Interim Periodic Review Report

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street
City of Buffalo, Erie County, New York
NYSDEC Site No. 915141A

April 2024

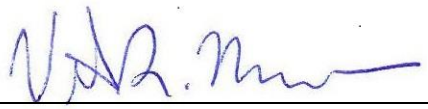
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April 2024

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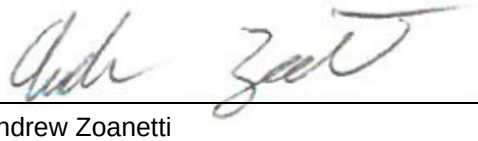
Our Ref:
30185775



Vincent Maresco
Principal Geologist



Dustin Kirschner
Project Manager



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Engineer

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Acronyms and Abbreviations

Arcadis	Arcadis of New York, Inc.
BSA	Buffalo Sewer Authority
BPDES	Buffalo Pollutant Discharge Elimination System
BTEX	benzene, toluene, ethylbenzene, and xylene
ESD	Explanation of Significant Difference
NAPL	non-aqueous phase liquid
NYSDEC	New York State Department of Environmental Conservation
OMM	operations, maintenance, and monitoring
OWS	oil-water separator
PPE	personal protective equipment
PRR	Periodic Review Report
ROD	Record of Decision
SBL	Site Block Lot
SMP	Site Management Plan
The Site	Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
USEPA	United States Environmental Protection Agency
Westwood Pharmaceuticals	Westwood-Squibb Pharmaceuticals Company, Inc.

Executive Summary

Table ES-1 summarizes the engineering controls implemented for the Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site (the Site), designated as Site No. 915141A by the New York State Department of Environmental Conservation (NYSDEC) pursuant to the New York State Inactive Hazardous Waste Registry Program. The Site is located at 120 Dart Street and 40 Bradley Street in the City of Buffalo, Erie County, New York. In addition to the engineering controls, Table ES-1 also summarizes the monitoring, inspection, maintenance, and reporting requirements for this Site.

Table ES-1. Period Review Report Summary

Element	Requirement
Engineering Controls	1. Soil cover system, including a combination of one foot topsoil cover and impermeable surfaces. 2. Groundwater and non-aqueous phase liquid collection and treatment system.
Monitoring	1. Groundwater Monitoring: a. Semi-annual fluid level measurements – monitoring wells B19, B6R, B7R, B8R, MWF1, MWF2, MWF3, MWF4, MWF5, MWS2, and MWS4 and piezometers P1, P2, P6R, P7R, P8R, PF3, PF4, PF6, PS1, PS2, TP1, and TP2. b. Semi-annual groundwater sampling – monitoring wells B6R, B7R, B8R, MWF2, MWF3, and MWF4 and piezometer P8R. 2. Seep Monitoring: Monthly seep monitoring – seep numbers 13, 14, 16, 30, and 32.
Inspections	Site-wide inspections will be performed on an annual basis, or within 5 days after an emergency, such as a natural disaster (e.g., flood, tornado, etc.) or an unforeseen failure of an engineering control, to verify the continued effectiveness of the institutional and engineering controls on the Site properties.
Maintenance	1. Transfer pumps: alternate quarterly, and clean as needed. 2. Flow meter: replace annually. 3. Control panels: as needed. 4. Level floats: as needed. 5. Piping, hoses, fittings, and unions: As needed. 6. Air compressor: drain condensate weekly, test relief valve monthly, and change out oil and lubricate motor bearings annually. 7. Air dryer: clean annually. 8. Thermostats: as needed. 9. Skymetry alarm: as needed. 10. Oil-water separator: drain non-aqueous phase liquid weekly and clean annually. 11. Equalization tank: clean annually or as needed. 12. Carbon adsorbers: as needed. 13. Cartridge filter: inspect weekly, replace as needed.
Reporting	A periodic review report is to be submitted to the NYSDEC on an annual basis, which is to first begin 16 months after the acceptance of the SMP. Note: The SMP has not been approved at this time, nor has the Environmental Easement been finalized with the NYSDEC and filed against the real property records. A draft of the SMP was submitted to NYSDEC for review on February 14, 2022. However, under agreement with the NYSDEC, an interim periodic review report will be submitted for review in advance of the final SMP and institutional controls (environmental easement) being in place.

1 Introduction

1.1 General

This Interim Periodic Review Report (PRR) has been prepared by Arcadis of New York, Inc. (Arcadis), on behalf of Westwood-Squibb Pharmaceuticals Company, Inc. (Westwood Pharmaceuticals), to present the post-remediation monitoring, inspection, operation and maintenance, and reporting of the past 12 months (April 2023-March 2024) for the Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site (the Site) located at 120 Dart Street and 40 Bradley Street in the City of Buffalo, Erie County, New York (**Figure 1**). The Site is currently listed under the New York State Inactive Hazardous Waste Registry Program (Site Number 915141A), which is administered by the New York State Department of Environmental Conservation (NYSDEC). Westwood Pharmaceuticals no longer holds fee title to the Site but maintains a legal right of access to the Site to maintain and operate the NYSDEC-approved Site remedy.

The Site was remediated by Westwood Pharmaceuticals between 1996 and 1997, consistent with the NYSDEC's selected remedy, as identified in the *Record of Decision* (ROD; NYSDEC 1994) and amended by the subsequently issued *Explanation of Significant Difference* (ESD; NYSDEC 2014). Remediation activities included installation of a groundwater pump and treat system with extraction wells and low permeability soil cover. The existing groundwater interceptor trench was installed in 2017 to enhance the groundwater and non-aqueous phase liquid (NAPL) recovery at the Site. This interceptor trench replaced the previously installed extraction wells. Institutional and engineering controls have been incorporated into the Site remedy to control exposure to the remaining soil and groundwater impacts and protect public health and the environment.

1.2 Site Background

The Site is comprised of two main properties, which are identified as Block 1, Lot 5.1 and Block 1, Lot 5.2 on Section 88.50 of the City of Buffalo Tax Map. An additional, small half-moon shaped area of land is included within the definition of the Site, which comprises a small area not currently listed under a Site Block Lot (SBL) number through Erie County, and is adjacent to the Scajaquada Creek; this area is assumed to have been formed by accretion. The Site properties encompass approximately 9.25 acres and are generally bounded by a City of Buffalo impound lot to the north; Bradley Street and a mix of vacant industrial and residential properties to the south; Dart Street and a mix of industrial and residential properties to the east; and vacant land, Scajaquada Creek, and industrial properties to the west. The Site is zoned for industrial use and contains two 100,000-square-foot warehouses (Building 6 and Building 9) and a groundwater treatment building (Building 6A). Building 6 and Building 9 are owned by 2225 East 7 Properties, LLC and JEMF Buffalo Industrial, LLC and are currently leased to a trucking firm for warehousing operations. The remainder of the Site is covered with a mixture of grass, asphalt pavement, and gravel/crushed stone. The Site is enclosed by fencing and is generally secure from public access.

Surface topography at the Site is relatively flat, but slopes steeply toward Scajaquada Creek along the western boundary of the Site. Most surface water run-off is directed toward on-site drainage ditches and storm sewers, although some surface water flows directly to Scajaquada Creek during precipitation events. Scajaquada Creek discharges into Black Rock Canal and eventually into the Niagara River.

2 Operations, Maintenance, and Monitoring

2.1 System Description

The extraction system recovers impacted groundwater and non-aqueous phase liquid (NAPL) from a 310-foot-long interceptor trench located in the northwest area of the Site, proximal to the Scajaquada Creek (**Figure 1**). The interceptor trench was installed in 2017 to replace a series of groundwater extraction wells. A 4-inch-diameter, 265-foot-long, slotted pipe was installed at the base of the interceptor trench and terminates at a recovery sump. A pneumatic pump extracts groundwater and NAPL from the recovery sump and transfers it through a 2-inch liquid conveyance pipe to the groundwater treatment plant (Building 6A). Compressed air is supplied to the pump via a 1-inch pipe. A second, high-viscosity pneumatic pump is installed in the sump for dedicated DNAPL recovery. A Construction Completion Report for the groundwater interceptor trench was submitted to the NYSDEC in December 2017 and approved by the NYSDEC on September 30, 2019.

Inside the groundwater treatment plant, the total fluids recovered from the interceptor trench sump flow through an oil-water separator (OWS) capable of separating both light NAPL and dense NAPL from the total fluid stream. The outflow of water is then pumped through an equalization tank, through a particle filtration system, and then through a granular activated carbon treatment. The treated water is discharged to the Buffalo Sewer Authority (BSA) under Buffalo Pollutant Discharge Elimination System (BPDES) discharge permit number 21-07-BU174. A process flow diagram is included as **Figure 2**.

2.2 System Operation and Facility Maintenance

Operations, maintenance, and monitoring (OMM) activities are performed by the operator and documented on operator log sheets. Weekly visual inspections of the treatment building and equipment, the cartridge filter, the air dryer, and the equalization tank level switches are conducted. Management of inventory supplies and spare parts is also completed on a weekly basis. Other OMM items to note are:

- The cartridge filter is checked and changed out as needed.
- The condensate liquid is removed as needed.
- Any NAPL from the OWS is drained and stored in a drum on a weekly basis.

The cap area and the area adjacent to the creek are mowed, as needed, during the growing season. Snow removal is completed to access the treatment building. The flow meter is replaced on an annual basis to keep an accurate and properly calibrated reading. On a quarterly basis, the transfer pump is switched over to the standby transfer pump that was not used for the previous quarter. Weed maintenance along the road and fence is completed in the spring and fall.

The system had been in operation since 1997 in its original configuration and was reconfigured in June 2017 after the completion of the groundwater interceptor trench, with limited downtime for maintenance since that time. In late November and early December 2019, the total fluids recovery pump became clogged with certain viscous NAPL, and NAPL recovery was temporarily reduced while the pump was removed from the sump and replaced. The total fluids recovery pump was re-installed in mid-March 2020 and lowered incrementally into the NAPL to prevent clogging and resume product recovery. Given the nature of the complete remedy, this limited and temporary decrease in efficiency did not have any impact on compliance.

The groundwater treatment system continues to be maintained weekly and, barring occasional maintenance, has been in continual operation. A total of 334,782 gallons of groundwater were extracted, treated, and discharged through the treatment system from April 1, 2023 through March 31, 2024. In the past 12 months, 0.25 gallons of non-aqueous phase liquid was recovered by the treatment system oil-water separator. A dedicated high-viscosity pump was used in May 2023 and June 2023 to recover DNAPL that had accumulated in the interceptor trench sump. Approximately 63 gallons of DNAPL were recovered during seven recovery events between May 15, 2023, and June 12, 2023. Non-aqueous phase liquid recovery from the dedicated high-viscosity pump and treatment system in the past 12 months is included in **Figure 3**.

3 Discharge Monitoring and Permit Compliance

To comply with the BSA BPDES Permit, Arcadis submits quarterly Discharge Monitoring Reports to the BSA. Monthly discharge grab samples are collected and analyzed for pH, total mercury, total zinc, total cyanide, volatile organic compounds, and semi-volatile organic compounds via standard United States Environmental Protection Agency (USEPA) methods. In the past 12 months, analytical results have indicated the treatment system operates within the permit requirements and within regulatory compliance. The Discharge Monitoring Reports are included in **Appendix A**.

4 Non-Aqueous Phase Liquid Recovery

NAPL recovered from the OWS and interceptor trench sump is temporarily stored on site in 55-gallon drums. Currently there are approximately 146 gallons of NAPL staged on site pending disposal. Profile samples have been collected and submitted to the disposal facility; pending facility acceptance the materials will be taken off-site for disposal.

As previously indicated to the NYSDEC in a prior PRR, to improve efficiency of NAPL recovery, additional OMM procedures are being implemented to recover NAPL that is currently located below the trench recovery sump pump intake. During routine system inspections, if needed, a recovery pump designed for high viscous liquids is lowered into the sump to recover accumulated NAPL. The recovered NAPL is pumped into 55-gallon drums for offsite disposal. This process was successfully used between May 2023 and June 2023, as discussed above.

5 Semi-Annual Groundwater Monitoring and Reporting

The semi-annual groundwater monitoring program at the Site is completed in accordance with a verbal request made by Glenn May of the NYSDEC on August 4, 2015, to Vin Maresco of Arcadis. Arcadis personnel completed the 2023 sampling events on May 16, 2023 and September 14, 2023, respectively. Groundwater sampling was completed in accordance with the December 2017 Proposed Groundwater Gauging and Sampling Plan (Groundwater Monitoring Plan) and subsequent groundwater monitoring events.

