-PAR-08		MW-PAR-08		MW-PAR-09	
				Field Sample ID	MW-06-10-09212022		MW-PAR-08-09212022		MW-PAR-08-11282022		MW-PAR-09-09212022	
				Matrix	WG		WG		WG		WG	
				Lab Sample ID	480-201944-1		480-201944-3		480-204174-1		480-201944-4	
				SDG	4802019441		4802019441		4802041741		4802019441	
				Sample Date	9/21/2022		9/21/2022		11/28/2022		9/21/2022	
				Sample Type Code	N		N		N		N	
Analytical Method	Chemical Name	CAS_RN	Unit	NYSDEC Class GA								
SW8260C	Benzene	71-43-2	ug/L	1	2	U	51		42		1	U
SW8260C	Ethylbenzene	100-41-4	ug/L	5	2	U	5.1		4.2		1	U
SW8260C	Toluene	108-88-3	ug/L	5	2	U	1.3	J	1.1		1	U
SW8260C	Xylenes	1330-20-7	ug/L	5	4	U	6		4.5		2	U
SW8270D	Acenaphthene	83-32-9	ug/L	20	2	J	9		5.7		5	U
SW8270D	Acenaphthylene	208-96-8	ug/L		5.2	U	2.8	J	2	J	5	U
SW8270D	Anthracene	120-12-7	ug/L	50	5.2	U	1.7	J	0.58	J	5	U
SW8270D	Benzo(A)Anthracene	56-55-3	ug/L	0.002	5.2	U	5	U	5	U	5	U
SW8270D	Benzo(A)Pyrene	50-32-8	ug/L	0	5.2	U	5	U	5	U	5	U
SW8270D	Benzo(B)Fluoranthene	205-99-2	ug/L	0.002	5.2	U	5	U	5	U	5	U
SW8270D	Benzo(G,H,I)Perylene	191-24-2	ug/L		5.2	U	5	U	5	U	5	U
SW8270D	Benzo(K)Fluoranthene	207-08-9	ug/L	0.002	5.2	U	5	U	5	U	5	U
SW8270D	Chrysene	218-01-9	ug/L	0.002	5.2	U	5	U	5	U	5	U
SW8270D	Dibenz(A,H)Anthracene	53-70-3	ug/L		5.2	U	5	U	5	U	5	U
SW8270D	Fluoranthene	206-44-0	ug/L	50	5.2	U	2.7	J	1.6	J	5	U
SW8270D	Fluorene	86-73-7	ug/L	50	1.1	J	2.6	J	2.9	J	5	U
SW8270D	Indeno(1,2,3-C,D)Pyrene	193-39-5	ug/L	0.002	5.2	U	5	U	5	U	5	U
SW8270D	Naphthalene	91-20-3	ug/L	10	0.98	J	1.9	J	14		5	U
SW8270D	Phenanthrene	85-01-8	ug/L	50	5.2	U	1.9	J	3	J	5	U
SW8270D	Pyrene	129-00-0	ug/L		5.2	U	1.8	J	1.1	J	5	U

Appendix A – Groundwater Sampling Logs

Low Flow Ground Water Sampling Log

Date	09/21/22	Personnel	Joe Sullivan	Weather	Sunny, 82
Site Name	McMaster	Evacuation Method	Geopump	Well #	MW-04-06
Site Location	Auburn NY	Sampling Method	Low Flow	Project #	452562

Well information:

Depth of Well	14.45 ft.	*Measurements taken from:		
Depth to Water	9.1 ft.		X	Top of Well Casing
H_{wc}	5.35 ft.			Top of Protective Casing
Depth to Intake	12 ft.			(Other, Specify)

Start Purge Time: 1515

		10%	0.1	3%	10 mV	10%	10%	100 - 500 mL/min
Elapsed Time (min)	**Depth to Water (ft)**	**Temperature (celsius)**	**pH**	**Conductivity (ms/cm)**	**Oxidation Reduction Potential**	**Dissolved Oxygen (mg/L)**	**Turbidity (NTU)**	**Flow Rate (mL/min)**
0	9.1	26.31	6.92	1.12	89	7.68	10.6	200
5	9.28	24.06	6.66	0.965	105	3.48	0	200
10	9.28	22.82	6.61	0.93	109	3.15	0	200
15	9.28	21.05	6.59	0.95	113	3.41	0	200
20	9.28	20.26	6.59	0.951	114	3.43	0	200
25	9.28	20.43	6.58	0.931	116	3.34	0	200

End Purge Time: 1320

Water Sample

Time Collected: 1325

Total volume of purged water removed: 1 (gallons)

Physical appearance at start:

Color Clear
Odor None
Sheen/Free Product None

Physical appearance at start:

Color Clear
Odor None
Sheen/Free Product None

Samples: (See list of parameters collected below) **No MS/MSD/Field Dupe**

MS/MSD/Field Dup?

Sample	Container Type	# Collected	Field Filtered	Preservative	Container pH
BTEX	40 mL VOA	3	no	HCL	-
TCL VOCs	40 mL VOA	3	no	HCL	-
PAH	250 Amber	2	no	None	

Low Flow Ground Water Sampling Log

Date	09/21/22	Personnel	Zack Cornish	Weather	Sunny, 75
Site Name	McMaster	Evacuation Method	Geopump	Well #	MW-06-09
Site Location	Auburn NY	Sampling Method	Low Flow	Project #	452562

Well information:

Depth of Well	14.38 ft.	*Measurements taken from:		
Depth to Water	6.52 ft.		X	Top of Well Casing
H_{wc}	7.86 ft.			Top of Protective Casing
Depth to Intake	10.2 ft.			(Other, Specify)

Start Purge Time: 1515

		10%	0.1	3%	10 mV	10%	10%	100 - 500 mL/min
Elapsed Time (min)	**Depth to Water (ft)**	**Temperature (celsius)**	**pH**	**Conductivity (ms/cm)**	**Oxidation Reduction Potential**	**Dissolved Oxygen (mg/L)**	**Turbidity (NTU)**	**Flow Rate (mL/min)**
10	7.1	14.94	7.47	4.8	-172	0	170	300
15	7.41	15.83	7.46	4.75	-171	0	250	200
20	7.63	15.86	7.46	4.77	-166	0	84	200
25	7.71	15.82	7.51	4.77	-173	0	31	200
30	7.85	15.75	7.53	4.77	-175	0	20	200
35	7.91	15.54	7.54	4.76	-178	0	10	200
40	7.99	15.44	7.54	4.76	-176	0	12	200
45	8.08	15.55	7.54	4.75	-175	0	11	200

End Purge Time: 1218

Water Sample

Time Collected: 1220

Total volume of purged water removed: 2.5 (gallons)

Physical appearance at start:

Color Silty
Odor None
Sheen/Free Product None

Physical appearance at start:

Color Silty
Odor None
Sheen/Free Product None

Samples: (See list of parameters collected below) **No MS/MSD/Field Dupe**

MS/MSD/Field Dup?

Sample	Container Type	# Collected	Field Filtered	Preservative	Container pH
BTEX	40 mL VOA	3	no	HCL	-
TCL VOCs	40 mL VOA	3	no	HCL	-
PAH	250 Amber	2	no	None	

Low Flow Ground Water Sampling Log

Date	09/21/22	Personnel	Zack Cornish	Weather	Sunny, 75
Site Name	McMaster	Evacuation Method	Geopump	Well #	MW-06-10
Site Location	Auburn NY	Sampling Method	Low Flow	Project #	452562

Well information:

Depth of Well	7.63 ft.	*Measurements taken from:		
Depth to Water	2.5 ft.		X	Top of Well Casing
H_{wc}	5.13 ft.			Top of Protective Casing
Depth to Intake	5 ft.			(Other, Specify)

Start Purge Time: 1515

		10%	0.1	3%	10 mV	10%	10%	100 - 500 mL/min
Elapsed Time (min)	**Depth to Water (ft)**	**Temperature (celsius)**	**pH**	**Conductivity (ms/cm)**	**Oxidation Reduction Potential**	**Dissolved Oxygen (mg/L)**	**Turbidity (NTU)**	**Flow Rate (mL/min)**
5	2.58	17.45	7.06	1.44	-161	4.34	77	200
10	2.58	17.6	7.05	1.42	-164	0.13	60	200
15	2.58	17.68	7.04	1.4	-167	0	30.3	200
20	2.58	17.7	7.03	1.41	-167	0	23.3	200
25	2.58	17.8	7.01	1.41	-166	0	13.3	200
30	2.58	17.88	6.99	1.42	-165	0	15.5	200
35	2.58	17.84	6.99	1.42	-165	0	14.6	200

End Purge Time: 0955

Water Sample

Time Collected: 1000

Physical appearance at start:

Color Clear

Odor Hydrocarbon

Sheen/Free Product None

Total volume of purged water removed: 3 (gallons)

Physical appearance at start:

Color Clear

Odor Hydrocarbon

Sheen/Free Product None

Samples: (See list of parameters collected below) **No MS/MSD/Field Dupe**

MS/MSD/Field Dup?

Collect MS/MSD

Collect BD-09212022 @ 1015

Sample	Container Type	# Collected	Field Filtered	Preservative	Container pH
BTEX	40 mL VOA	3	no	HCL	-
TCL VOCs	40 mL VOA	3	no	HCL	-
PAH	250 Amber	2	no	None	

Low Flow Ground Water Sampling Log

Date	09/21/22	Personnel	Joe Sullivan	Weather	Sunny, 77
Site Name	McMaster	Evacuation Method	Geopump	Well #	MW-PAR-08
Site Location	Auburn NY	Sampling Method	Low Flow	Project #	452562

Well information:

Depth of Well	11.08 ft.	*Measurements taken from:		
Depth to Water	5.14 ft.		X	Top of Well Casing
H_{wc}	5.94 ft.			Top of Protective Casing
Depth to Intake	9 ft.			(Other, Specify)

Start Purge Time: 1515

		10%	0.1	3%	10 mV	10%	10%	100 - 500 mL/min
Elapsed Time (min)	**Depth to Water (ft)**	**Temperature (celsius)**	**pH**	**Conductivity (ms/cm)**	**Oxidation Reduction Potential**	**Dissolved Oxygen (mg/L)**	**Turbidity (NTU)**	**Flow Rate (mL/min)**
0	6.44	19.38	7.59	0.604	-81	2.6	0	250
5	5.37	19.78	7.39	0.578	-100	2.35	0	150
10	5.35	20.04	7.32	0.571	-102	2.05	0	150
15	5.4	20.37	7.25	0.58	-98	2.01	0	150
20	5.37	20.45	7.23	0.586	-97	1.95	0	150
25	5.37	20.88	7.25	0.585	-98	1.89	0	150
30	5.37	20.73	7.22	0.588	-96	1.72	0	150
35	5.37	20.8	7.2	0.587	-95	1.74	0	150

End Purge Time: 0937

Water Sample

Time Collected: 0950

Total volume of purged water removed: 3 (gallons)

Physical appearance at start:
Color Clear
Odor None
Sheen/Free Product None

Physical appearance at start:
Color Clear
Odor None
Sheen/Free Product None

Samples: (See list of parameters collected below) **No MS/MSD/Field Dupe**

MS/MSD/Field Dup?