The field activities, field observations, and analytical results for groundwater sampling completed during both the May 2023 and September 2023 events are described below.

Groundwater monitoring, consisting of fluid level measurements (gauging) and groundwater sampling, is conducted to:

- Confirm groundwater elevation and flow direction, and the effectiveness of the groundwater/NAPL collection system.
- Assess seasonal changes in groundwater elevation.
- Monitor for the presence of NAPL.
- Evaluate dissolved-phase concentration trends to assess dissolved-phase stability.

5.1 Groundwater Elevation Measurements

Fluid level measurements (gauging) are collected on a semi-annual basis at: monitoring wells B6R, B7R, B8R, B19, MWF1, MWF2, MWF3, MWF4, MWF5, MWS2, and MWS4; piezometers P1, P2, P6R, P7R, P8R, PF3, PF4, PF6, PS1, PS2, TP1, and TP2; and the trench pumping sump. The well locations are shown on **Figure 1**. Each gauging event includes the following:

- Measurement of the groundwater/surface water level and, where present, NAPL thickness at each well or piezometer; and
- Manual removal, to the extent practicable, of NAPL accumulations greater than 0.1 foot in thickness in the well column.

At each well/piezometer an oil-water interface probe is used to determine the presence or absence of NAPL and measure the depth to groundwater, the depth to NAPL (where present), and the total depth of the well/piezometer. Depths are measured to the nearest 0.01 foot from the reference point at the top of the inner casing. To the extent practicable, groundwater levels are measured within a single workday to minimize potential relative changes in measurements due to seasonal conditions or precipitation events.

Groundwater elevations observed during the 2023 gauging events consistently show a general westward flow towards the Scajaquada Creek and gradients toward the interceptor trench and recovery sump. Groundwater gauging data and contour maps are included in **Appendix B**.

5.2 Groundwater Sampling

Groundwater sampling is conducted on a semi-annual basis at monitoring wells B6R, B7R, B8R, MWF2, MWF3, and MWF4 and at piezometer P8R. The well locations are shown on **Figure 1**. Each sampling event includes the following:

- Measurement of the groundwater level and, where present, NAPL thickness at each well or piezometer (as discussed in Section 5.1);
- Collection and analysis of groundwater samples from those wells/piezometers where NAPL is not observed, using disposable bailers and a three-volume purge technique (purge and sampling logs are included in **Appendix B**); and
- Manual removal, to the extent practicable, of NAPL accumulations greater than 0.1 foot in thickness.

Following fluid level measurements, groundwater samples are collected, packaged on ice, and shipped to Eurofins Test America Laboratory for the analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) via USEPA Method 8260C.

During the May 2023 sampling event, total BTEX concentrations ranged from below laboratory method detection limits at monitoring wells B6R and MWF3 to 1,637 micrograms per liter at monitoring well MWF2. Samples collected from monitoring wells B7R, B8R, MWF2, MWF4, and P8R exhibited BTEX at concentrations greater than the NYSDEC ambient water quality standards and guidance values presented in the NYSDEC Technical and Operational Guidance Series 1.1.1.[1] Results of the May 2023 analytical results are generally consistent with the historical project record.

During the September 2023 sampling event, total BTEX concentrations ranged from below laboratory method detection limits at monitoring wells B6R and MWF3 to 1865 micrograms per liter at monitoring well MWF2. Samples collected from monitoring wells B7R, B8R, MWF2, MWF4, and P8R exhibited detected BTEX at concentrations greater than NYSDEC ambient water quality standards and guidance values presented in the NYSDEC Technical and Operational Guidance Series 1.1.1. Results of the September 2023 analytical results are generally consistent with the results of the previous sampling event and the historical project record.

Tabulated groundwater analytical data and groundwater concentration figures for the associated period are included in **Appendix B**.

6 Cap, Creek, and Sheet Pile Wall Inspections

The Site cap, consisting of previously existing Site development, impervious surfaces, and an engineered soil cover system, is inspected weekly for any breaches, penetrations, or other disturbances. Cap disturbances caused by tire ruts were identified in March 2023, and repaired and re-seeded with grass in May 2023. The monthly cap inspection sheets including photo-documentation are provided in **Appendix C**.

Monitoring of the sheet pile wall and Scajaquada Creek are conducted monthly to verify that the groundwater/NAPL collection system is providing sufficient hydraulic containment to prevent the off-site migration of groundwater and NAPL. Each monitoring event includes a visual assessment and photo-documentation of the exposed portion of the sheet pile wall, as well as the surface waters of the Scajaquada Creek.

No seepage through the wall or sheen on the surface water has been observed within the past 12 months. No other issues impacting the effectiveness of the engineering controls were identified. The monthly creek and sheet pile wall inspection reports are included in **Appendix C**.

7 Waste Handling and Disposal

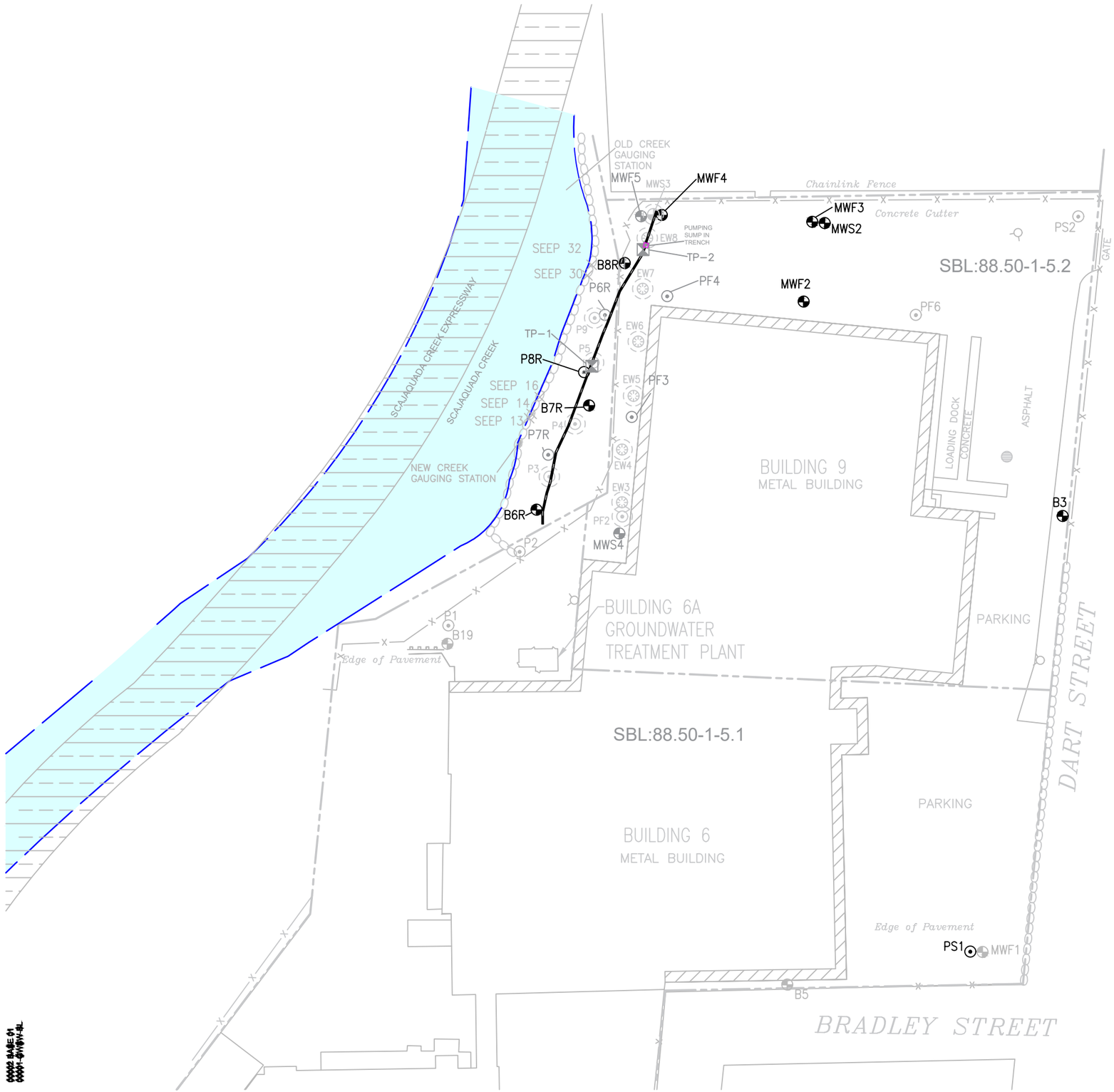
There is approximately 146 gallons of NAPL, along with used cartridge filters and personal protective equipment (PPE) staged in 55-gallon drums on site pending disposal at the Covanta Niagara facility in Niagara Falls, NY.

[1] NYSDEC. 1993. Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards And Guidance Values and Groundwater Effluent Limitations. October 22, 1993, reissued June 1998.

8 Conclusion

The current remedy and institutional controls have been effective for the past 12 months and are being implemented consistent with the requirements of the ROD and ESD. The groundwater recovery trench has been effectively controlling groundwater, dissolved constituents, and NAPL. The groundwater treatment system has operated within permit requirements with no exceedances over the past 12 months. Work continues with the property owner to effectuate the filing of an environmental easement on the real property to finalize implementation of the remedy. A final Site Management Plan (SMP), to be approved by the NYSDEC, will be incorporated by reference into the environmental easement to assure continuation of the institutional and engineering controls, as well as the associated OMM activities described herein.

Figures



LEGEND :

- INTERCEPTOR TRENCH
- PROPERTY BOUNDARY
- FENCE
- SHEET PILE RETAINING WALL
- MONITORING WELL
- ABANDONED MONITORING WELL
- STREAM GAUGE
- SEEP LOCATION
- PIEZOMETER
- ABANDONED PIEZOMETER
- GROUNDWATER EXTRACTION WELL
- ABANDONED GROUNDWATER EXTRACTION WELL
- TRENCH PIEZOMETER
- RECOVERY SUMP
- NS — NOT SAMPLED
- ND — NOT DETECTED
- J — ESTIMATED CONCENTRATION

NOTE:

1. BASE MAP FROM A GROUNDWATER & ENVIRONMENTAL SERVICES, INC. FIGURE TITLED "PROPOSED GROUNDWATER COLLECTION TRENCH LOCATION MAP" DATED 4/13/2013.

0 100 200

GRAPHIC SCALE

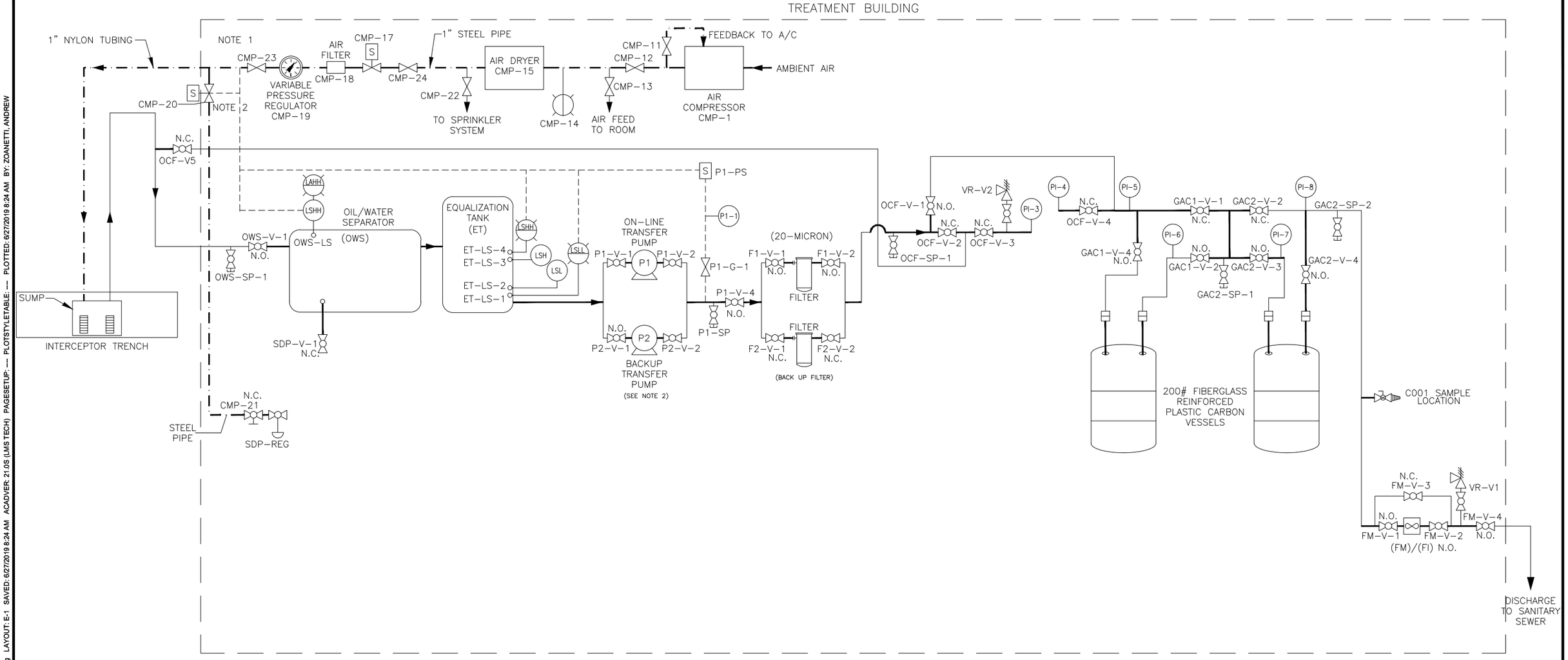
IROQUOIS GAS/WESTWOOD PHARMACEUTICALS TERRESTRIAL SITE
120 DART ST. AND 40 BRADLEY ST.
CITY OF BUFFALO, ERIE COUNTY, NEW YORK
NYSDEC SITE NO. 915141A