Sample	Container Type	# Collected	Field Filtered	Preservative	Container pH
BTEX	40 mL VOA	3	no	HCL	-
TCL VOCs	40 mL VOA	3	no	HCL	-
PAH	250 Amber	2	no	None	

Low Flow Ground Water Sampling Log

Date	09/21/22	Personnel	Joe Sullivan	Weather	Sunny, 78
Site Name	McMaster	Evacuation Method	Geopump	Well #	MW-PAR-09
Site Location	Auburn NY	Sampling Method	Low Flow	Project #	452562

Well information:

Depth of Well	15.67 ft.	*Measurements taken from:		
Depth to Water	8.93 ft.		X	Top of Well Casing
H_{wc}	6.74 ft.			Top of Protective Casing
Depth to Intake	13 ft.			(Other, Specify)

Start Purge Time: 1515

		10%	0.1	3%	10 mV	10%	10%	100 - 500 mL/min
Elapsed Time (min)	**Depth to Water (ft)**	**Temperature (celsius)**	**pH**	**Conductivity (ms/cm)**	**Oxidation Reduction Potential**	**Dissolved Oxygen (mg/L)**	**Turbidity (NTU)**	**Flow Rate (mL/min)**
0	8.93	18.79	6.62	1.16	-100	7.36	352	200
5	8.9	18.25	6.58	1.18	-106	6.41	120	150
10	8.89	20.42	6.55	1.14	-111	5.8	35.5	150
15	8.89	20.24	6.54	1.15	-112	4.85	22.3	150
20	8.89	20.49	6.53	1.15	-115	4.42	12.7	150
25	8.89	20.2	6.53	1.15	-113	4.2	8.5	150

End Purge Time: 1150

Water Sample

Time Collected: 1155

Total volume of purged water removed: 4 (gallons)

Physical appearance at start:

Color Suspended Solids
Odor None
Sheen/Free Product None

Physical appearance at start:

Color Clear
Odor None
Sheen/Free Product None

Samples: (See list of parameters collected below) **No MS/MSD/Field Dupe**

MS/MSD/Field Dup?

Sample	Container Type	# Collected	Field Filtered	Preservative	Container pH
BTEX	40 mL VOA	3	no	HCL	-
TCL VOCs	40 mL VOA	3	no	HCL	-
PAH	250 Amber	2	no	None	

Low Flow Ground Water Sampling Log

Date	11/28/22	Personnel	Joe Sullivan	Weather	Rain, 42
Site Name	McMaster	Evacuation Method	Geopump	Well #	MW-PAR-08
Site Location	Auburn NY	Sampling Method	Low Flow	Project #	452562

Well information:

Depth of Well	9.5 ft.	*Measurements taken from:	
Depth to Water	5.1 ft.	X	Top of Well Casing
H_{wc}	4.4 ft.		Top of Protective Casing
Depth to Intake	7 ft.		(Other, Specify)

Start Purge Time: 1515

		10%	0.1	3%	10 mV	10%	10%	100 - 500 mL/min
Elapsed Time (min)	**Depth to Water (ft)**	**Temperature (celsius)**	**pH**	**Conductivity (ms/cm)**	**Oxidation Reduction Potential**	**Dissolved Oxygen (mg/L)**	**Turbidity (NTU)**	**Flow Rate (mL/min)**
0	5.12	10.43	7.58	0.54	17	0	10.9	150
5	5.12	10.46	7.68	0.484	-10	0.74	4.3	150
10	5.24	10.29	7.67	0.467	-10	1.55	2.1	150
15	5.36	10.35	7.64	0.472	-16	1.57	2.6	150
20	5.48	10.25	7.64	0.468	-21	1.83	1.8	150
25	5.48	10.22	7.62	0.471	-19	1.9	1.6	150
30	5.48	10.16	7.58	0.467	-22	1.93	1.4	150
35	5.48	10.1	7.57	0.472	-21	1.63	1.3	150

End Purge Time: 1050

Water Sample

Time Collected: 1050

Total volume of purged water removed: 4 (gallons)

Physical appearance at start:
Color Light Red
Odor None
Sheen/Free Product None

Physical appearance at start:
Color Clear
Odor None
Sheen/Free Product None

Samples: (See list of parameters collected below) **No MS/MSD/Field Dupe**

MS/MSD/Field Dup?

Sample	Container Type	# Collected	Field Filtered	Preservative	Container pH
BTEX	40 mL VOA	3	no	HCL	-
PAH	250 Amber	2	no	None	-

Appendix B – Data Usability Summary Report (2022)

DATA USABILITY SUMMARY REPORT

McMASTER STREET
FORMER MANUFACTURED GAS PLANT SITE
AUBURN, NEW YORK

Prepared For:

NEW YORK STATE ELECTRIC AND GAS CORPORATION

Prepared By:

PARSONS

301 Plainfield Road, Suite 350
Syracuse, New York 13212

DECEMBER 2022

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LIST OF ATTACHMENTS

SECTION 1 DATA USABILITY SUMMARY

Groundwater samples were collected from the Iberdrola McMaster Street site in Auburn, New York on September 21, 2022 and November 28, 2022. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan,
- Analytical methodologies, and
- USEPA Region II Standard Operating Procedures (SOPs) for organic data review.

The analytical laboratory for this project was Eurofins – Environment Testing America (Eurofins) in Buffalo, New York. This laboratory is certified to perform project analyses through the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

1.1 Laboratory Data Packages

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 6-10 days for the project samples.

The data packages received from Eurofins were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized in Section 2.

1.2 Sampling and Chain-of-Custody

The samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received at Eurofins within one to two days of sampling. All samples were received intact and in good condition at the laboratory.

1.3 Laboratory Analytical Methods

The groundwater samples that were collected from the site were analyzed for the volatiles benzene, toluene, ethylbenzene, and xylenes (BTEX) and polynuclear aromatic hydrocarbons (PAHs). Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.2. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) are discussed for each analytical method in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

"U" - not detected at the value given,
"UJ" - estimated and not detected at the value given,
"J" - estimated at the value given,
"J+" - estimated biased high at the value given,
"J-" - estimated biased low at the value given,
"N" - presumptive evidence at the value given, and
"R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Volatile Organic Analysis

The project samples were analyzed for BTEX using the USEPA SW-846 8260C analytical method. The reported results for these samples did not require qualification resulting from data validation. The reported BTEX analytical results were 100% (i.e., usable) for the project data. PARCCS requirements were met.

1.3.2 Semivolatile Organic Analysis

The project samples were analyzed for PAHs using the USEPA SW-846 8270D analytical method. The reported results for these samples did not require qualification resulting from data validation. The reported PAHs analytical results were 100% complete (i.e., usable) for the project data. PARCCS requirements were met.

SECTION 2 DATA VALIDATION REPORT

2.1 Groundwater Samples

Data review has been completed for data packages generated by Eurofins containing groundwater samples collected from the site. Analytical results from these samples were contained within sample delivery groups (SDGs) 480-201944-1 and 480-204174-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data are presented in Attachment A.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic data review. This data validation and usability report is presented by analysis type.

2.1.1 BTEX

The following items were reviewed for compliancy in the BTEX analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and trip/equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All BTEX sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The BTEX data presented by Eurofins were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A.

2.1.2 PAHs

The following items were reviewed for compliancy in the PAH analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy

- LCS recoveries
- Laboratory method blank and equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of surrogate recoveries as discussed below.

Surrogate Recoveries

All sample surrogate recoveries were considered acceptable and within QC limits with the exception of the low surrogate recoveries for p-terphenyl-d14 (QC limit 60-148%R) in samples MW-06-10-09212022 (47%R), BD-09212022 (43%R), MW-PAR-08-09212022 (53%R), MW-PAR-09-09212022 (42%R), and MW-04-06-09212022 (46%R). Validation qualification was not required for the affected samples.

Usability

All PAH sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The PAH data presented by Eurofins were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A.