SITE MAP

ARCADIS

FIGURE 1

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB: L.POSENAUER PMTM: M.BENOIT LYR:(Opt)ON=*;OFF=*REF*
G:\Clients\BMS\Buffalo\11 Draft Reports and Presentations\NYSDEC Progress Report\Appendices\Appendix 3 - GW sampling results\SITE MAP.dwg LAYOUT: X SAVED: 4/10/2020 10:53 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LB-PDF PLOTSTYLETABLE: ---- PLOTTED: 4/10/2020 11:15 AM BY: ZOANETTI, ANDREW



NOTES:

1. SOLENOID VALVE IS ACTIVATED TO THE OFF-POSITION UNDER ANY OF THE FOLLOWING CONDITIONS:
   a) LSHH AT THE OIL-WATER SEPARATOR;
   b) LSHH AT THE EQUILIZATION TANK IS ACTIVATED;
   c) P1-PS HIGH PUMP DISCHARGE PRESSURE SWISWITCH IS ACTIVATED.

2. USE OF TRANSFER PUMPS IS ALTERED ON A QUARTERLY BASIS.

CITY: SYRACUSE, NY DIV/GROUP: DB: PM: TM: LYR:ON=*;OFF=*REF*
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XREFS:
TITLE

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING:

USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REUSED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name

Professional Engineer's No.

State	Date Signed	Project Mgr.
Designed by	Drawn by	Checked by

ARCADIS

ARCADIS OF NEW YORK, INC.

NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

IROQUOIS GAS/WESTWOOD PHARMACEUTICALS TERRESTRIAL SITE
120 DART ST. AND 40 BRADLEY ST.
CITY OF BUFFALO, ERIE COUNTY, NEW YORK
NYSDEC SITE NO. 915141A

PROCESS FLOW DIAGRAM

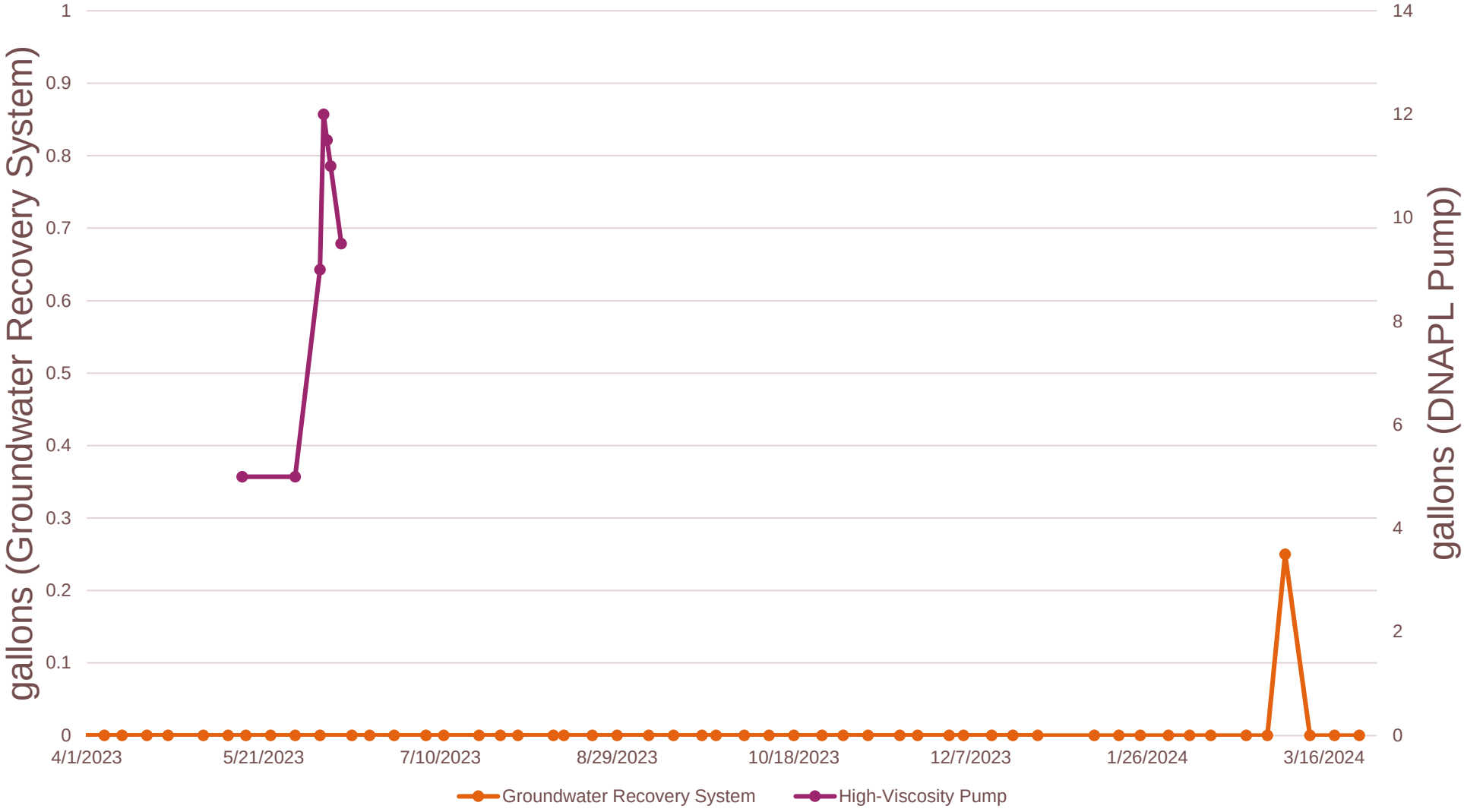
ARCADIS Project No.
B0087370.0000.00001

Date
SEPTEMBER 2017

ARCADIS
ARCADIS OF NEW YORK, INC.
110 W. FAYETTE ST., STE 300
SYRACUSE, NY 13202
TEL. 315.446.9120

FIGURE 2

Figure 3
Non-Aqueous Phase Liquid Recovery
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, NY



Appendix A

Discharge Monitoring Reports

Ms. Leslie Sedita
Industrial Waste Section
Buffalo Sewer Authority Treatment Plant
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www.arcadis.com

Date: June 30, 2023
Our Ref: 30125855
Subject: **Discharge Monitoring Report – Second Quarter 2023**
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY 14213
BSA Discharge Permit # 21-07-BU174

Dear Ms. Sedita,

On behalf of Bristol-Myers Squibb Company, Arcadis of New York, Inc. (Arcadis) is pleased to submit this second quarter 2023 Discharge Monitoring Report (DMR) for the above-referenced site, which covers the period April 1, to June 30, 2023. The monthly discharge sampling and DMR preparation were completed in accordance with the Buffalo Sewer Authority (BSA) Sampling Measurement and Analytical Guidelines Sheet. A total of 79,450 gallons of water were discharged during the reporting period (i.e., flow meter totalizer readings from 3/28/2023 to 6/27/2023). Laboratory analytical results indicate that the remedial system operated within BSA permit requirements during the second quarter 2023.

The sampling protocol and calculated discharges are based on the following: (1) total flows are a daily average taken over approximately 7 days; and (2) monthly composite samples are collected over an 8-hour period, where grab samples are collected every 2 hours. A total of four grab samples are collected throughout the 8-hour period. The discharge sample point location, following carbon treatment, is labeled as “C001 Sample Location” on the Process Flow Diagram (**Attachment A**). The Sample Collection and Log Sheets for the April, May, and June monthly sampling events are provided in **Attachment B**.

The monthly grab samples were submitted to Eurofins TestAmerica in Amherst, New York, where samples are composited and analyzed for pH via Method 4500 H+B, Total Mercury via United States Environmental Protection Agency (EPA) Method 245.1, Total Zinc via EPA Method 200.7, Total Cyanide via EPA Method 335.4, Volatile Organic Compounds via EPA Method 624.1, and Semi-Volatile Organic Compounds via EPA Method 625.1.

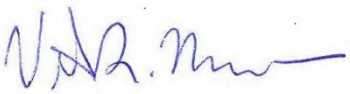
Laboratory analytical results and average daily flows are provided in the Quarterly Analytical Data Table (**Attachment C**). No exceedances of Daily Maximum or Maximum Allowable Instantaneous Discharge Limitations were observed during the reporting period. BSA Permit Specific Conditions require reporting of any compounds analyzed by EPA Methods 624 and 625 that are detected at a concentration above a threshold of 0.01 milligrams per liter (mg/L). In April, May, and June 2023, there were no detections above the reporting threshold. The laboratory results for the monthly sample, collected on 5/4/2023, indicated that the cyanide result was flagged with a “H” qualifier. This denotes that the sample was prepped or analyzed beyond the specified holding time, and this will not meet regulatory requirements. The reason this note was added was because the first laboratory quality control analysis failed, which caused the laboratory to re-analyze outside the hold time. Arcadis has

reviewed the data and is not concerned with this note because the result of the analysis is entirely consistent with historical results. The laboratory analytical data packages are provided in **Attachment D**.

If you have any questions or would like to discuss further, please feel free to contact the undersigned.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation.

Signed on behalf of Bristol-Myers Squibb Company and submitted by:



Vincent S. Maresco
Arcadis of New York, Inc.
Project Manager

Email: Vin.Maresco@arcadis.com
Direct Line: 315 671 9256

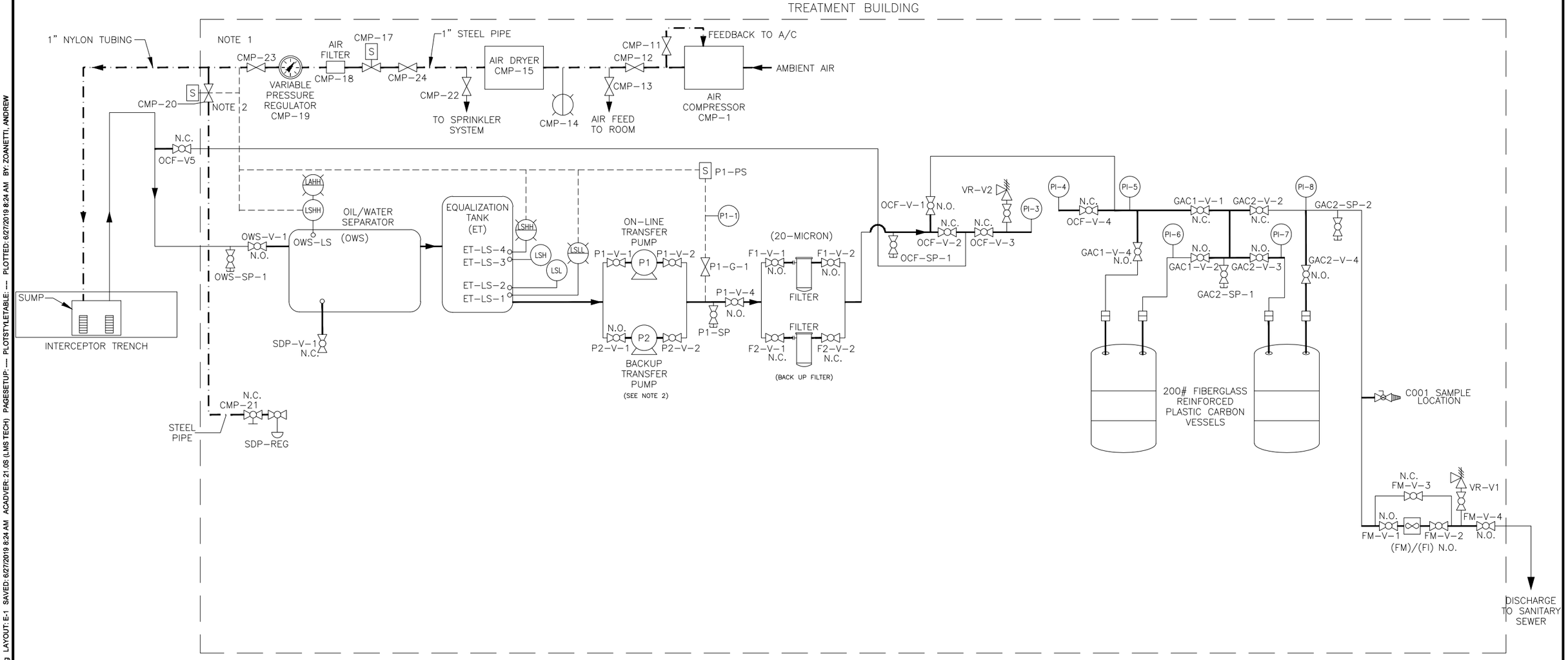
CC. Traserra Adams, BSA
Richard Mator, BMS
John Alonzo, de maximis, inc.
Michael J. Hecker, Hodgson Russ LLP
Katie Hoelscher, NFG