ATTACHMENT A – VALIDATED LABORATORY DATA

		Location ID		EB-09212022		TRIP BLANK-09212022-3		MW-04-06 MW-04-06-09212022		MW-06-09 MW-06-09-09212022		MW-06-10 BD-09212022		MW-06-10 MW-06-10-09212022	
		Field Sample ID													
		Matrix		WQ		WQ		WG		WG		WG		WG	
		Lab Sample ID		480-201944-7		480-201944-8		480-201944-5		480-201944-6		480-201944-2		480-201944-1	
		SDG		4802019441		4802019441		4802019441		4802019441		4802019441		4802019441	
		Sample Date		9/21/2022		9/21/2022		9/21/2022		9/21/2022		9/21/2022		9/21/2022	
		Sample Type Code		EB		TB		N		N		FD		N	
Analytical Method	Chemical Name	cas_rn	Unit												
SW8260C	Benzene	71-43-2	ug/L	1	U	1	U	1	U	2	U	2	U	2	U
SW8260C	Ethylbenzene	100-41-4	ug/L	1	U	1	U	1	U	2	U	2	U	2	U
SW8260C	Toluene	108-88-3	ug/L	1	U	1	U	1	U	2	U	2	U	2	U
SW8260C	Xylenes	1330-20-7	ug/L	2	U	2	U	2	U	4	U	4	U	4	U
SW8270D	Acenaphthene	83-32-9	ug/L	5.4	U			5	U	5.4	U	1.8	J	2	J
SW8270D	Acenaphthylene	208-96-8	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Anthracene	120-12-7	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Benzo(A)Anthracene	56-55-3	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Benzo(A)Pyrene	50-32-8	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Benzo(B)Fluoranthene	205-99-2	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Benzo(G,H,I)Perylene	191-24-2	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Benzo(K)Fluoranthene	207-08-9	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Chrysene	218-01-9	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Dibenz(A,H)Anthracene	53-70-3	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Fluoranthene	206-44-0	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Fluorene	86-73-7	ug/L	5.4	U			5	U	5.4	U	1	J	1.1	J
SW8270D	Indeno(1,2,3-C,D)Pyrene	193-39-5	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Naphthalene	91-20-3	ug/L	5.4	U			5	U	5.4	U	0.89	J	0.98	J
SW8270D	Phenanthrene	85-01-8	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U
SW8270D	Pyrene	129-00-0	ug/L	5.4	U			5	U	5.4	U	5.4	U	5.2	U

		Location ID		MW-PAR-08		MW-PAR-08		MW-PAR-09	
		Field Sample ID		MW-PAR-08-09212022		MW-PAR-08-11282022		MW-PAR-09-09212022	
		Matrix		WG		WG		WG	
		Lab Sample ID		480-201944-3		480-204174-1		480-201944-4	
		SDG		4802019441		4802041741		4802019441	
		Sample Date		9/21/2022		11/28/2022		9/21/2022	
		Sample Type Code		N		N		N	
Analytical Method	Chemical Name	cas_rn	Unit						
SW8260C	Benzene	71-43-2	ug/L	51		42		1	U
SW8260C	Ethylbenzene	100-41-4	ug/L	5.1		4.2		1	U
SW8260C	Toluene	108-88-3	ug/L	1.3	J	1.1		1	U
SW8260C	Xylenes	1330-20-7	ug/L	6		4.5		2	U
SW8270D	Acenaphthene	83-32-9	ug/L	9		5.7		5	U
SW8270D	Acenaphthylene	208-96-8	ug/L	2.8	J	2	J	5	U
SW8270D	Anthracene	120-12-7	ug/L	1.7	J	0.58	J	5	U
SW8270D	Benzo(A)Anthracene	56-55-3	ug/L	5	U	5	U	5	U
SW8270D	Benzo(A)Pyrene	50-32-8	ug/L	5	U	5	U	5	U
SW8270D	Benzo(B)Fluoranthene	205-99-2	ug/L	5	U	5	U	5	U
SW8270D	Benzo(G,H,I)Perylene	191-24-2	ug/L	5	U	5	U	5	U
SW8270D	Benzo(K)Fluoranthene	207-08-9	ug/L	5	U	5	U	5	U
SW8270D	Chrysene	218-01-9	ug/L	5	U	5	U	5	U
SW8270D	Dibenz(A,H)Anthracene	53-70-3	ug/L	5	U	5	U	5	U
SW8270D	Fluoranthene	206-44-0	ug/L	2.7	J	1.6	J	5	U
SW8270D	Fluorene	86-73-7	ug/L	2.6	J	2.9	J	5	U
SW8270D	Indeno(1,2,3-C,D)Pyrene	193-39-5	ug/L	5	U	5	U	5	U
SW8270D	Naphthalene	91-20-3	ug/L	1.9	J	14		5	U
SW8270D	Phenanthrene	85-01-8	ug/L	1.9	J	3	J	5	U
SW8270D	Pyrene	129-00-0	ug/L	1.8	J	1.1	J	5	U

Appendix C – Eurofins TestAmerica Level 2 Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 480-201944-1
Client Project/Site: Avangrid - McMaster Street
Revision: 1

For:
Parsons Corporation
301 Plainfield Road
Suite 350
Syracuse, New York 13212

Attn: Cathy Adamitis

Authorized for release by:
11/9/2022 2:24:23 PM
Rebecca Jones, Project Management Assistant I
(716)504-9884
Rebecca.Jones@et.eurofinsus.com

Designee for

John Schove, Project Manager II
(716)504-9838
John.Schove@et.eurofinsus.com

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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

Table of Contents

Definitions/Glossary

Client: Parsons Corporation
Job ID: 480-201944-1
Project/Site: Avangrid - McMaster Street

Qualifiers

GC/MS 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.
U	Indicates the analyte was analyzed for but not detected.

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.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

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: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Job ID: 480-201944-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-201944-1

Revision
This report has been revised to only include BTEX as the analyte list for method 8260C.

Receipt
The samples were received on 9/23/2022 10:30 AM. 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 3.4º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-PAR-08-09212022 (480-201944-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-06-10-09212022 (480-201944-1), MW-06-10-09212022 MS (480-201944-1[MS]), MW-06-10-09212022 MSD (480-201944-1[MSD]), BD-09212022 (480-201944-2) and MW-06-09-09212022 (480-201944-6). 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: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW-06-10-09212022 (480-201944-1), MW-06-10-09212022 MS (480-201944-1[MS]), MW-06-10-09212022 MSD (480-201944-1[MSD]), BD-09212022 (480-201944-2), MW-PAR-08-09212022 (480-201944-3), MW-PAR-09-09212022 (480-201944-4) and MW-04-06-09212022 (480-201944-5). These results have been reported and qualified.

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: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: MW-06-10-09212022 — Lab Sample ID: 480-201944-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	2.0	J	5.2	0.43	ug/L	1		8270D	Total/NA
Fluorene	1.1	J	5.2	0.38	ug/L	1		8270D	Total/NA
Naphthalene	0.98	J	5.2	0.79	ug/L	1		8270D	Total/NA

Client Sample ID: BD-09212022 — Lab Sample ID: 480-201944-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1.8	J	5.4	0.45	ug/L	1		8270D	Total/NA
Fluorene	1.0	J	5.4	0.39	ug/L	1		8270D	Total/NA
Naphthalene	0.89	J	5.4	0.83	ug/L	1		8270D	Total/NA

Client Sample ID: MW-PAR-08-09212022 — Lab Sample ID: 480-201944-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	51		2.0	0.82	ug/L	2		8260C	Total/NA
Ethylbenzene	5.1		2.0	1.5	ug/L	2		8260C	Total/NA
Toluene	1.3	J	2.0	1.0	ug/L	2		8260C	Total/NA
Xylenes, Total	6.0		4.0	1.3	ug/L	2		8260C	Total/NA
Acenaphthene	9.0		5.0	0.41	ug/L	1		8270D	Total/NA
Acenaphthylene	2.8	J	5.0	0.38	ug/L	1		8270D	Total/NA
Anthracene	1.7	J	5.0	0.28	ug/L	1		8270D	Total/NA
Fluoranthene	2.7	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	2.6	J	5.0	0.36	ug/L	1		8270D	Total/NA
Naphthalene	1.9	J	5.0	0.76	ug/L	1		8270D	Total/NA
Phenanthrene	1.9	J	5.0	0.44	ug/L	1		8270D	Total/NA
Pyrene	1.8	J	5.0	0.34	ug/L	1		8270D	Total/NA

Client Sample ID: MW-PAR-09-09212022 — Lab Sample ID: 480-201944-4

No Detections.

Client Sample ID: MW-04-06-09212022 — Lab Sample ID: 480-201944-5

No Detections.

Client Sample ID: MW-06-09-09212022 — Lab Sample ID: 480-201944-6

No Detections.

Client Sample ID: EB-09212022 — Lab Sample ID: 480-201944-7

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-201944-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-06-10-09212022
Lab Sample ID: 480-201944-1

Date Collected: 09/21/22 10:00
Matrix: Water
Date Received: 09/23/22 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.0	U	2.0	0.82	ug/L			09/26/22 22:00	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			09/26/22 22:00	2
Toluene	2.0	U	2.0	1.0	ug/L			09/26/22 22:00	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			09/26/22 22:00	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*09/26/22 22:00*	*2*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*09/26/22 22:00*	*2*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*09/26/22 22:00*	*2*
Toluene-d8 (Surr)	*91*		*80 - 120*		*09/26/22 22:00*	*2*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**2.0**	**J**	5.2	0.43	ug/L		09/28/22 08:13	09/29/22 16:45	1
Acenaphthylene	5.2	U	5.2	0.40	ug/L		09/28/22 08:13	09/29/22 16:45	1
Anthracene	5.2	U	5.2	0.29	ug/L		09/28/22 08:13	09/29/22 16:45	1
Benzo(a)anthracene	5.2	U	5.2	0.38	ug/L		09/28/22 08:13	09/29/22 16:45	1
Benzo(a)pyrene	5.2	U	5.2	0.49	ug/L		09/28/22 08:13	09/29/22 16:45	1
Benzo(b)fluoranthene	5.2	U	5.2	0.35	ug/L		09/28/22 08:13	09/29/22 16:45	1
Benzo(g,h,i) perylene	5.2	U	5.2	0.36	ug/L		09/28/22 08:13	09/29/22 16:45	1
Benzo(k)fluoranthene	5.2	U	5.2	0.76	ug/L		09/28/22 08:13	09/29/22 16:45	1
Chrysene	5.2	U	5.2	0.34	ug/L		09/28/22 08:13	09/29/22 16:45	1
Dibenz(a,h)anthracene	5.2	U	5.2	0.44	ug/L		09/28/22 08:13	09/29/22 16:45	1
Fluoranthene	5.2	U	5.2	0.42	ug/L		09/28/22 08:13	09/29/22 16:45	1
Fluorene	**1.1**	**J**	5.2	0.38	ug/L		09/28/22 08:13	09/29/22 16:45	1
Ideno(1,2,3-cd)pyrene	5.2	U	5.2	0.49	ug/L		09/28/22 08:13	09/29/22 16:45	1
Naphthalene	**0.98**	**J**	5.2	0.79	ug/L		09/28/22 08:13	09/29/22 16:45	1
Phenanthrene	5.2	U	5.2	0.46	ug/L		09/28/22 08:13	09/29/22 16:45	1
Pyrene	5.2	U	5.2	0.35	ug/L		09/28/22 08:13	09/29/22 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*48 - 120*	*09/28/22 08:13*	*09/29/22 16:45*	*1*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*	*09/28/22 08:13*	*09/29/22 16:45*	*1*
p-Terphenyl-d14 (Surr)	*47*	*S1-*	*60 - 148*	*09/28/22 08:13*	*09/29/22 16:45*	*1*