Attachments:

- A Process Flow Diagram
- B Sample Collection and Log Sheets for Monthly Sampling Events
- C Quarterly Analytical Data Table
- D Laboratory Analytical Data Packages

Attachment A

Process Flow Diagram



NOTES:

1. SOLENOID VALVE IS ACTIVATED TO THE OFF-POSITION UNDER ANY OF THE FOLLOWING CONDITIONS:
   a) LSHH AT THE OIL-WATER SEPARATOR;
   b) LSHH AT THE EQUILIZATION TANK IS ACTIVATED;
   c) P1-PS HIGH PUMP DISCHARGE PRESSURE SWISWITCH IS ACTIVATED.

2. USE OF TRANSFER PUMPS IS ALTERED ON A QUARTERLY BASIS.

CITY: SYRACUSE, NY DIV/GROUP: DB: PM: TM: LYR:ON=*;OFF=*REF*
C:\Users\AZoianetti\Documents\Bristol-Myers Squibb\BMS Buffalo, NY\ATTACHMENT A.dwg LAYOUT: E-1 SAVED: 6/27/2019 8:24 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 6/27/2019 8:24 AM BY: ZOANETTI, ANDREW
XREFS:
TITLE

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

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Professional Engineer's Name

Professional Engineer's No.

State	Date Signed	Project Mgr.
Designed by	Drawn by	Checked by

ARCADIS Design & Consultancy for natural and built assets
ARCADIS OF NEW YORK, INC.

NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

IROQUOIS GAS/WESTWOOD PHARMACEUTICALS TERRESTRIAL SITE NO. 915141A
120 DART STREET AND 40 BRADLEY STREET, BUFFALO, NY

PROCESS FLOW DIAGRAM

ARCADIS Project No.
B0087370.0000.00001

Date
SEPTEMBER 2017

ARCADIS
ARCADIS OF NEW YORK, INC.
110 W. FAYETTE ST., STE 300
SYRACUSE, NY 13202
TEL. 315.446.9120

PFD

Attachment B

Sample Collection and Log Sheets for Monthly Sampling Events

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm **Permit #:** 12-05-BU174

Sample Location: 001 **Sample Type:** Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	4/6/23	→	→	→	JTG
Sample Time	0615	0815	1015	1215	JTG
Sample Observations	Clear	→	→	→	JTG
pH Measurement	7.18	7.23	7.14	7.16	JTG
Weather	47°F Overcast	46°F Overcast	45°F Overcast	43°F Partly Sunny	JTG
Comments	None	→	→	→	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski — Sample Technician

4/6/23 — Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm **Permit #:** 12-05-BU174

Sample Location: 001 **Sample Type:** Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	5/4/23				JTG
Sample Time	0635	0835	1035	1235	JTG
Sample Observations	Clear	→	→	→	JTG
pH Measurement	7.34	7.19	7.40	7.27	JTG
Weather	44°F Overcast	45°F overcast	47°F cloudy	50°F Cloudy	JTG
Comments	None	→	→	→	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski — Sample Technician

5/4/23 — Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm **Permit #:** 12-05-BU174

Sample Location: 001 **Sample Type:** Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	6/6/23	→	→	→	JT6
Sample Time	0607	0807	1007	1207	JT6
Sample Observations	Clear	→	→	→	JT6
pH Measurement	7.64	7.53	7.51	7.61	JT6
Weather	56°F Sunny	61°F Sunny	65°F Sunny	74°F Sunny	JT6
Comments	None	→	→	→	JT6

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski
Sample Technician

6/6/23
Date

Attachment C

Quarterly Analytical Data Table

Quarterly Analytical Data Table
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY
BSA Discharge Permit No. 18-07-BU174

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	3/28/2023	4/6/2023	4/11/2023	4/18/2023	4/24/2023	5/4/2023	5/11/2023
Totalizer	gal	NA	1,248,217	1,257,407	1,262,342	1,269,112	1,274,861	1,283,893	1,290,283
Total Mercury	lbs	0.00001**	NS	ND	NS	NS	NS	ND	NS
Total Zinc	lbs	3.0**	NS	2.13E-05 J B	NS	NS	NS	ND	NS
Total Cyanide	lbs	7.93**	NS	7.06E-04 B	NS	NS	NS	6.17E-04 H B ^+	NS
Total VOCs	mg/L	NA	NS	ND	NS	NS	NS	ND	NS
Total SVOCs	mg/L	NA	NS	6.20E-04 J	NS	NS	NS	ND	NS
pH	SU	5.0-12.0	NS	8.2 HF	NS	NS	NS	7.1 HF	NS
Total Daily Flow	gal	14,400	-	1,021	987	967	958	903	913

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	5/16/2023	5/23/2023	5/30/2023	6/6/2023	6/15/2023	6/20/2023	6/27/2023
Totalizer	gal	NA	1,294,421	1,300,725	1,305,344	1,310,668	1,317,538	1,322,086	1,327,667
Total Mercury	lbs	0.00001**	NS	NS	NS	ND	NS	NS	NS
Total Zinc	lbs	3.0**	NS	NS	NS	ND	NS	NS	NS
Total Cyanide	lbs	7.93**	NS	NS	NS	6.21E-04 B F1	NS	NS	NS
Total VOCs	mg/L	NA	NS	NS	NS	ND	NS	NS	NS
Total SVOCs	mg/L	NA	NS	NS	NS	ND	NS	NS	NS
pH	SU	5.0-12.0	NS	NS	NS	7.4 HF	NS	NS	NS
Total Daily Flow	gal	14,400	828	901	660	761	763	910	797

Notes:

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Compound was found in the blank and the sample.
H - Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
HF - Field parameter with a holding time of 15 minutes. Test performed by laboratory at clients request. Analytical performed as required and in compliance by BSA permit.
^+ - CCV is outside acceptance limits, high biased.
NA - Not Applicable
ND - Not Detected at the reporting limit
NS - Not Sampled
gal - Gallons
lbs - Pounds
mg/L - Milligrams per liter
SU - Standard Units
** - Maximum Allowable Instantaneous Discharge limits are also included in the permit. All analytical data for this quarter in in compliance with the Maximum Allowable Instantaneous Discharge limits. Analytical results are not presented in this table, they can be found in the attached analytical reports.

The permittee must report any compound whose concentration is greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by this test procedure, which may cause or contribute to a violation of water quality incorporated into the permit.

Start of quarter values

Attachment D

Laboratory Analytical Data Packages

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 4/20/2023 9:24:42 AM

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.Monthly

JOB NUMBER

480-207612-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

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.

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

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.

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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-207612-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-207612-1

Comments
No additional comments.

Receipt
The samples were received on 4/7/2023 10:05 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 6.7º 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.

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

General Chemistry
Methods 9040B, 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-207612-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-664591.

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-207612-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-207612-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Decane	0.62	J	9.8	0.39	ug/L	1		625.1	Total/NA
Zinc	0.0025	J B	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Cyanide, Total	0.083	B	0.010	0.0041	mg/L	1		335.4	Total/NA
pH	8.2		0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.1	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-207612-5
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			04/07/23 17:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			04/07/23 17:04	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			04/07/23 17:04	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			04/07/23 17:04	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			04/07/23 17:04	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			04/07/23 17:04	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			04/07/23 17:04	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			04/07/23 17:04	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			04/07/23 17:04	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			04/07/23 17:04	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			04/07/23 17:04	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			04/07/23 17:04	1
Acrolein	ND		100	17	ug/L			04/07/23 17:04	1
Acrylonitrile	ND		50	1.9	ug/L			04/07/23 17:04	1
Benzene	ND		5.0	0.60	ug/L			04/07/23 17:04	1
Bromoform	ND		5.0	0.47	ug/L			04/07/23 17:04	1
Bromomethane	ND		5.0	1.2	ug/L			04/07/23 17:04	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			04/07/23 17:04	1
Chlorobenzene	ND		5.0	0.48	ug/L			04/07/23 17:04	1
Dibromochloromethane	ND		5.0	0.41	ug/L			04/07/23 17:04	1
Chloroethane	ND		5.0	0.87	ug/L			04/07/23 17:04	1
Chloroform	ND		5.0	0.54	ug/L			04/07/23 17:04	1
Chloromethane	ND		5.0	0.64	ug/L			04/07/23 17:04	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			04/07/23 17:04	1
Bromodichloromethane	ND		5.0	0.54	ug/L			04/07/23 17:04	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			04/07/23 17:04	1
Ethylbenzene	ND		5.0	0.46	ug/L			04/07/23 17:04	1
Methylene Chloride	ND		5.0	0.81	ug/L			04/07/23 17:04	1
Tetrachloroethene	ND		5.0	0.34	ug/L			04/07/23 17:04	1
Toluene	ND		5.0	0.45	ug/L			04/07/23 17:04	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			04/07/23 17:04	1
Trichloroethene	ND		5.0	0.60	ug/L			04/07/23 17:04	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			04/07/23 17:04	1
Vinyl chloride	ND		5.0	0.75	ug/L			04/07/23 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*04/07/23 17:04*	*1*
4-Bromofluorobenzene (Surr)	*91*		*76 - 123*		*04/07/23 17:04*	*1*
Toluene-d8 (Surr)	*92*		*77 - 120*		*04/07/23 17:04*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*04/07/23 17:04*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-207612-6
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			04/07/23 17:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			04/07/23 17:28	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			04/07/23 17:28	1