Client Sample ID: BD-09212022

Date Collected: 09/21/22 10:15
Date Received: 09/23/22 10:30

Lab Sample ID: 480-201944-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.0	U	2.0	0.82	ug/L			09/26/22 22:22	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			09/26/22 22:22	2
Toluene	2.0	U	2.0	1.0	ug/L			09/26/22 22:22	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			09/26/22 22:22	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*09/26/22 22:22*	*2*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*09/26/22 22:22*	*2*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*09/26/22 22:22*	*2*
Toluene-d8 (Surr)	*89*		*80 - 120*		*09/26/22 22:22*	*2*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.8**	**J**	5.4	0.45	ug/L		09/28/22 08:13	09/29/22 20:22	1
Acenaphthylene	5.4	U	5.4	0.41	ug/L		09/28/22 08:13	09/29/22 20:22	1
Anthracene	5.4	U	5.4	0.30	ug/L		09/28/22 08:13	09/29/22 20:22	1
Benzo(a)anthracene	5.4	U	5.4	0.39	ug/L		09/28/22 08:13	09/29/22 20:22	1
Benzo(a)pyrene	5.4	U	5.4	0.51	ug/L		09/28/22 08:13	09/29/22 20:22	1
Benzo(b)fluoranthene	5.4	U	5.4	0.37	ug/L		09/28/22 08:13	09/29/22 20:22	1
Benzo(g,h,i) perylene	5.4	U	5.4	0.38	ug/L		09/28/22 08:13	09/29/22 20:22	1
Benzo(k)fluoranthene	5.4	U	5.4	0.79	ug/L		09/28/22 08:13	09/29/22 20:22	1
Chrysene	5.4	U	5.4	0.36	ug/L		09/28/22 08:13	09/29/22 20:22	1
Dibenz(a,h)anthracene	5.4	U	5.4	0.46	ug/L		09/28/22 08:13	09/29/22 20:22	1
Fluoranthene	5.4	U	5.4	0.43	ug/L		09/28/22 08:13	09/29/22 20:22	1
Fluorene	**1.0**	**J**	5.4	0.39	ug/L		09/28/22 08:13	09/29/22 20:22	1
Ideno(1,2,3-cd)pyrene	5.4	U	5.4	0.51	ug/L		09/28/22 08:13	09/29/22 20:22	1
Naphthalene	**0.89**	**J**	5.4	0.83	ug/L		09/28/22 08:13	09/29/22 20:22	1
Phenanthrene	5.4	U	5.4	0.48	ug/L		09/28/22 08:13	09/29/22 20:22	1
Pyrene	5.4	U	5.4	0.37	ug/L		09/28/22 08:13	09/29/22 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*48 - 120*	*09/28/22 08:13*	*09/29/22 20:22*	*1*
Nitrobenzene-d5 (Surr)	*67*		*46 - 120*	*09/28/22 08:13*	*09/29/22 20:22*	*1*
p-Terphenyl-d14 (Surr)	*43*	*S1-*	*60 - 148*	*09/28/22 08:13*	*09/29/22 20:22*	*1*

Client Sample ID: MW-PAR-08-09212022
Lab Sample ID: 480-201944-3

Date Collected: 09/21/22 09:50
Matrix: Water
Date Received: 09/23/22 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**51**		2.0	0.82	ug/L			09/26/22 22:44	2
Ethylbenzene	**5.1**		2.0	1.5	ug/L			09/26/22 22:44	2
Toluene	**1.3**	**J**	2.0	1.0	ug/L			09/26/22 22:44	2
Xylenes, Total	**6.0**		4.0	1.3	ug/L			09/26/22 22:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*09/26/22 22:44*	*2*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*09/26/22 22:44*	*2*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*09/26/22 22:44*	*2*
Toluene-d8 (Surr)	*91*		*80 - 120*		*09/26/22 22:44*	*2*

Method: SW846 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		09/28/22 08:13	09/29/22 20:49	1
Acenaphthylene	**2.8**	**J**	5.0	0.38	ug/L		09/28/22 08:13	09/29/22 20:49	1
Anthracene	**1.7**	**J**	5.0	0.28	ug/L		09/28/22 08:13	09/29/22 20:49	1
Benzo(a)anthracene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 20:49	1
Benzo(a)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 20:49	1
Benzo(b)fluoranthene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 20:49	1
Benzo(g,h,i) perylene	5.0	U	5.0	0.35	ug/L		09/28/22 08:13	09/29/22 20:49	1
Benzo(k)fluoranthene	5.0	U	5.0	0.73	ug/L		09/28/22 08:13	09/29/22 20:49	1
Chrysene	5.0	U	5.0	0.33	ug/L		09/28/22 08:13	09/29/22 20:49	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		09/28/22 08:13	09/29/22 20:49	1
Fluoranthene	**2.7**	**J**	5.0	0.40	ug/L		09/28/22 08:13	09/29/22 20:49	1
Fluorene	**2.6**	**J**	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 20:49	1
Ideno(1,2,3-cd)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 20:49	1
Naphthalene	**1.9**	**J**	5.0	0.76	ug/L		09/28/22 08:13	09/29/22 20:49	1
Phenanthrene	**1.9**	**J**	5.0	0.44	ug/L		09/28/22 08:13	09/29/22 20:49	1
Pyrene	**1.8**	**J**	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*48 - 120*	*09/28/22 08:13*	*09/29/22 20:49*	*1*
Nitrobenzene-d5 (Surr)	*67*		*46 - 120*	*09/28/22 08:13*	*09/29/22 20:49*	*1*
p-Terphenyl-d14 (Surr)	*53*	*S1-*	*60 - 148*	*09/28/22 08:13*	*09/29/22 20:49*	*1*

Client: Parsons Corporation
Job ID: 480-201944-1
Project/Site: Avangrid - McMaster Street

Client Sample ID: MW-PAR-09-09212022
Lab Sample ID: 480-201944-4
Date Collected: 09/21/22 11:55
Matrix: Water
Date Received: 09/23/22 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			09/26/22 23:06	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			09/26/22 23:06	1
Toluene	1.0	U	1.0	0.51	ug/L			09/26/22 23:06	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			09/26/22 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*09/26/22 23:06*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/26/22 23:06*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*09/26/22 23:06*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*09/26/22 23:06*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5.0	U	5.0	0.41	ug/L		09/28/22 08:13	09/29/22 21:17	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		09/28/22 08:13	09/29/22 21:17	1
Anthracene	5.0	U	5.0	0.28	ug/L		09/28/22 08:13	09/29/22 21:17	1
Benzo(a)anthracene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 21:17	1
Benzo(a)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 21:17	1
Benzo(b)fluoranthene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 21:17	1
Benzo(g,h,i) perylene	5.0	U	5.0	0.35	ug/L		09/28/22 08:13	09/29/22 21:17	1
Benzo(k)fluoranthene	5.0	U	5.0	0.73	ug/L		09/28/22 08:13	09/29/22 21:17	1
Chrysene	5.0	U	5.0	0.33	ug/L		09/28/22 08:13	09/29/22 21:17	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		09/28/22 08:13	09/29/22 21:17	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		09/28/22 08:13	09/29/22 21:17	1
Fluorene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 21:17	1
Ideno(1,2,3-cd)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 21:17	1
Naphthalene	5.0	U	5.0	0.76	ug/L		09/28/22 08:13	09/29/22 21:17	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		09/28/22 08:13	09/29/22 21:17	1
Pyrene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*48 - 120*	*09/28/22 08:13*	*09/29/22 21:17*	*1*
Nitrobenzene-d5 (Surr)	*69*		*46 - 120*	*09/28/22 08:13*	*09/29/22 21:17*	*1*
p-Terphenyl-d14 (Surr)	*42*	*S1-*	*60 - 148*	*09/28/22 08:13*	*09/29/22 21:17*	*1*

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: MW-04-06-09212022

Date Collected: 09/21/22 13:25
Date Received: 09/23/22 10:30

Lab Sample ID: 480-201944-5

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			09/26/22 23:29	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			09/26/22 23:29	1
Toluene	1.0	U	1.0	0.51	ug/L			09/26/22 23:29	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			09/26/22 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/26/22 23:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*09/26/22 23:29*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*09/26/22 23:29*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*09/26/22 23:29*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5.0	U	5.0	0.41	ug/L		09/28/22 08:13	09/29/22 21:44	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		09/28/22 08:13	09/29/22 21:44	1
Anthracene	5.0	U	5.0	0.28	ug/L		09/28/22 08:13	09/29/22 21:44	1
Benzo(a)anthracene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 21:44	1
Benzo(a)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 21:44	1
Benzo(b)fluoranthene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 21:44	1
Benzo(g,h,i) perylene	5.0	U	5.0	0.35	ug/L		09/28/22 08:13	09/29/22 21:44	1
Benzo(k)fluoranthene	5.0	U	5.0	0.73	ug/L		09/28/22 08:13	09/29/22 21:44	1
Chrysene	5.0	U	5.0	0.33	ug/L		09/28/22 08:13	09/29/22 21:44	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		09/28/22 08:13	09/29/22 21:44	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		09/28/22 08:13	09/29/22 21:44	1
Fluorene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 21:44	1
Ideno(1,2,3-cd)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 21:44	1
Naphthalene	5.0	U	5.0	0.76	ug/L		09/28/22 08:13	09/29/22 21:44	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		09/28/22 08:13	09/29/22 21:44	1
Pyrene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*48 - 120*	*09/28/22 08:13*	*09/29/22 21:44*	*1*
Nitrobenzene-d5 (Surr)	*69*		*46 - 120*	*09/28/22 08:13*	*09/29/22 21:44*	*1*
p-Terphenyl-d14 (Surr)	*46*	*S1-*	*60 - 148*	*09/28/22 08:13*	*09/29/22 21:44*	*1*

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: MW-06-09-09212022

Date Collected: 09/21/22 12:20
Date Received: 09/23/22 10:30

Lab Sample ID: 480-201944-6

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.0	U	2.0	0.82	ug/L			09/26/22 23:51	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			09/26/22 23:51	2
Toluene	2.0	U	2.0	1.0	ug/L			09/26/22 23:51	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			09/26/22 23:51	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*09/26/22 23:51*	*2*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*09/26/22 23:51*	*2*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*09/26/22 23:51*	*2*
Toluene-d8 (Surr)	*90*		*80 - 120*		*09/26/22 23:51*	*2*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5.4	U	5.4	0.45	ug/L		09/28/22 08:13	09/29/22 22:11	1
Acenaphthylene	5.4	U	5.4	0.41	ug/L		09/28/22 08:13	09/29/22 22:11	1
Anthracene	5.4	U	5.4	0.30	ug/L		09/28/22 08:13	09/29/22 22:11	1
Benzo(a)anthracene	5.4	U	5.4	0.39	ug/L		09/28/22 08:13	09/29/22 22:11	1
Benzo(a)pyrene	5.4	U	5.4	0.51	ug/L		09/28/22 08:13	09/29/22 22:11	1
Benzo(b)fluoranthene	5.4	U	5.4	0.37	ug/L		09/28/22 08:13	09/29/22 22:11	1
Benzo(g,h,i) perylene	5.4	U	5.4	0.38	ug/L		09/28/22 08:13	09/29/22 22:11	1
Benzo(k)fluoranthene	5.4	U	5.4	0.79	ug/L		09/28/22 08:13	09/29/22 22:11	1
Chrysene	5.4	U	5.4	0.36	ug/L		09/28/22 08:13	09/29/22 22:11	1
Dibenz(a,h)anthracene	5.4	U	5.4	0.46	ug/L		09/28/22 08:13	09/29/22 22:11	1
Fluoranthene	5.4	U	5.4	0.43	ug/L		09/28/22 08:13	09/29/22 22:11	1
Fluorene	5.4	U	5.4	0.39	ug/L		09/28/22 08:13	09/29/22 22:11	1
Ideno(1,2,3-cd)pyrene	5.4	U	5.4	0.51	ug/L		09/28/22 08:13	09/29/22 22:11	1
Naphthalene	5.4	U	5.4	0.83	ug/L		09/28/22 08:13	09/29/22 22:11	1
Phenanthrene	5.4	U	5.4	0.48	ug/L		09/28/22 08:13	09/29/22 22:11	1
Pyrene	5.4	U	5.4	0.37	ug/L		09/28/22 08:13	09/29/22 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*48 - 120*	*09/28/22 08:13*	*09/29/22 22:11*	*1*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*	*09/28/22 08:13*	*09/29/22 22:11*	*1*
p-Terphenyl-d14 (Surr)	*73*		*60 - 148*	*09/28/22 08:13*	*09/29/22 22:11*	*1*

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: EB-09212022

Date Collected: 09/21/22 12:50
Date Received: 09/23/22 10:30

Lab Sample ID: 480-201944-7

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			09/26/22 18:30	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			09/26/22 18:30	1
Toluene	1.0	U	1.0	0.51	ug/L			09/26/22 18:30	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			09/26/22 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*09/26/22 18:30*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/26/22 18:30*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*09/26/22 18:30*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/26/22 18:30*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5.4	U	5.4	0.45	ug/L		09/28/22 08:13	09/29/22 22:38	1
Acenaphthylene	5.4	U	5.4	0.41	ug/L		09/28/22 08:13	09/29/22 22:38	1
Anthracene	5.4	U	5.4	0.30	ug/L		09/28/22 08:13	09/29/22 22:38	1
Benzo(a)anthracene	5.4	U	5.4	0.39	ug/L		09/28/22 08:13	09/29/22 22:38	1
Benzo(a)pyrene	5.4	U	5.4	0.51	ug/L		09/28/22 08:13	09/29/22 22:38	1
Benzo(b)fluoranthene	5.4	U	5.4	0.37	ug/L		09/28/22 08:13	09/29/22 22:38	1
Benzo(g,h,i) perylene	5.4	U	5.4	0.38	ug/L		09/28/22 08:13	09/29/22 22:38	1
Benzo(k)fluoranthene	5.4	U	5.4	0.79	ug/L		09/28/22 08:13	09/29/22 22:38	1
Chrysene	5.4	U	5.4	0.36	ug/L		09/28/22 08:13	09/29/22 22:38	1
Dibenz(a,h)anthracene	5.4	U	5.4	0.46	ug/L		09/28/22 08:13	09/29/22 22:38	1
Fluoranthene	5.4	U	5.4	0.43	ug/L		09/28/22 08:13	09/29/22 22:38	1
Fluorene	5.4	U	5.4	0.39	ug/L		09/28/22 08:13	09/29/22 22:38	1
Ideno(1,2,3-cd)pyrene	5.4	U	5.4	0.51	ug/L		09/28/22 08:13	09/29/22 22:38	1
Naphthalene	5.4	U	5.4	0.83	ug/L		09/28/22 08:13	09/29/22 22:38	1
Phenanthrene	5.4	U	5.4	0.48	ug/L		09/28/22 08:13	09/29/22 22:38	1
Pyrene	5.4	U	5.4	0.37	ug/L		09/28/22 08:13	09/29/22 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*48 - 120*	*09/28/22 08:13*	*09/29/22 22:38*	*1*
Nitrobenzene-d5 (Surr)	*78*		*46 - 120*	*09/28/22 08:13*	*09/29/22 22:38*	*1*
p-Terphenyl-d14 (Surr)	*79*		*60 - 148*	*09/28/22 08:13*	*09/29/22 22:38*	*1*

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: TRIP BLANK

Date Collected: 09/21/22 09:30
Date Received: 09/23/22 10:30

Lab Sample ID: 480-201944-8

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			09/26/22 18:53	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			09/26/22 18:53	1
Toluene	1.0	U	1.0	0.51	ug/L			09/26/22 18:53	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			09/26/22 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*09/26/22 18:53*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*09/26/22 18:53*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*09/26/22 18:53*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*09/26/22 18:53*	*1*

Surrogate Summary

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-201944-1	MW-06-10-09212022	100	96	96	91
480-201944-1 MS	MW-06-10-09212022 MS	99	96	98	93
480-201944-1 MSD	MW-06-10-09212022 MSD	100	98	98	90
480-201944-2	BD-09212022	101	93	99	89
480-201944-3	MW-PAR-08-09212022	99	94	98	91
480-201944-4	MW-PAR-09-09212022	101	97	98	89
480-201944-5	MW-04-06-09212022	103	95	99	88
480-201944-6	MW-06-09-09212022	99	96	97	90
480-201944-7	EB-09212022	90	103	100	98
480-201944-8	TRIP BLANK	92	104	100	97
LCS 480-642738/5	Lab Control Sample	91	102	100	101
LCS 480-642778/6	Lab Control Sample	98	93	97	87
MB 480-642738/7	Method Blank	92	102	103	97
MB 480-642778/8	Method Blank	98	97	94	88

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(60-148)
480-201944-1	MW-06-10-09212022	92	77	47 S1-
480-201944-1 MS	MW-06-10-09212022 MS	87	80	39 S1-
480-201944-1 MSD	MW-06-10-09212022 MSD	85	77	37 S1-
480-201944-2	BD-09212022	83	67	43 S1-
480-201944-3	MW-PAR-08-09212022	81	67	53 S1-
480-201944-4	MW-PAR-09-09212022	88	69	42 S1-
480-201944-5	MW-04-06-09212022	84	69	46 S1-
480-201944-6	MW-06-09-09212022	92	73	73
480-201944-7	EB-09212022	95	78	79
LCS 480-643043/2-A	Lab Control Sample	86	77	76
MB 480-643043/1-A	Method Blank	94	78	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

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

Lab Sample ID: MB 480-642738/7
Matrix: Water
Analysis Batch: 642738

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	U	1.0	0.41	ug/L			09/26/22 12:06	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			09/26/22 12:06	1
Toluene	1.0	U	1.0	0.51	ug/L			09/26/22 12:06	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			09/26/22 12:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*09/26/22 12:06*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/26/22 12:06*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/26/22 12:06*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*09/26/22 12:06*	*1*

Lab Sample ID: LCS 480-642738/5
Matrix: Water
Analysis Batch: 642738

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	24.5		ug/L		98	71 - 124
Ethylbenzene	25.0	23.5		ug/L		94	77 - 123
Toluene	25.0	24.7		ug/L		99	80 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 480-642778/8
Matrix: Water
Analysis Batch: 642778

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	U	1.0	0.41	ug/L			09/26/22 16:51	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			09/26/22 16:51	1
Toluene	1.0	U	1.0	0.51	ug/L			09/26/22 16:51	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			09/26/22 16:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*09/26/22 16:51*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/26/22 16:51*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*09/26/22 16:51*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*09/26/22 16:51*	*1*

Lab Sample ID: LCS 480-642778/6
Matrix: Water
Analysis Batch: 642778

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	23.3		ug/L		93	71 - 124

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

Lab Sample ID: LCS 480-642778/6
Matrix: Water
Analysis Batch: 642778

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	25.0	22.6		ug/L		90	77 - 123
Toluene	25.0	21.5		ug/L		86	80 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*
Toluene-d8 (Surr)	*87*		*80 - 120*

Lab Sample ID: 480-201944-1 MS
Matrix: Water
Analysis Batch: 642778

Client Sample ID: MW-06-10-09212022 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	2.0	U	50.0	46.5		ug/L		93	71 - 124
Ethylbenzene	2.0	U	50.0	47.5		ug/L		95	77 - 123
Toluene	2.0	U	50.0	44.3		ug/L		89	80 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: 480-201944-1 MSD
Matrix: Water
Analysis Batch: 642778

Client Sample ID: MW-06-10-09212022 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	2.0	U	50.0	47.1		ug/L		94	71 - 124	1	13
Ethylbenzene	2.0	U	50.0	47.0		ug/L		94	77 - 123	1	15
Toluene	2.0	U	50.0	43.4		ug/L		87	80 - 122	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*90*		*80 - 120*

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

Lab Sample ID: MB 480-643043/1-A
Matrix: Water
Analysis Batch: 643248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 643043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5.0	U	5.0	0.41	ug/L		09/28/22 08:13	09/29/22 13:34	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		09/28/22 08:13	09/29/22 13:34	1