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-207612-6
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			04/07/23 17:28	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			04/07/23 17:28	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			04/07/23 17:28	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			04/07/23 17:28	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			04/07/23 17:28	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			04/07/23 17:28	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			04/07/23 17:28	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			04/07/23 17:28	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			04/07/23 17:28	1
Acrolein	ND		100	17	ug/L			04/07/23 17:28	1
Acrylonitrile	ND		50	1.9	ug/L			04/07/23 17:28	1
Benzene	ND		5.0	0.60	ug/L			04/07/23 17:28	1
Bromoform	ND		5.0	0.47	ug/L			04/07/23 17:28	1
Bromomethane	ND		5.0	1.2	ug/L			04/07/23 17:28	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			04/07/23 17:28	1
Chlorobenzene	ND		5.0	0.48	ug/L			04/07/23 17:28	1
Dibromochloromethane	ND		5.0	0.41	ug/L			04/07/23 17:28	1
Chloroethane	ND		5.0	0.87	ug/L			04/07/23 17:28	1
Chloroform	ND		5.0	0.54	ug/L			04/07/23 17:28	1
Chloromethane	ND		5.0	0.64	ug/L			04/07/23 17:28	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			04/07/23 17:28	1
Bromodichloromethane	ND		5.0	0.54	ug/L			04/07/23 17:28	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			04/07/23 17:28	1
Ethylbenzene	ND		5.0	0.46	ug/L			04/07/23 17:28	1
Methylene Chloride	ND		5.0	0.81	ug/L			04/07/23 17:28	1
Tetrachloroethene	ND		5.0	0.34	ug/L			04/07/23 17:28	1
Toluene	ND		5.0	0.45	ug/L			04/07/23 17:28	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			04/07/23 17:28	1
Trichloroethene	ND		5.0	0.60	ug/L			04/07/23 17:28	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			04/07/23 17:28	1
Vinyl chloride	ND		5.0	0.75	ug/L			04/07/23 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*68 - 130*		*04/07/23 17:28*	*1*
4-Bromofluorobenzene (Surr)	*91*		*76 - 123*		*04/07/23 17:28*	*1*
Toluene-d8 (Surr)	*92*		*77 - 120*		*04/07/23 17:28*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*04/07/23 17:28*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.8	0.20	ug/L		04/10/23 15:21	04/11/23 14:20	1
1,2-Dichlorobenzene	ND		9.8	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
1,2-Diphenylhydrazine	ND		9.8	0.19	ug/L		04/10/23 15:21	04/11/23 14:20	1
1,3-Dichlorobenzene	ND		9.8	0.17	ug/L		04/10/23 15:21	04/11/23 14:20	1
1,4-Dichlorobenzene	ND		9.8	0.20	ug/L		04/10/23 15:21	04/11/23 14:20	1
2,2'-Oxybis(1-chloropropane)	ND		4.9	0.21	ug/L		04/10/23 15:21	04/11/23 14:20	1
2,4,6-Trichlorophenol	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
2,4-Dichlorophenol	ND		4.9	0.19	ug/L		04/10/23 15:21	04/11/23 14:20	1
2,4-Dimethylphenol	ND		4.9	0.34	ug/L		04/10/23 15:21	04/11/23 14:20	1
2,4-Dinitrophenol	ND		9.8	1.2	ug/L		04/10/23 15:21	04/11/23 14:20	1

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-207612-6
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		9.8	0.39	ug/L		04/10/23 15:21	04/11/23 14:20	1
2,6-Dinitrotoluene	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
2-Chloronaphthalene	ND		4.9	0.22	ug/L		04/10/23 15:21	04/11/23 14:20	1
2-Chlorophenol	ND		4.9	0.16	ug/L		04/10/23 15:21	04/11/23 14:20	1
2-Nitrophenol	ND		4.9	0.17	ug/L		04/10/23 15:21	04/11/23 14:20	1
3,3'-Dichlorobenzidine	ND		4.9	0.39	ug/L		04/10/23 15:21	04/11/23 14:20	1
4,6-Dinitro-2-methylphenol	ND		9.8	0.44	ug/L		04/10/23 15:21	04/11/23 14:20	1
4-Bromophenyl phenyl ether	ND		4.9	0.34	ug/L		04/10/23 15:21	04/11/23 14:20	1
4-Chloro-3-methylphenol	ND		4.9	0.27	ug/L		04/10/23 15:21	04/11/23 14:20	1
4-Chlorophenyl phenyl ether	ND		4.9	0.32	ug/L		04/10/23 15:21	04/11/23 14:20	1
4-Nitrophenol	ND		15	0.48	ug/L		04/10/23 15:21	04/11/23 14:20	1
Acenaphthene	ND		4.9	0.20	ug/L		04/10/23 15:21	04/11/23 14:20	1
Acenaphthylene	ND		4.9	0.21	ug/L		04/10/23 15:21	04/11/23 14:20	1
Anthracene	ND		4.9	0.34	ug/L		04/10/23 15:21	04/11/23 14:20	1
Benzidine	ND		78	13	ug/L		04/10/23 15:21	04/11/23 14:20	1
Benzo[a]anthracene	ND		4.9	0.27	ug/L		04/10/23 15:21	04/11/23 14:20	1
Benzo[a]pyrene	ND		4.9	0.32	ug/L		04/10/23 15:21	04/11/23 14:20	1
Benzo[b]fluoranthene	ND		4.9	0.29	ug/L		04/10/23 15:21	04/11/23 14:20	1
Benzo[g,h,i]perylene	ND		4.9	0.37	ug/L		04/10/23 15:21	04/11/23 14:20	1
Benzo[k]fluoranthene	ND		4.9	0.32	ug/L		04/10/23 15:21	04/11/23 14:20	1
Bis(2-chloroethoxy)methane	ND		4.9	0.18	ug/L		04/10/23 15:21	04/11/23 14:20	1
Bis(2-chloroethyl)ether	ND		4.9	0.23	ug/L		04/10/23 15:21	04/11/23 14:20	1
Bis(2-ethylhexyl) phthalate	ND		9.8	0.29	ug/L		04/10/23 15:21	04/11/23 14:20	1
Butyl benzyl phthalate	ND		4.9	0.27	ug/L		04/10/23 15:21	04/11/23 14:20	1
Chrysene	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
Decane	**0.62**	**J**	9.8	0.39	ug/L		04/10/23 15:21	04/11/23 14:20	1
Di-n-butyl phthalate	ND		4.9	0.39	ug/L		04/10/23 15:21	04/11/23 14:20	1
Di-n-octyl phthalate	ND		4.9	0.29	ug/L		04/10/23 15:21	04/11/23 14:20	1
Dibenz(a,h)anthracene	ND		4.9	0.37	ug/L		04/10/23 15:21	04/11/23 14:20	1
Diethyl phthalate	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
Dimethyl phthalate	ND		4.9	0.22	ug/L		04/10/23 15:21	04/11/23 14:20	1
Fluoranthene	ND		4.9	0.39	ug/L		04/10/23 15:21	04/11/23 14:20	1
Fluorene	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
Hexachlorobenzene	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
Hexachlorobutadiene	ND		4.9	0.25	ug/L		04/10/23 15:21	04/11/23 14:20	1
Hexachlorocyclopentadiene	ND		9.8	0.52	ug/L		04/10/23 15:21	04/11/23 14:20	1
Hexachloroethane	ND		4.9	0.15	ug/L		04/10/23 15:21	04/11/23 14:20	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.37	ug/L		04/10/23 15:21	04/11/23 14:20	1
Isophorone	ND		4.9	0.18	ug/L		04/10/23 15:21	04/11/23 14:20	1
N-Nitrosodi-n-propylamine	ND		4.9	0.22	ug/L		04/10/23 15:21	04/11/23 14:20	1
N-Nitrosodimethylamine	ND		9.8	0.14	ug/L		04/10/23 15:21	04/11/23 14:20	1
N-Nitrosodiphenylamine	ND		4.9	0.20	ug/L		04/10/23 15:21	04/11/23 14:20	1
Naphthalene	ND		4.9	0.21	ug/L		04/10/23 15:21	04/11/23 14:20	1
Nitrobenzene	ND		4.9	0.20	ug/L		04/10/23 15:21	04/11/23 14:20	1
Pentachlorophenol	ND		9.8	0.77	ug/L		04/10/23 15:21	04/11/23 14:20	1
Phenanthrene	ND		4.9	0.29	ug/L		04/10/23 15:21	04/11/23 14:20	1
Phenol	ND		4.9	0.086	ug/L		04/10/23 15:21	04/11/23 14:20	1
Pyrene	ND		4.9	0.34	ug/L		04/10/23 15:21	04/11/23 14:20	1
n-Octadecane	ND		9.8	0.29	ug/L		04/10/23 15:21	04/11/23 14:20	1

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-207612-6
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*75*		*52 - 151*	*04/10/23 15:21*	*04/11/23 14:20*	*1*
2-Fluorobiphenyl	*88*		*44 - 120*	*04/10/23 15:21*	*04/11/23 14:20*	*1*
2-Fluorophenol	*53*		*17 - 120*	*04/10/23 15:21*	*04/11/23 14:20*	*1*
Nitrobenzene-d5	*81*		*15 - 314*	*04/10/23 15:21*	*04/11/23 14:20*	*1*
p-Terphenyl-d14	*92*		*22 - 125*	*04/10/23 15:21*	*04/11/23 14:20*	*1*
Phenol-d5	*34*		*8 - 424*	*04/10/23 15:21*	*04/11/23 14:20*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**0.0025**	**J B**	0.010	0.0015	mg/L		04/10/23 08:33	04/11/23 17:56	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		04/10/23 10:31	04/10/23 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.083**	**B**	0.010	0.0041	mg/L			04/14/23 15:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**8.2**		0.1	0.1	SU			04/19/23 13:42	1
Temperature (SM 4500 H+ B)	**20.1**	**HF**	0.001	0.001	Degrees C			04/19/23 13:42	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-207612-5	TRIP BLANK	103	91	92	107
480-207612-6	001 LAB COMP	102	91	92	108
LCS 480-664363/6	Lab Control Sample	101	92	91	106
MB 480-664363/8	Method Blank	101	91	92	106

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-207612-6	001 LAB COMP	75	88	53	81	92	34
LCS 480-664591/2-A	Lab Control Sample	92	87	48	82	97	37
LCSD 480-664591/3-A	Lab Control Sample Dup	95	92	53	85	98	37
MB 480-664591/1-A	Method Blank	67	85	46	76	92	32

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-664363/8
Matrix: Water
Analysis Batch: 664363

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			04/07/23 16:06	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			04/07/23 16:06	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			04/07/23 16:06	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			04/07/23 16:06	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			04/07/23 16:06	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			04/07/23 16:06	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			04/07/23 16:06	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			04/07/23 16:06	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			04/07/23 16:06	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			04/07/23 16:06	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			04/07/23 16:06	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			04/07/23 16:06	1
Acrolein	ND		100	17	ug/L			04/07/23 16:06	1
Acrylonitrile	ND		50	1.9	ug/L			04/07/23 16:06	1
Benzene	ND		5.0	0.60	ug/L			04/07/23 16:06	1
Bromoform	ND		5.0	0.47	ug/L			04/07/23 16:06	1
Bromomethane	ND		5.0	1.2	ug/L			04/07/23 16:06	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			04/07/23 16:06	1
Chlorobenzene	ND		5.0	0.48	ug/L			04/07/23 16:06	1
Dibromochloromethane	ND		5.0	0.41	ug/L			04/07/23 16:06	1
Chloroethane	ND		5.0	0.87	ug/L			04/07/23 16:06	1
Chloroform	ND		5.0	0.54	ug/L			04/07/23 16:06	1
Chloromethane	ND		5.0	0.64	ug/L			04/07/23 16:06	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			04/07/23 16:06	1
Bromodichloromethane	ND		5.0	0.54	ug/L			04/07/23 16:06	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			04/07/23 16:06	1
Ethylbenzene	ND		5.0	0.46	ug/L			04/07/23 16:06	1
Methylene Chloride	ND		5.0	0.81	ug/L			04/07/23 16:06	1
Tetrachloroethene	ND		5.0	0.34	ug/L			04/07/23 16:06	1
Toluene	ND		5.0	0.45	ug/L			04/07/23 16:06	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			04/07/23 16:06	1
Trichloroethene	ND		5.0	0.60	ug/L			04/07/23 16:06	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			04/07/23 16:06	1
Vinyl chloride	ND		5.0	0.75	ug/L			04/07/23 16:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*04/07/23 16:06*	*1*
4-Bromofluorobenzene (Surr)	*91*		*76 - 123*		*04/07/23 16:06*	*1*
Toluene-d8 (Surr)	*92*		*77 - 120*		*04/07/23 16:06*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*04/07/23 16:06*	*1*

Lab Sample ID: LCS 480-664363/6
Matrix: Water
Analysis Batch: 664363

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	22.0		ug/L		110	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	21.2		ug/L		106	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-664363/6
Matrix: Water
Analysis Batch: 664363