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

Lab Sample ID: MB 480-643043/1-A
Matrix: Water
Analysis Batch: 643248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 643043

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	5.0	U	5.0	0.28	ug/L		09/28/22 08:13	09/29/22 13:34	1
Benzo(a)anthracene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 13:34	1
Benzo(a)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 13:34	1
Benzo(b)fluoranthene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 13:34	1
Benzo(g,h,i) perylene	5.0	U	5.0	0.35	ug/L		09/28/22 08:13	09/29/22 13:34	1
Benzo(k)fluoranthene	5.0	U	5.0	0.73	ug/L		09/28/22 08:13	09/29/22 13:34	1
Chrysene	5.0	U	5.0	0.33	ug/L		09/28/22 08:13	09/29/22 13:34	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		09/28/22 08:13	09/29/22 13:34	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		09/28/22 08:13	09/29/22 13:34	1
Fluorene	5.0	U	5.0	0.36	ug/L		09/28/22 08:13	09/29/22 13:34	1
Ideno(1,2,3-cd)pyrene	5.0	U	5.0	0.47	ug/L		09/28/22 08:13	09/29/22 13:34	1
Naphthalene	5.0	U	5.0	0.76	ug/L		09/28/22 08:13	09/29/22 13:34	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		09/28/22 08:13	09/29/22 13:34	1
Pyrene	5.0	U	5.0	0.34	ug/L		09/28/22 08:13	09/29/22 13:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*48 - 120*	*09/28/22 08:13*	*09/29/22 13:34*	*1*
Nitrobenzene-d5 (Surr)	*78*		*46 - 120*	*09/28/22 08:13*	*09/29/22 13:34*	*1*
p-Terphenyl-d14 (Surr)	*73*		*60 - 148*	*09/28/22 08:13*	*09/29/22 13:34*	*1*

Lab Sample ID: LCS 480-643043/2-A
Matrix: Water
Analysis Batch: 643248

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 643043

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	32.0	26.6		ug/L		83	60 - 120
Acenaphthylene	32.0	28.3		ug/L		89	63 - 120
Anthracene	32.0	29.6		ug/L		92	67 - 120
Benzo(a)anthracene	32.0	27.4		ug/L		86	70 - 121
Benzo(a)pyrene	32.0	27.8		ug/L		87	60 - 123
Benzo(b)fluoranthene	32.0	27.6		ug/L		86	66 - 126
Benzo(g,h,i) perylene	32.0	26.2		ug/L		82	66 - 150
Benzo(k)fluoranthene	32.0	27.8		ug/L		87	65 - 124
Chrysene	32.0	27.5		ug/L		86	69 - 120
Dibenz(a,h)anthracene	32.0	27.4		ug/L		86	65 - 135
Fluoranthene	32.0	29.8		ug/L		93	69 - 126
Fluorene	32.0	27.5		ug/L		86	66 - 120
Ideno(1,2,3-cd)pyrene	32.0	27.2		ug/L		85	69 - 146
Naphthalene	32.0	24.9		ug/L		78	57 - 120
Phenanthrene	32.0	28.8		ug/L		90	68 - 120
Pyrene	32.0	28.5		ug/L		89	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*48 - 120*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*
p-Terphenyl-d14 (Surr)	*76*		*60 - 148*

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

Lab Sample ID: 480-201944-1 MS
Matrix: Water
Analysis Batch: 643248

Client Sample ID: MW-06-10-09212022 MS
Prep Type: Total/NA
Prep Batch: 643043

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.0	J	34.8	31.1		ug/L		84	48 - 120
Acenaphthylene	5.2	U	34.8	31.2		ug/L		90	63 - 120
Anthracene	5.2	U	34.8	29.8		ug/L		86	65 - 122
Benzo(a)anthracene	5.2	U	34.8	19.6		ug/L		56	43 - 124
Benzo(a)pyrene	5.2	U	34.8	19.4		ug/L		56	23 - 125
Benzo(b)fluoranthene	5.2	U	34.8	19.7		ug/L		57	27 - 127
Benzo(g,h,i) perylene	5.2	U	34.8	17.5		ug/L		50	16 - 147
Benzo(k)fluoranthene	5.2	U	34.8	19.8		ug/L		57	20 - 124
Chrysene	5.2	U	34.8	19.1		ug/L		55	44 - 122
Dibenz(a,h)anthracene	5.2	U	34.8	18.2		ug/L		52	16 - 139
Fluoranthene	5.2	U	34.8	28.3		ug/L		81	63 - 129
Fluorene	1.1	J	34.8	30.4		ug/L		84	62 - 120
Ideno(1,2,3-cd)pyrene	5.2	U	34.8	17.9		ug/L		51	16 - 140
Naphthalene	0.98	J	34.8	29.5		ug/L		82	45 - 120
Phenanthrene	5.2	U	34.8	30.1		ug/L		87	65 - 122
Pyrene	5.2	U	34.8	26.1		ug/L		75	58 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*48 - 120*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*
p-Terphenyl-d14 (Surr)	*39*	*S1-*	*60 - 148*

Lab Sample ID: 480-201944-1 MSD
Matrix: Water
Analysis Batch: 643248

Client Sample ID: MW-06-10-09212022 MSD
Prep Type: Total/NA
Prep Batch: 643043

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	2.0	J	33.3	29.1		ug/L		81	48 - 120	7	24
Acenaphthylene	5.2	U	33.3	29.7		ug/L		89	63 - 120	5	18
Anthracene	5.2	U	33.3	28.5		ug/L		86	65 - 122	4	15
Benzo(a)anthracene	5.2	U	33.3	19.6		ug/L		59	43 - 124	0	15
Benzo(a)pyrene	5.2	U	33.3	18.0		ug/L		54	23 - 125	8	15
Benzo(b)fluoranthene	5.2	U	33.3	18.4		ug/L		55	27 - 127	7	15
Benzo(g,h,i) perylene	5.2	U	33.3	16.6		ug/L		50	16 - 147	5	15
Benzo(k)fluoranthene	5.2	U	33.3	18.4		ug/L		55	20 - 124	7	22
Chrysene	5.2	U	33.3	18.5		ug/L		56	44 - 122	3	15
Dibenz(a,h)anthracene	5.2	U	33.3	16.8		ug/L		50	16 - 139	8	15
Fluoranthene	5.2	U	33.3	27.6		ug/L		83	63 - 129	3	15
Fluorene	1.1	J	33.3	29.6		ug/L		85	62 - 120	3	15
Ideno(1,2,3-cd)pyrene	5.2	U	33.3	17.2		ug/L		52	16 - 140	4	15
Naphthalene	0.98	J	33.3	27.0		ug/L		78	45 - 120	9	29
Phenanthrene	5.2	U	33.3	28.7		ug/L		86	65 - 122	5	15
Pyrene	5.2	U	33.3	25.6		ug/L		77	58 - 128	2	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*48 - 120*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*
p-Terphenyl-d14 (Surr)	*37*	*S1-*	*60 - 148*

QC Association Summary

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

GC/MS VOA

Analysis Batch: 642738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201944-7	EB-09212022	Total/NA	Water	8260C	
480-201944-8	TRIP BLANK	Total/NA	Water	8260C	
MB 480-642738/7	Method Blank	Total/NA	Water	8260C	
LCS 480-642738/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 642778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201944-1	MW-06-10-09212022	Total/NA	Water	8260C	
480-201944-2	BD-09212022	Total/NA	Water	8260C	
480-201944-3	MW-PAR-08-09212022	Total/NA	Water	8260C	
480-201944-4	MW-PAR-09-09212022	Total/NA	Water	8260C	
480-201944-5	MW-04-06-09212022	Total/NA	Water	8260C	
480-201944-6	MW-06-09-09212022	Total/NA	Water	8260C	
MB 480-642778/8	Method Blank	Total/NA	Water	8260C	
LCS 480-642778/6	Lab Control Sample	Total/NA	Water	8260C	
480-201944-1 MS	MW-06-10-09212022 MS	Total/NA	Water	8260C	
480-201944-1 MSD	MW-06-10-09212022 MSD	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 643043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201944-1	MW-06-10-09212022	Total/NA	Water	3510C	
480-201944-2	BD-09212022	Total/NA	Water	3510C	
480-201944-3	MW-PAR-08-09212022	Total/NA	Water	3510C	
480-201944-4	MW-PAR-09-09212022	Total/NA	Water	3510C	
480-201944-5	MW-04-06-09212022	Total/NA	Water	3510C	
480-201944-6	MW-06-09-09212022	Total/NA	Water	3510C	
480-201944-7	EB-09212022	Total/NA	Water	3510C	
MB 480-643043/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-643043/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-201944-1 MS	MW-06-10-09212022 MS	Total/NA	Water	3510C	
480-201944-1 MSD	MW-06-10-09212022 MSD	Total/NA	Water	3510C	

Analysis Batch: 643248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201944-1	MW-06-10-09212022	Total/NA	Water	8270D	643043
480-201944-2	BD-09212022	Total/NA	Water	8270D	643043
480-201944-3	MW-PAR-08-09212022	Total/NA	Water	8270D	643043
480-201944-4	MW-PAR-09-09212022	Total/NA	Water	8270D	643043
480-201944-5	MW-04-06-09212022	Total/NA	Water	8270D	643043
480-201944-6	MW-06-09-09212022	Total/NA	Water	8270D	643043
480-201944-7	EB-09212022	Total/NA	Water	8270D	643043
MB 480-643043/1-A	Method Blank	Total/NA	Water	8270D	643043
LCS 480-643043/2-A	Lab Control Sample	Total/NA	Water	8270D	643043
480-201944-1 MS	MW-06-10-09212022 MS	Total/NA	Water	8270D	643043
480-201944-1 MSD	MW-06-10-09212022 MSD	Total/NA	Water	8270D	643043

Lab Chronicle

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: MW-06-10-09212022
Lab Sample ID: 480-201944-1
Date Collected: 09/21/22 10:00
Matrix: Water
Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	642778	CR	EET BUF	09/26/22 22:00
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 16:45