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	18.3		ug/L		92	52 - 150
1,1-Dichloroethane	20.0	19.4		ug/L		97	59 - 155
1,1-Dichloroethene	20.0	20.0		ug/L		100	1 - 234
1,2-Dichlorobenzene	20.0	21.6		ug/L		108	18 - 190
1,2-Dichloroethane	20.0	21.9		ug/L		109	49 - 155
1,2-Dichloropropane	20.0	19.7		ug/L		99	1 - 210
1,3-Dichlorobenzene	20.0	21.5		ug/L		107	59 - 156
1,4-Dichlorobenzene	20.0	21.5		ug/L		107	18 - 190
2-Chloroethyl vinyl ether	20.0	20.0	J	ug/L		100	1 - 305
Benzene	20.0	19.1		ug/L		96	37 - 151
Bromoform	20.0	18.3		ug/L		92	45 - 169
Bromomethane	20.0	21.0		ug/L		105	1 - 242
Carbon tetrachloride	20.0	21.3		ug/L		107	70 - 140
Chlorobenzene	20.0	20.8		ug/L		104	37 - 160
Dibromochloromethane	20.0	21.4		ug/L		107	53 - 149
Chloroethane	20.0	19.8		ug/L		99	14 - 230
Chloroform	20.0	19.8		ug/L		99	51 - 138
Chloromethane	20.0	19.7		ug/L		99	1 - 273
cis-1,3-Dichloropropene	20.0	19.9		ug/L		100	1 - 227
Bromodichloromethane	20.0	20.6		ug/L		103	35 - 155
Ethylbenzene	20.0	19.4		ug/L		97	37 - 162
Methylene Chloride	20.0	20.9		ug/L		104	1 - 221
Tetrachloroethene	20.0	18.1		ug/L		91	64 - 148
Toluene	20.0	19.1		ug/L		95	47 - 150
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	17 - 183
Trichloroethene	20.0	21.2		ug/L		106	71 - 157
Trichlorofluoromethane	20.0	25.0		ug/L		125	17 - 181
Vinyl chloride	20.0	18.8		ug/L		94	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*
4-Bromofluorobenzene (Surr)	*92*		*76 - 123*
Toluene-d8 (Surr)	*91*		*77 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-664591/1-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 664591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		04/10/23 15:21	04/11/23 13:05	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		04/10/23 15:21	04/11/23 13:05	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		04/10/23 15:21	04/11/23 13:05	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		04/10/23 15:21	04/11/23 13:05	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		04/10/23 15:21	04/11/23 13:05	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		04/10/23 15:21	04/11/23 13:05	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-664591/1-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 664591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		04/10/23 15:21	04/11/23 13:05	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		04/10/23 15:21	04/11/23 13:05	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		04/10/23 15:21	04/11/23 13:05	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		04/10/23 15:21	04/11/23 13:05	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		04/10/23 15:21	04/11/23 13:05	1
2-Chlorophenol	ND		5.0	0.17	ug/L		04/10/23 15:21	04/11/23 13:05	1
2-Nitrophenol	ND		5.0	0.18	ug/L		04/10/23 15:21	04/11/23 13:05	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		04/10/23 15:21	04/11/23 13:05	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		04/10/23 15:21	04/11/23 13:05	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		04/10/23 15:21	04/11/23 13:05	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		04/10/23 15:21	04/11/23 13:05	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		04/10/23 15:21	04/11/23 13:05	1
4-Nitrophenol	ND		15	0.49	ug/L		04/10/23 15:21	04/11/23 13:05	1
Acenaphthene	ND		5.0	0.20	ug/L		04/10/23 15:21	04/11/23 13:05	1
Acenaphthylene	ND		5.0	0.22	ug/L		04/10/23 15:21	04/11/23 13:05	1
Anthracene	ND		5.0	0.35	ug/L		04/10/23 15:21	04/11/23 13:05	1
Benzidine	ND		80	14	ug/L		04/10/23 15:21	04/11/23 13:05	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		04/10/23 15:21	04/11/23 13:05	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		04/10/23 15:21	04/11/23 13:05	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		04/10/23 15:21	04/11/23 13:05	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		04/10/23 15:21	04/11/23 13:05	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		04/10/23 15:21	04/11/23 13:05	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		04/10/23 15:21	04/11/23 13:05	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		04/10/23 15:21	04/11/23 13:05	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		04/10/23 15:21	04/11/23 13:05	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		04/10/23 15:21	04/11/23 13:05	1
Chrysene	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1
Decane	ND		10	0.40	ug/L		04/10/23 15:21	04/11/23 13:05	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		04/10/23 15:21	04/11/23 13:05	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		04/10/23 15:21	04/11/23 13:05	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		04/10/23 15:21	04/11/23 13:05	1
Diethyl phthalate	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		04/10/23 15:21	04/11/23 13:05	1
Fluoranthene	ND		5.0	0.40	ug/L		04/10/23 15:21	04/11/23 13:05	1
Fluorene	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		04/10/23 15:21	04/11/23 13:05	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		04/10/23 15:21	04/11/23 13:05	1
Hexachloroethane	ND		5.0	0.15	ug/L		04/10/23 15:21	04/11/23 13:05	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		04/10/23 15:21	04/11/23 13:05	1
Isophorone	ND		5.0	0.19	ug/L		04/10/23 15:21	04/11/23 13:05	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		04/10/23 15:21	04/11/23 13:05	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		04/10/23 15:21	04/11/23 13:05	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		04/10/23 15:21	04/11/23 13:05	1
Naphthalene	ND		5.0	0.22	ug/L		04/10/23 15:21	04/11/23 13:05	1
Nitrobenzene	ND		5.0	0.20	ug/L		04/10/23 15:21	04/11/23 13:05	1
Pentachlorophenol	ND		10	0.79	ug/L		04/10/23 15:21	04/11/23 13:05	1
Phenanthrene	ND		5.0	0.30	ug/L		04/10/23 15:21	04/11/23 13:05	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-664591/1-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 664591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		04/10/23 15:21	04/11/23 13:05	1
Pyrene	ND		5.0	0.35	ug/L		04/10/23 15:21	04/11/23 13:05	1
n-Octadecane	ND		10	0.30	ug/L		04/10/23 15:21	04/11/23 13:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*52 - 151*	*04/10/23 15:21*	*04/11/23 13:05*	*1*
2-Fluorobiphenyl	*85*		*44 - 120*	*04/10/23 15:21*	*04/11/23 13:05*	*1*
2-Fluorophenol	*46*		*17 - 120*	*04/10/23 15:21*	*04/11/23 13:05*	*1*
Nitrobenzene-d5	*76*		*15 - 314*	*04/10/23 15:21*	*04/11/23 13:05*	*1*
p-Terphenyl-d14	*92*		*22 - 125*	*04/10/23 15:21*	*04/11/23 13:05*	*1*
Phenol-d5	*32*		*8 - 424*	*04/10/23 15:21*	*04/11/23 13:05*	*1*

Lab Sample ID: LCS 480-664591/2-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 664591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	37.1		ug/L		74	44 - 142
1,2-Dichlorobenzene	50.0	36.0		ug/L		72	32 - 129
1,3-Dichlorobenzene	50.0	32.5		ug/L		65	1 - 172
1,4-Dichlorobenzene	50.0	33.6		ug/L		67	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	46.7		ug/L		93	36 - 166
2,4,6-Trichlorophenol	50.0	46.4		ug/L		93	37 - 144
2,4-Dichlorophenol	50.0	48.2		ug/L		96	39 - 135
2,4-Dimethylphenol	50.0	48.5		ug/L		97	32 - 120
2,4-Dinitrophenol	100	91.9		ug/L		92	1 - 191
2,4-Dinitrotoluene	50.0	48.4		ug/L		97	39 - 139
2,6-Dinitrotoluene	50.0	49.8		ug/L		100	50 - 158
2-Chloronaphthalene	50.0	44.8		ug/L		90	60 - 120
2-Chlorophenol	50.0	42.8		ug/L		86	23 - 134
2-Nitrophenol	50.0	46.6		ug/L		93	29 - 182
3,3'-Dichlorobenzidine	100	94.4		ug/L		94	1 - 262
4,6-Dinitro-2-methylphenol	100	106		ug/L		106	1 - 181
4-Bromophenyl phenyl ether	50.0	51.4		ug/L		103	53 - 127
4-Chloro-3-methylphenol	50.0	50.6		ug/L		101	22 - 147
4-Chlorophenyl phenyl ether	50.0	47.8		ug/L		96	25 - 158
4-Nitrophenol	100	49.4		ug/L		49	1 - 132
Acenaphthene	50.0	46.5		ug/L		93	47 - 145
Acenaphthylene	50.0	47.9		ug/L		96	33 - 145
Anthracene	50.0	54.2		ug/L		108	27 - 133
Benzidine	100	47.3	J	ug/L		47	1 - 120
Benzo[a]anthracene	50.0	52.9		ug/L		106	33 - 143
Benzo[a]pyrene	50.0	54.5		ug/L		109	17 - 163
Benzo[b]fluoranthene	50.0	57.3		ug/L		115	24 - 159
Benzo[g,h,i]perylene	50.0	54.8		ug/L		110	1 - 219
Benzo[k]fluoranthene	50.0	53.8		ug/L		108	11 - 162
Bis(2-chloroethoxy)methane	50.0	48.6		ug/L		97	33 - 184
Bis(2-chloroethyl)ether	50.0	43.4		ug/L		87	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-664591/2-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 664591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	51.9		ug/L		104	8 - 158
Butyl benzyl phthalate	50.0	52.8		ug/L		106	1 - 152
Chrysene	50.0	48.7		ug/L		97	17 - 168
Di-n-butyl phthalate	50.0	57.2		ug/L		114	1 - 120
Di-n-octyl phthalate	50.0	56.9		ug/L		114	4 - 146
Dibenz(a,h)anthracene	50.0	54.5		ug/L		109	1 - 227
Diethyl phthalate	50.0	50.4		ug/L		101	1 - 120
Dimethyl phthalate	50.0	49.6		ug/L		99	1 - 120
Fluoranthene	50.0	54.0		ug/L		108	26 - 137
Fluorene	50.0	48.5		ug/L		97	59 - 121
Hexachlorobenzene	50.0	49.5		ug/L		99	1 - 152
Hexachlorocyclopentadiene	50.0	33.9		ug/L		68	5 - 120
Hexachloroethane	50.0	31.1		ug/L		62	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	55.8		ug/L		112	1 - 171
Isophorone	50.0	52.3		ug/L		105	21 - 196
N-Nitrosodi-n-propylamine	50.0	46.8		ug/L		94	1 - 230
N-Nitrosodiphenylamine	50.0	53.3		ug/L		107	54 - 125
Naphthalene	50.0	44.2		ug/L		88	21 - 133
Nitrobenzene	50.0	46.1		ug/L		92	35 - 180
Pentachlorophenol	100	98.3		ug/L		98	14 - 176
Phenanthrene	50.0	51.3		ug/L		103	54 - 120
Phenol	50.0	22.4		ug/L		45	5 - 120
Pyrene	50.0	53.1		ug/L		106	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*92*		*52 - 151*
2-Fluorobiphenyl	*87*		*44 - 120*
2-Fluorophenol	*48*		*17 - 120*
Nitrobenzene-d5	*82*		*15 - 314*
p-Terphenyl-d14	*97*		*22 - 125*
Phenol-d5	*37*		*8 - 424*

Lab Sample ID: LCSD 480-664591/3-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 664591

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	38.9		ug/L		78	44 - 142	5	34
1,2-Dichlorobenzene	50.0	36.9		ug/L		74	32 - 129	3	38
1,3-Dichlorobenzene	50.0	34.6		ug/L		69	1 - 172	6	37
1,4-Dichlorobenzene	50.0	35.0		ug/L		70	20 - 124	4	40
2,2'-Oxybis(1-chloropropane)	50.0	47.2		ug/L		94	36 - 166	1	36
2,4,6-Trichlorophenol	50.0	50.1		ug/L		100	37 - 144	8	20
2,4-Dichlorophenol	50.0	47.4		ug/L		95	39 - 135	2	23
2,4-Dimethylphenol	50.0	49.4		ug/L		99	32 - 120	2	18
2,4-Dinitrophenol	100	105		ug/L		105	1 - 191	14	29
2,4-Dinitrotoluene	50.0	54.8		ug/L		110	39 - 139	12	20
2,6-Dinitrotoluene	50.0	53.7		ug/L		107	50 - 158	7	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-664591/3-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 664591

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	48.0		ug/L		96	60 - 120	7	30
2-Chlorophenol			50.0	45.1		ug/L		90	23 - 134	5	26
2-Nitrophenol			50.0	49.1		ug/L		98	29 - 182	5	28
3,3'-Dichlorobenzidine			100	97.2		ug/L		97	1 - 262	3	31
4,6-Dinitro-2-methylphenol			100	113		ug/L		113	1 - 181	6	30
4-Bromophenyl phenyl ether			50.0	51.3		ug/L		103	53 - 127	0	16
4-Chloro-3-methylphenol			50.0	51.2		ug/L		102	22 - 147	1	16
4-Chlorophenyl phenyl ether			50.0	50.5		ug/L		101	25 - 158	6	15
4-Nitrophenol			100	60.5		ug/L		60	1 - 132	20	24
Acenaphthene			50.0	48.9		ug/L		98	47 - 145	5	25
Acenaphthylene			50.0	52.9		ug/L		106	33 - 145	10	22
Anthracene			50.0	55.8		ug/L		112	27 - 133	3	15
Benzidine			100	49.3	J	ug/L		49	1 - 120	4	50
Benzo[a]anthracene			50.0	55.9		ug/L		112	33 - 143	5	15
Benzo[a]pyrene			50.0	56.2		ug/L		112	17 - 163	3	15
Benzo[b]fluoranthene			50.0	55.7		ug/L		111	24 - 159	3	17
Benzo[g,h,i]perylene			50.0	56.7		ug/L		113	1 - 219	3	19
Benzo[k]fluoranthene			50.0	56.6		ug/L		113	11 - 162	5	19
Bis(2-chloroethoxy)methane			50.0	50.3		ug/L		101	33 - 184	3	23
Bis(2-chloroethyl)ether			50.0	45.8		ug/L		92	12 - 158	5	33
Bis(2-ethylhexyl) phthalate			50.0	55.1		ug/L		110	8 - 158	6	15
Butyl benzyl phthalate			50.0	52.7		ug/L		105	1 - 152	0	15
Chrysene			50.0	50.9		ug/L		102	17 - 168	4	15
Di-n-butyl phthalate			50.0	58.3		ug/L		117	1 - 120	2	15
Di-n-octyl phthalate			50.0	60.3		ug/L		121	4 - 146	6	15
Dibenz(a,h)anthracene			50.0	58.6		ug/L		117	1 - 227	7	18
Diethyl phthalate			50.0	54.0		ug/L		108	1 - 120	7	15
Dimethyl phthalate			50.0	54.5		ug/L		109	1 - 120	9	15
Fluoranthene			50.0	55.1		ug/L		110	26 - 137	2	15
Fluorene			50.0	53.7		ug/L		107	59 - 121	10	18
Hexachlorobenzene			50.0	51.7		ug/L		103	1 - 152	4	15
Hexachlorocyclopentadiene			50.0	39.6		ug/L		79	5 - 120	16	50
Hexachloroethane			50.0	30.0		ug/L		60	40 - 120	4	43
Indeno[1,2,3-cd]pyrene			50.0	59.3		ug/L		119	1 - 171	6	17
Isophorone			50.0	51.5		ug/L		103	21 - 196	2	21
N-Nitrosodi-n-propylamine			50.0	48.1		ug/L		96	1 - 230	3	23
N-Nitrosodiphenylamine			50.0	53.2		ug/L		106	54 - 125	0	15
Naphthalene			50.0	44.3		ug/L		89	21 - 133	0	31
Nitrobenzene			50.0	48.2		ug/L		96	35 - 180	4	27
Pentachlorophenol			100	105		ug/L		105	14 - 176	7	21
Phenanthrene			50.0	52.8		ug/L		106	54 - 120	3	16
Phenol			50.0	23.4		ug/L		47	5 - 120	4	36
Pyrene			50.0	51.8		ug/L		104	52 - 120	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*95*		*52 - 151*
2-Fluorobiphenyl	*92*		*44 - 120*
2-Fluorophenol	*53*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-664591/3-A
Matrix: Water
Analysis Batch: 664695

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 664591

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*85*		*15 - 314*
p-Terphenyl-d14	*98*		*22 - 125*
Phenol-d5	*37*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-664395/1-A
Matrix: Water
Analysis Batch: 664920

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 664395

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.00201	J	0.010	0.0015	mg/L		04/10/23 08:33	04/11/23 17:08	1

Lab Sample ID: LCS 480-664395/2-A
Matrix: Water
Analysis Batch: 664920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 664395

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.207		mg/L		104	85 - 115

Lab Sample ID: 480-207612-6 MS
Matrix: Water
Analysis Batch: 664920

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 664395

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.0025	J B	0.200	0.203		mg/L		100	70 - 130

Lab Sample ID: 480-207612-6 MSD
Matrix: Water
Analysis Batch: 664920

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 664395

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	0.0025	J B	0.200	0.204		mg/L		101	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-664513/1-A
Matrix: Water
Analysis Batch: 664636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 664513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		04/10/23 10:31	04/10/23 15:18	1

Lab Sample ID: LCS 480-664513/2-A
Matrix: Water
Analysis Batch: 664636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 664513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00598		mg/L		89	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-665533/21
Matrix: Water
Analysis Batch: 665533

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00490	J	0.010	0.0041	mg/L			04/14/23 15:19	1

Lab Sample ID: MB 480-665533/49
Matrix: Water
Analysis Batch: 665533

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00600	J ^+	0.010	0.0041	mg/L			04/14/23 16:35	1

Lab Sample ID: HLCS 480-665533/22
Matrix: Water
Analysis Batch: 665533

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

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.397		mg/L		99	90 - 110		

Lab Sample ID: LCS 480-665533/23
Matrix: Water
Analysis Batch: 665533

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.245		mg/L		98	90 - 110		

Lab Sample ID: LCS 480-665533/50
Matrix: Water
Analysis Batch: 665533

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.240	^+	mg/L		96	90 - 110		

Lab Sample ID: 480-207612-6 MS
Matrix: Water
Analysis Batch: 665533

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	0.083	B	0.100	0.183		mg/L		99	90 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-666044/23
Matrix: Water
Analysis Batch: 666044

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101	99 - 101		

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

GC/MS VOA

Analysis Batch: 664363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-5	TRIP BLANK	Total/NA	Water	624.1	
480-207612-6	001 LAB COMP	Total/NA	Water	624.1	
MB 480-664363/8	Method Blank	Total/NA	Water	624.1	
LCS 480-664363/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 664591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	625	
MB 480-664591/1-A	Method Blank	Total/NA	Water	625	
LCS 480-664591/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-664591/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 664695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	625.1	664591
MB 480-664591/1-A	Method Blank	Total/NA	Water	625.1	664591
LCS 480-664591/2-A	Lab Control Sample	Total/NA	Water	625.1	664591
LCSD 480-664591/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	664591

Metals

Prep Batch: 664395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	200.7	
MB 480-664395/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-664395/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-207612-6 MS	001 LAB COMP	Total/NA	Water	200.7	
480-207612-6 MSD	001 LAB COMP	Total/NA	Water	200.7	

Prep Batch: 664513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	245.1	
MB 480-664513/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-664513/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 664636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	245.1	664513
MB 480-664513/1-A	Method Blank	Total/NA	Water	245.1	664513
LCS 480-664513/2-A	Lab Control Sample	Total/NA	Water	245.1	664513

Analysis Batch: 664920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	664395
MB 480-664395/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	664395
LCS 480-664395/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	664395
480-207612-6 MS	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	664395
480-207612-6 MSD	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	664395

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

General Chemistry

Analysis Batch: 665533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	335.4	
MB 480-665533/21	Method Blank	Total/NA	Water	335.4	
MB 480-665533/49	Method Blank	Total/NA	Water	335.4	
HLCS 480-665533/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-665533/23	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-665533/50	Lab Control Sample	Total/NA	Water	335.4	
480-207612-6 MS	001 LAB COMP	Total/NA	Water	335.4	

Analysis Batch: 666044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207612-6	001 LAB COMP	Total/NA	Water	SM 4500 H+ B	
LCS 480-666044/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-207612-5
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	664363	ATG	EET BUF	04/07/23 17:04

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-207612-6
Date Collected: 04/06/23 00:00
Matrix: Water
Date Received: 04/07/23 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	664363	ATG	EET BUF	04/07/23 17:28
Total/NA	Prep	625			664591	LSC	EET BUF	04/10/23 15:21
Total/NA	Analysis	625.1		1	664695	JMM	EET BUF	04/11/23 14:20
Total/NA	Prep	200.7			664395	NVK	EET BUF	04/10/23 08:33
Total/NA	Analysis	200.7 Rev 4.4		1	664920	LMH	EET BUF	04/11/23 17:56
Total/NA	Prep	245.1			664513	VAK	EET BUF	04/10/23 10:31
Total/NA	Analysis	245.1		1	664636	NVK	EET BUF	04/10/23 15:51
Total/NA	Analysis	335.4		1	665533	CLT	EET BUF	04/14/23 15:30
Total/NA	Analysis	SM 4500 H+ B		1	666044	MT	EET BUF	04/19/23 13:42

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,2-Dichloroethene, Total
624.1		Water	Ethyl methacrylate
625.1	625	Water	1,2-Dichlorobenzene
625.1	625	Water	1,3-Dichlorobenzene
625.1	625	Water	1,4-Dichlorobenzene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-207612-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-207612-5	TRIP BLANK	Water	04/06/23 00:00	04/07/23 10:05
480-207612-6	001 LAB COMP	Water	04/06/23 00:00	04/07/23 10:05

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

Chain of Custody Record

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Client Information	Sampler: Jason Gutkowski	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-181778-34075.1
Client Contact: Jason Gutkowski	Phone: 3154363605	E-Mail: Steve.Hartmann@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS U.S., Inc.	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3

480-207612 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)	625.1_PREC - Priority Pollutant List - SVOA - 6	624.1_PREC - Priority Pollutant List - VOA - 62	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	624.1_PREC - Priority Pollutant List - VOA	Total Number	Special Instructions/Note:
Preservation Code:							N	N	D	N	B	N		
001-1	4/6/23	0615	G	Water			X	X	X	X	X			Lab To
001-2		0815		Water			X	X	X	X	X			Composite
001-3		1015					X	X	X	X	X			Samples
001-4		1215					X	X	X	X	X			
Trip Blank		—										X		Short Hold Time

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:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/6/23 / 1232	Arcadis	[signature]	4/6/23 1232	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 617 # 1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-207612-1

Login Number: 207612
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	ARCADIS
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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

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JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.Monthly

JOB NUMBER

480-208565-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

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.

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.

General Chemistry

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Job ID: 480-208565-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-208565-1

Comments
No additional comments.

Receipt
The samples were received on 5/4/2023 2:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 11.6º C.

GC/MS VOA
Method 624.1: The following Volatile sample was composited by the laboratory on 5/4/2023 as requested by the client: 001 LAB COMP (480-208565-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

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

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

General Chemistry
Methods 335.4: Reanalysis of the following sample was performed outside of the analytical holding time due to qc (low ccv) failures during first analysis : 001 LAB COMP (480-208565-6).

Method SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-208565-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-668385.

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-208565-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-208565-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.082	H B ^+	0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	20.4	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-208565-5

Date Collected: 05/04/23 00:00
Matrix: Water
Date Received: 05/04/23 14:50

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/04/23 18:35	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/04/23 18:35	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/04/23 18:35	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/04/23 18:35	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/04/23 18:35	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/04/23 18:35	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/04/23 18:35	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/04/23 18:35	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/04/23 18:35	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/04/23 18:35	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/04/23 18:35	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/04/23 18:35	1
Acrolein	ND		100	17	ug/L			05/04/23 18:35	1
Acrylonitrile	ND		50	1.9	ug/L			05/04/23 18:35	1
Benzene	ND		5.0	0.60	ug/L			05/04/23 18:35	1
Bromoform	ND		5.0	0.47	ug/L			05/04/23 18:35	1
Bromomethane	ND		5.0	1.2	ug/L			05/04/23 18:35	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/04/23 18:35	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/04/23 18:35	1
Dibromochloromethane	ND		5.0	0.41	ug/L			05/04/23 18:35	1
Chloroethane	ND		5.0	0.87	ug/L			05/04/23 18:35	1
Chloroform	ND		5.0	0.54	ug/L			05/04/23 18:35	1
Chloromethane	ND		5.0	0.64	ug/L			05/04/23 18:35	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/04/23 18:35	1
Bromodichloromethane	ND		5.0	0.54	ug/L			05/04/23 18:35	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			05/04/23 18:35	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/04/23 18:35	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/04/23 18:35	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/04/23 18:35	1
Toluene	ND		5.0	0.45	ug/L			05/04/23 18:35	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/04/23 18:35	1
Trichloroethene	ND		5.0	0.60	ug/L			05/04/23 18:35	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			05/04/23 18:35	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/04/23 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*05/04/23 18:35*	*1*
4-Bromofluorobenzene (Surr)	*91*		*76 - 123*		*05/04/23 18:35*	*1*
Toluene-d8 (Surr)	*89*		*77 - 120*		*05/04/23 18:35*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*05/04/23 18:35*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-208565-6

Date Collected: 05/04/23 12:35
Matrix: Water
Date Received: 05/04/23 14:50

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/04/23 19:00	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/04/23 19:00	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/04/23 19:00	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-208565-6
Date Collected: 05/04/23 12:35
Matrix: Water
Date Received: 05/04/23 14:50