Client Sample ID: BD-09212022
Lab Sample ID: 480-201944-2
Date Collected: 09/21/22 10:15
Matrix: Water
Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	642778	CR	EET BUF	09/26/22 22:22
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 20:22

Client Sample ID: MW-PAR-08-09212022
Lab Sample ID: 480-201944-3
Date Collected: 09/21/22 09:50
Matrix: Water
Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	642778	CR	EET BUF	09/26/22 22:44
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 20:49

Client Sample ID: MW-PAR-09-09212022
Lab Sample ID: 480-201944-4
Date Collected: 09/21/22 11:55
Matrix: Water
Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	642778	CR	EET BUF	09/26/22 23:06
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 21:17

Client Sample ID: MW-04-06-09212022
Lab Sample ID: 480-201944-5
Date Collected: 09/21/22 13:25
Matrix: Water
Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	642778	CR	EET BUF	09/26/22 23:29
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 21:44

Client Sample ID: MW-06-09-09212022
Lab Sample ID: 480-201944-6
Date Collected: 09/21/22 12:20
Matrix: Water
Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	642778	CR	EET BUF	09/26/22 23:51

Lab Chronicle

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Client Sample ID: MW-06-09-09212022

Lab Sample ID: 480-201944-6

Date Collected: 09/21/22 12:20

Matrix: Water

Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 22:11

Client Sample ID: EB-09212022

Lab Sample ID: 480-201944-7

Date Collected: 09/21/22 12:50

Matrix: Water

Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	642738	AXK	EET BUF	09/26/22 18:30
Total/NA	Prep	3510C			643043	MS	EET BUF	09/28/22 08:13
Total/NA	Analysis	8270D		1	643248	JMM	EET BUF	09/29/22 22:38

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-201944-8

Date Collected: 09/21/22 09:30

Matrix: Water

Date Received: 09/23/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	642738	AXK	EET BUF	09/26/22 18:53

Laboratory References:

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

Accreditation/Certification Summary

Client: Parsons Corporation
Job ID: 480-201944-1
Project/Site: Avangrid - McMaster Street

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-201944-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201944-1	MW-06-10-09212022	Water	09/21/22 10:00	09/23/22 10:30
480-201944-2	BD-09212022	Water	09/21/22 10:15	09/23/22 10:30
480-201944-3	MW-PAR-08-09212022	Water	09/21/22 09:50	09/23/22 10:30
480-201944-4	MW-PAR-09-09212022	Water	09/21/22 11:55	09/23/22 10:30
480-201944-5	MW-04-06-09212022	Water	09/21/22 13:25	09/23/22 10:30
480-201944-6	MW-06-09-09212022	Water	09/21/22 12:20	09/23/22 10:30
480-201944-7	EB-09212022	Water	09/21/22 12:50	09/23/22 10:30
480-201944-8	TRIP BLANK	Water	09/21/22 09:30	09/23/22 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Zack Cornish	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-177529-38060.1
Client Contact: Cathy Adamitis	Phone: 607-354-6482	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 3
Company: Parsons Corporation	PWSID:			Job #:
Address: 301 Plainfield Road Suite 350	Due Date Requested:	Analysis Requested		
City: Syracuse	TAT Requested (days): Standard			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Na2SO3, Na2S2O3, H2SO4, SP Dodecahydrate, Acetone, ICAA, pH 4-5, Trizma, Other (specify)
State, Zip: NY, 13212	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 452562.452563..60214.07			
Email: catherine.adamitis@parsons.com	WO #: 452562.02000			
Project Name: Avangrid - McMaster Street	Project #: 48024388			
Site:	SSOW#:			

480-201944 Chain of Custody

McMaster Sampling

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - BTEX	8260C - TCL VOCs	8270D - PAH Semivolatiles	Total Number of c	Special Instructions/Note:
			Preservation Code:				A	A	N		
MW-06-10-09212022	9/21/22	1000	G	Water	N	Y	3	3	2	8	
MW-06-10-09212022 MS	9/21/22	1000	G	Water	N	Y	3	3	2	8	
MW-06-10-09212022 MSD	9/21/22	1000	G	Water	N	Y	3	3	2	8	
BD-09212022	9/21/22	1015	G	Water	N	N	3	3	2	8	
MW-PAR-08-09212022	9/21/22	0950	G	Water	N	N	3	3	2	8	
MW-PAR-09-09212022	9/21/22	1155	G	Water	N	N	3	3	2	8	
MW-04-06-09212022	9/21/22	1325	G	Water	N	N	3	3	2	8	
MW-06-09-09212022	9/21/22	1220	G	Water	N	N	3	3	2	8	
EB-09212022	9/21/22	1250	G	Water	N	N	3	3	2	8	
TRIP Blank	9/21/22	0930	G	Water	N	N	X	2	X	2	
				Water							

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Zack Cornish	Date/Time: 9/22/22 @ 1800	Company: Parsons	Received by:	Date/Time: 9/23/22 1030	Company: TAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.5 #1 IR6

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Parsons Corporation

Job Number: 480-201944-1

Login Number: 201944
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (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	PARSONS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Cathy Adamitis
Parsons Corporation
301 Plainfield Road
Suite 350
Syracuse, New York 13212

Generated 12/5/2022 3:13:18 PM

JOB DESCRIPTION

Avangrid - McMaster Street

JOB NUMBER

480-204174-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Designee for
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Table of Contents

Definitions/Glossary

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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.
U	Indicates the analyte was analyzed for but not detected.

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: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

Job ID: 480-204174-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-204174-1

Comments
No additional comments.

Receipt
The sample was received on 11/29/2022 10:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described 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: Parsons Corporation
Project/Site: Avangrid - McMaster Street

Job ID: 480-204174-1

Client Sample ID: MW-PAR-08-11282022

Lab Sample ID: 480-204174-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	42		1.0	0.41	ug/L	1		8260C	Total/NA
Toluene	1.1		1.0	0.51	ug/L	1		8260C	Total/NA
Ethylbenzene	4.2		1.0	0.74	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	3.4		2.0	0.66	ug/L	1		8260C	Total/NA
o-Xylene	1.1		1.0	0.76	ug/L	1		8260C	Total/NA
Xylenes, Total	4.5		2.0	0.66	ug/L	1		8260C	Total/NA
Acenaphthene	5.7		5.0	0.41	ug/L	1		8270D	Total/NA
Acenaphthylene	2.0	J	5.0	0.38	ug/L	1		8270D	Total/NA
Anthracene	0.58	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	2.9	J	5.0	0.36	ug/L	1		8270D	Total/NA
Naphthalene	14		5.0	0.76	ug/L	1		8270D	Total/NA
Phenanthrene	3.0	J	5.0	0.44	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.

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

Client Sample ID: MW-PAR-08-11282022
Lab Sample ID: 480-204174-1

Date Collected: 11/28/22 10:50
Matrix: Water

Date Received: 11/29/22 10:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**42**		1.0	0.41	ug/L			12/01/22 14:29	1
Toluene	**1.1**		1.0	0.51	ug/L			12/01/22 14:29	1
Ethylbenzene	**4.2**		1.0	0.74	ug/L			12/01/22 14:29	1
m-Xylene & p-Xylene	**3.4**		2.0	0.66	ug/L			12/01/22 14:29	1
o-Xylene	**1.1**		1.0	0.76	ug/L			12/01/22 14:29	1
Xylenes, Total	**4.5**		2.0	0.66	ug/L			12/01/22 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/01/22 14:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*12/01/22 14:29*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*12/01/22 14:29*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*12/01/22 14:29*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**5.7**		5.0	0.41	ug/L		11/30/22 08:31	12/01/22 14:59	1
Acenaphthylene	**2.0**	**J**	5.0	0.38	ug/L		11/30/22 08:31	12/01/22 14:59	1
Anthracene	**0.58**	**J**	5.0	0.28	ug/L		11/30/22 08:31	12/01/22 14:59	1
Benzo(a)anthracene	5.0	U	5.0	0.36	ug/L		11/30/22 08:31	12/01/22 14:59	1
Benzo(a)pyrene	5.0	U	5.0	0.47	ug/L		11/30/22 08:31	12/01/22 14:59	1
Benzo(b)fluoranthene	5.0	U	5.0	0.34	ug/L		11/30/22 08:31	12/01/22 14:59	1
Benzo(g,h,i) perylene	5.0	U	5.0	0.35	ug/L		11/30/22 08:31	12/01/22 14:59	1
Benzo(k)fluoranthene	5.0	U	5.0	0.73	ug/L		11/30/22 08:31	12/01/22 14:59	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/30/22 08:31	12/01/22 14:59	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/30/22 08:31	12/01/22 14:59	1
Fluoranthene	**1.6**	**J**	5.0	0.40	ug/L		11/30/22 08:31	12/01/22 14:59	1
Fluorene	**2.9**	**J**	5.0	0.36	ug/L		11/30/22 08:31	12/01/22 14:59	1
Ideno(1,2,3-cd)pyrene	5.0	U	5.0	0.47	ug/L		11/30/22 08:31	12/01/22 14:59	1
Naphthalene	**14**		5.0	0.76	ug/L		11/30/22 08:31	12/01/22 14:59	1
Phenanthrene	**3.0**	**J**	5.0	0.44	ug/L		11/30/22 08:31	12/01/22 14:59	1
Pyrene	**1.1**	**J**	5.0	0.34	ug/L		11/30/22 08:31	12/01/22 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*48 - 120*	*11/30/22 08:31*	*12/01/22 14:59*	*1*
Nitrobenzene-d5 (Surr)	*83*		*46 - 120*	*11/30/22 08:31*	*12/01/22 14:59*	*1*
p-Terphenyl-d14 (Surr)	*85*		*60 - 148*	*11/30/22 08:31*	*12/01/22 14:59*	*1*

Surrogate Summary

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-204174-1	MW-PAR-08-11282022	99	100	96	99
LCS 480-651792/5	Lab Control Sample	100	98	101	99
MB 480-651792/7	Method Blank	102	102	104	100

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(60-148)
480-204174-1	MW-PAR-08-11282022	95	83	85
LCS 480-651589/2-A	Lab Control Sample	101	89	103
MB 480-651589/1-A	Method Blank	95	81	105

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

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

Lab Sample ID: MB 480-651792/7
Matrix: Water
Analysis Batch: 651792

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	U	1.0	0.41	ug/L			12/01/22 13:58	1
Toluene	1.0	U	1.0	0.51	ug/L			12/01/22 13:58	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			12/01/22 13:58	1
m-Xylene & p-Xylene	2.0	U	2.0	0.66	ug/L			12/01/22 13:58	1
o-Xylene	1.0	U	1.0	0.76	ug/L			12/01/22 13:58	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			12/01/22 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/01/22 13:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*12/01/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*12/01/22 13:58*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/01/22 13:58*	*1*

Lab Sample ID: LCS 480-651792/5
Matrix: Water
Analysis Batch: 651792

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	25.2		ug/L		101	71 - 124
Toluene	25.0	25.5		ug/L		102	80 - 122
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
m-Xylene & p-Xylene	25.0	26.2		ug/L		105	76 - 122
o-Xylene	25.0	26.1		ug/L		104	76 - 122

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

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

Lab Sample ID: MB 480-651589/1-A
Matrix: Water
Analysis Batch: 651741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 651589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/30/22 08:31	12/01/22 10:52	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/30/22 08:31	12/01/22 10:52	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/30/22 08:31	12/01/22 10:52	1
Benzo(a)anthracene	5.0	U	5.0	0.36	ug/L		11/30/22 08:31	12/01/22 10:52	1
Benzo(a)pyrene	5.0	U	5.0	0.47	ug/L		11/30/22 08:31	12/01/22 10:52	1
Benzo(b)fluoranthene	5.0	U	5.0	0.34	ug/L		11/30/22 08:31	12/01/22 10:52	1
Benzo(g,h,i) perylene	5.0	U	5.0	0.35	ug/L		11/30/22 08:31	12/01/22 10:52	1
Benzo(k)fluoranthene	5.0	U	5.0	0.73	ug/L		11/30/22 08:31	12/01/22 10:52	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/30/22 08:31	12/01/22 10:52	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/30/22 08:31	12/01/22 10:52	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/30/22 08:31	12/01/22 10:52	1

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

Lab Sample ID: MB 480-651589/1-A
Matrix: Water
Analysis Batch: 651741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 651589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.0	U	5.0	0.36	ug/L		11/30/22 08:31	12/01/22 10:52	1
Ideno(1,2,3-cd)pyrene	5.0	U	5.0	0.47	ug/L		11/30/22 08:31	12/01/22 10:52	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/30/22 08:31	12/01/22 10:52	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/30/22 08:31	12/01/22 10:52	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/30/22 08:31	12/01/22 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*48 - 120*	*11/30/22 08:31*	*12/01/22 10:52*	*1*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*	*11/30/22 08:31*	*12/01/22 10:52*	*1*
p-Terphenyl-d14 (Surr)	*105*		*60 - 148*	*11/30/22 08:31*	*12/01/22 10:52*	*1*

Lab Sample ID: LCS 480-651589/2-A
Matrix: Water
Analysis Batch: 651741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 651589

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	32.0	29.7		ug/L		93	60 - 120
Acenaphthylene	32.0	30.1		ug/L		94	63 - 120
Anthracene	32.0	30.8		ug/L		96	67 - 120
Benzo(a)anthracene	32.0	30.7		ug/L		96	70 - 121
Benzo(a)pyrene	32.0	31.5		ug/L		99	60 - 123
Benzo(b)fluoranthene	32.0	31.7		ug/L		99	66 - 126
Benzo(g,h,i) perylene	32.0	32.9		ug/L		103	66 - 150
Benzo(k)fluoranthene	32.0	32.0		ug/L		100	65 - 124
Chrysene	32.0	31.9		ug/L		100	69 - 120
Dibenz(a,h)anthracene	32.0	32.2		ug/L		101	65 - 135
Fluoranthene	32.0	31.2		ug/L		97	69 - 126
Fluorene	32.0	30.5		ug/L		95	66 - 120
Ideno(1,2,3-cd)pyrene	32.0	32.0		ug/L		100	69 - 146
Naphthalene	32.0	28.2		ug/L		88	57 - 120
Phenanthrene	32.0	30.5		ug/L		95	68 - 120
Pyrene	32.0	32.7		ug/L		102	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*101*		*48 - 120*
Nitrobenzene-d5 (Surr)	*89*		*46 - 120*
p-Terphenyl-d14 (Surr)	*103*		*60 - 148*

QC Association Summary

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

GC/MS VOA

Analysis Batch: 651792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204174-1	MW-PAR-08-11282022	Total/NA	Water	8260C	
MB 480-651792/7	Method Blank	Total/NA	Water	8260C	
LCS 480-651792/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 651589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204174-1	MW-PAR-08-11282022	Total/NA	Water	3510C	
MB 480-651589/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-651589/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 651741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204174-1	MW-PAR-08-11282022	Total/NA	Water	8270D	651589
MB 480-651589/1-A	Method Blank	Total/NA	Water	8270D	651589
LCS 480-651589/2-A	Lab Control Sample	Total/NA	Water	8270D	651589

Lab Chronicle

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

Client Sample ID: MW-PAR-08-11282022
Lab Sample ID: 480-204174-1
Date Collected: 11/28/22 10:50
Matrix: Water
Date Received: 11/29/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	651792	CB	EET BUF	12/01/22 14:29
Total/NA	Prep	3510C			651589	MS	EET BUF	11/30/22 08:31
Total/NA	Analysis	8270D		1	651741	JMM	EET BUF	12/01/22 14:59

Laboratory References:

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

Accreditation/Certification Summary

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

Method Summary

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Parsons Corporation
Job ID: 480-204174-1
Project/Site: Avangrid - McMaster Street

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-204174-1	MW-PAR-08-11282022	Water	11/28/22 10:50	11/29/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Zack Cornish	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-179459-38378.1
Client Contact: Cathy Adamitis	Phone: 607-354-6482	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Parsons Corporation	PWSID:			Job #:

Address: 301 Plainfield Road Suite 350	Due Date Requested:	
City: Syracuse	TAT Requested (days): Standard	
State, Zip: NY, 13212	Compliance Project: Δ Yes Δ No	
Phone:	PO #: 452562.452563..60214.07	
Email: catherine.adamitis@parsons.com	WO #: 452562.02000	
Project Name: Avangrid - McMaster Street	Project #: 48024388	
Site: McMaster, Auburn NY	SSOW#:	

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
M - Hexane
N - None
O - AsNaO2
P - Na2O4S

480-204174 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - PAH Semivolatiles	8260C - BTEX	Total Number	Special Instructions/Note:
			Preservation Code:				N	A		
MW-PAR-08-11282022	11/28/22	1050	G	Water	N	N	2	3	5	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Zack Cornish / Zack Cornish	11/28/22 @ 1500	Parsons	Received by:	11/29/22 1000	FAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 3.3

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Parsons Corporation

Job Number: 480-204174-1

Login Number: 204174

List Source: Eurofins Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (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.	N/A	

Appendix D – Photographic Log

Observations:

Photographs 1 and 2 show the Isolated patches of Japanese knotweed (*Reynoutria japonica*) at McMaster Street former MGP during the July reconnaissance site visit. Photos 3 and 4 show the August herbicide treatment of Japanese knotweed (*Reynoutria japonica*). Photos 5 and 6 show a vegetation plot and a surviving dogwood (*Cornus* sp.) from the August vegetation survey.

Photograph 1

Photograph 2

Photograph 3

Photograph 4

Photograph 5

Photograph 6

Appendix E – Site Management Form

Institutional and Engineering Controls Inspection Form

I. Site Information

Site No.: 70-06-010 Site Name: McMaster Street Former Manufactured Gas Plant

Site Address: 30 McMaster Street Zip Code: 13021

City/Town: Auburn, NY County: Cayuga

Current Use: vacant unimproved gravel lot

II. Site Conditions

- Physical characteristics of the Site-flat, open gravel lot with some paved areas adjacent, vegetated banks along the river
- Current Site operations- annual groundwater and quarterly NAPL monitoring, annual inspection. Invasive species management as needed.

III. Site Inspection Checklist

YES NO

1. Has some or all of the Site property been sold, subdivided, merged, or undergonea tax map amendment since the initial/last certification?
   8/26/22: NO

   If YES, is documentation or evidence that documentation has been previously submitted included with this certification?

2. Have any amendments and/or additional filings been recorded that maymodify or supersede the Environmental Easement?
   8/26/22: NO

   If YES, is documentation or evidence that documentation has been previously submitted included with this certification?

3. Have any federal, state, and/or local permits (e.g., building permit) beenissued for or at the property since the initial/last certification?
   8/26/22: NO

   If YES, is documentation or evidence that documentation has been previously submitted included with this certification?

4. Has there been an actual or pending zoning or land-use change for the

   RestrictedArea on which the Environmental Easement is filed?

   If YES, is documentation or evidence that documentation has been previously submitted included with this certification?
   8/26/22: NO

5. Have periodic inspections of the Site identified any excavation or other disturbance activities that have taken place within the institutional control areas or other areas subject to the Site Management Plan?
   8/26/22: NO

6. Is the Site cover is good working condition, free of excess wear and tear, and without obvious signs of failure? Note any observed deficiencies.
   8/26/22: Site is in good condition; vegetation cover is excellent, no bare areas or erosion were observed.

   If YES, is the new information or evidence that new information has been previously submitted included with this Certification?
   8/26/22: Yes, this is new information, included above.

Control Certification Statement

For each Institutional or Engineering control listed above, I certify by checking "Yes" that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control;

(d) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(e) if a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;

(f) use of the site is compliant with the Environmental Easement;

(g) the information presented in this report is accurate and complete;

(h) no new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off- site contamination are no longer valid; and

(i) the assumptions made in the qualitative exposure assessment remain valid.

IC/EC CERTIFICATIONS SITE NO. 70-06-008

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I_____ at _____,
print name print business address

am certifying as OWNER (Owner or Remedial Party) for the Site named in the Site Information Section of this form.

_____ _____
Owner or Remedial Party Rendering Certification Date

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

I, Raymond D'Hollander, P.E. at Parsons, 301 Plainfield Road, Ste 350, Syracuse NY, 13212
am certifying as a Qualified Environmental Professional for the Site named in the Site Information Section of this form.

_____ 7/28/23
Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification Stamp (If Required) Date

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