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/04/23 19:00	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/04/23 19:00	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/04/23 19:00	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/04/23 19:00	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/04/23 19:00	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/04/23 19:00	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/04/23 19:00	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/04/23 19:00	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/04/23 19:00	1
Acrolein	ND		100	17	ug/L			05/04/23 19:00	1
Acrylonitrile	ND		50	1.9	ug/L			05/04/23 19:00	1
Benzene	ND		5.0	0.60	ug/L			05/04/23 19:00	1
Bromoform	ND		5.0	0.47	ug/L			05/04/23 19:00	1
Bromomethane	ND		5.0	1.2	ug/L			05/04/23 19:00	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/04/23 19:00	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/04/23 19:00	1
Dibromochloromethane	ND		5.0	0.41	ug/L			05/04/23 19:00	1
Chloroethane	ND		5.0	0.87	ug/L			05/04/23 19:00	1
Chloroform	ND		5.0	0.54	ug/L			05/04/23 19:00	1
Chloromethane	ND		5.0	0.64	ug/L			05/04/23 19:00	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/04/23 19:00	1
Bromodichloromethane	ND		5.0	0.54	ug/L			05/04/23 19:00	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			05/04/23 19:00	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/04/23 19:00	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/04/23 19:00	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/04/23 19:00	1
Toluene	ND		5.0	0.45	ug/L			05/04/23 19:00	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/04/23 19:00	1
Trichloroethene	ND		5.0	0.60	ug/L			05/04/23 19:00	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			05/04/23 19:00	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/04/23 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*05/04/23 19:00*	*1*
4-Bromofluorobenzene (Surr)	*90*		*76 - 123*		*05/04/23 19:00*	*1*
Toluene-d8 (Surr)	*90*		*77 - 120*		*05/04/23 19:00*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*05/04/23 19:00*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.6	0.20	ug/L		05/05/23 14:55	05/08/23 17:38	1
1,2-Dichlorobenzene	ND		9.6	0.25	ug/L		05/05/23 14:55	05/08/23 17:38	1
1,2-Diphenylhydrazine	ND		9.6	0.19	ug/L		05/05/23 14:55	05/08/23 17:38	1
1,3-Dichlorobenzene	ND		9.6	0.17	ug/L		05/05/23 14:55	05/08/23 17:38	1
1,4-Dichlorobenzene	ND		9.6	0.20	ug/L		05/05/23 14:55	05/08/23 17:38	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		05/05/23 14:55	05/08/23 17:38	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
2,4-Dichlorophenol	ND		4.8	0.19	ug/L		05/05/23 14:55	05/08/23 17:38	1
2,4-Dimethylphenol	ND		4.8	0.34	ug/L		05/05/23 14:55	05/08/23 17:38	1
2,4-Dinitrophenol	ND		9.6	1.2	ug/L		05/05/23 14:55	05/08/23 17:38	1

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-208565-6
Date Collected: 05/04/23 12:35
Matrix: Water
Date Received: 05/04/23 14:50

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		9.6	0.39	ug/L		05/05/23 14:55	05/08/23 17:38	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		05/05/23 14:55	05/08/23 17:38	1
2-Chlorophenol	ND		4.8	0.16	ug/L		05/05/23 14:55	05/08/23 17:38	1
2-Nitrophenol	ND		4.8	0.17	ug/L		05/05/23 14:55	05/08/23 17:38	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		05/05/23 14:55	05/08/23 17:38	1
4,6-Dinitro-2-methylphenol	ND		9.6	0.43	ug/L		05/05/23 14:55	05/08/23 17:38	1
4-Bromophenyl phenyl ether	ND		4.8	0.34	ug/L		05/05/23 14:55	05/08/23 17:38	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		05/05/23 14:55	05/08/23 17:38	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		05/05/23 14:55	05/08/23 17:38	1
4-Nitrophenol	ND		14	0.47	ug/L		05/05/23 14:55	05/08/23 17:38	1
Acenaphthene	ND		4.8	0.19	ug/L		05/05/23 14:55	05/08/23 17:38	1
Acenaphthylene	ND		4.8	0.21	ug/L		05/05/23 14:55	05/08/23 17:38	1
Anthracene	ND		4.8	0.34	ug/L		05/05/23 14:55	05/08/23 17:38	1
Benzidine	ND		77	13	ug/L		05/05/23 14:55	05/08/23 17:38	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		05/05/23 14:55	05/08/23 17:38	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		05/05/23 14:55	05/08/23 17:38	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		05/05/23 14:55	05/08/23 17:38	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		05/05/23 14:55	05/08/23 17:38	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		05/05/23 14:55	05/08/23 17:38	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		05/05/23 14:55	05/08/23 17:38	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		05/05/23 14:55	05/08/23 17:38	1
Bis(2-ethylhexyl) phthalate	ND		9.6	0.29	ug/L		05/05/23 14:55	05/08/23 17:38	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		05/05/23 14:55	05/08/23 17:38	1
Chrysene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
Decane	ND		9.6	0.38	ug/L		05/05/23 14:55	05/08/23 17:38	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		05/05/23 14:55	05/08/23 17:38	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		05/05/23 14:55	05/08/23 17:38	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		05/05/23 14:55	05/08/23 17:38	1
Diethyl phthalate	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		05/05/23 14:55	05/08/23 17:38	1
Fluoranthene	ND		4.8	0.38	ug/L		05/05/23 14:55	05/08/23 17:38	1
Fluorene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 17:38	1
Hexachlorocyclopentadiene	ND		9.6	0.51	ug/L		05/05/23 14:55	05/08/23 17:38	1
Hexachloroethane	ND		4.8	0.14	ug/L		05/05/23 14:55	05/08/23 17:38	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		05/05/23 14:55	05/08/23 17:38	1
Isophorone	ND		4.8	0.18	ug/L		05/05/23 14:55	05/08/23 17:38	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		05/05/23 14:55	05/08/23 17:38	1
N-Nitrosodimethylamine	ND		9.6	0.14	ug/L		05/05/23 14:55	05/08/23 17:38	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		05/05/23 14:55	05/08/23 17:38	1
Naphthalene	ND		4.8	0.21	ug/L		05/05/23 14:55	05/08/23 17:38	1
Nitrobenzene	ND		4.8	0.19	ug/L		05/05/23 14:55	05/08/23 17:38	1
Pentachlorophenol	ND		9.6	0.76	ug/L		05/05/23 14:55	05/08/23 17:38	1
Phenanthrene	ND		4.8	0.29	ug/L		05/05/23 14:55	05/08/23 17:38	1
Phenol	ND		4.8	0.084	ug/L		05/05/23 14:55	05/08/23 17:38	1
Pyrene	ND		4.8	0.34	ug/L		05/05/23 14:55	05/08/23 17:38	1
n-Octadecane	ND		9.6	0.29	ug/L		05/05/23 14:55	05/08/23 17:38	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-208565-6

Date Collected: 05/04/23 12:35
Matrix: Water
Date Received: 05/04/23 14:50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*64*		*52 - 151*	*05/05/23 14:55*	*05/08/23 17:38*	*1*
2-Fluorobiphenyl	*90*		*44 - 120*	*05/05/23 14:55*	*05/08/23 17:38*	*1*
2-Fluorophenol	*48*		*17 - 120*	*05/05/23 14:55*	*05/08/23 17:38*	*1*
Nitrobenzene-d5	*80*		*15 - 314*	*05/05/23 14:55*	*05/08/23 17:38*	*1*
p-Terphenyl-d14	*80*		*22 - 125*	*05/05/23 14:55*	*05/08/23 17:38*	*1*
Phenol-d5	*31*		*8 - 424*	*05/05/23 14:55*	*05/08/23 17:38*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		05/08/23 08:41	05/10/23 14:04	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		05/05/23 11:10	05/05/23 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.082**	**H B ^+**	0.010	0.0041	mg/L			05/25/23 17:23	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.1**	**HF**	0.1	0.1	SU			05/16/23 18:26	1
Temperature (SM 4500 H+ B)	**20.4**	**HF**	0.001	0.001	Degrees C			05/16/23 18:26	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-208565-5	TRIP BLANK	103	91	89	106
480-208565-6	001 LAB COMP	103	90	90	108
LCS 480-668108/6	Lab Control Sample	100	92	89	105
MB 480-668108/8	Method Blank	103	90	90	104

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-208565-6	001 LAB COMP	64	90	48	80	80	31
LCS 480-668385/2-A	Lab Control Sample	86	86	44	75	86	32
LCSD 480-668385/3-A	Lab Control Sample Dup	92	90	47	79	82	32
MB 480-668385/1-A	Method Blank	69	89	53	82	95	36

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-668108/8
Matrix: Water
Analysis Batch: 668108

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			05/04/23 11:55	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			05/04/23 11:55	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			05/04/23 11:55	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			05/04/23 11:55	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			05/04/23 11:55	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			05/04/23 11:55	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			05/04/23 11:55	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			05/04/23 11:55	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			05/04/23 11:55	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			05/04/23 11:55	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			05/04/23 11:55	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			05/04/23 11:55	1
Acrolein	ND		100	17	ug/L			05/04/23 11:55	1
Acrylonitrile	ND		50	1.9	ug/L			05/04/23 11:55	1
Benzene	ND		5.0	0.60	ug/L			05/04/23 11:55	1
Bromoform	ND		5.0	0.47	ug/L			05/04/23 11:55	1
Bromomethane	ND		5.0	1.2	ug/L			05/04/23 11:55	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			05/04/23 11:55	1
Chlorobenzene	ND		5.0	0.48	ug/L			05/04/23 11:55	1
Dibromochloromethane	ND		5.0	0.41	ug/L			05/04/23 11:55	1
Chloroethane	ND		5.0	0.87	ug/L			05/04/23 11:55	1
Chloroform	ND		5.0	0.54	ug/L			05/04/23 11:55	1
Chloromethane	ND		5.0	0.64	ug/L			05/04/23 11:55	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			05/04/23 11:55	1
Bromodichloromethane	ND		5.0	0.54	ug/L			05/04/23 11:55	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			05/04/23 11:55	1
Ethylbenzene	ND		5.0	0.46	ug/L			05/04/23 11:55	1
Methylene Chloride	ND		5.0	0.81	ug/L			05/04/23 11:55	1
Tetrachloroethene	ND		5.0	0.34	ug/L			05/04/23 11:55	1
Toluene	ND		5.0	0.45	ug/L			05/04/23 11:55	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			05/04/23 11:55	1
Trichloroethene	ND		5.0	0.60	ug/L			05/04/23 11:55	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			05/04/23 11:55	1
Vinyl chloride	ND		5.0	0.75	ug/L			05/04/23 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*05/04/23 11:55*	*1*
4-Bromofluorobenzene (Surr)	*90*		*76 - 123*		*05/04/23 11:55*	*1*
Toluene-d8 (Surr)	*90*		*77 - 120*		*05/04/23 11:55*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/04/23 11:55*	*1*

Lab Sample ID: LCS 480-668108/6
Matrix: Water
Analysis Batch: 668108

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	23.3		ug/L		117	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	18.6		ug/L		93	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-668108/6
Matrix: Water
Analysis Batch: 668108

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	18.2		ug/L		91	52 - 150
1,1-Dichloroethane	20.0	20.3		ug/L		102	59 - 155
1,1-Dichloroethene	20.0	21.3		ug/L		107	1 - 234
1,2-Dichlorobenzene	20.0	21.0		ug/L		105	18 - 190
1,2-Dichloroethane	20.0	21.9		ug/L		110	49 - 155
1,2-Dichloropropane	20.0	19.8		ug/L		99	1 - 210
1,3-Dichlorobenzene	20.0	21.1		ug/L		106	59 - 156
1,4-Dichlorobenzene	20.0	21.2		ug/L		106	18 - 190
2-Chloroethyl vinyl ether	20.0	20.4	J	ug/L		102	1 - 305
Benzene	20.0	19.6		ug/L		98	37 - 151
Bromoform	20.0	21.8		ug/L		109	45 - 169
Bromomethane	20.0	21.2		ug/L		106	1 - 242
Carbon tetrachloride	20.0	25.4		ug/L		127	70 - 140
Chlorobenzene	20.0	20.9		ug/L		104	37 - 160
Dibromochloromethane	20.0	22.4		ug/L		112	53 - 149
Chloroethane	20.0	20.4		ug/L		102	14 - 230
Chloroform	20.0	19.9		ug/L		99	51 - 138
Chloromethane	20.0	15.9		ug/L		79	1 - 273
cis-1,3-Dichloropropene	20.0	20.4		ug/L		102	1 - 227
Bromodichloromethane	20.0	21.1		ug/L		106	35 - 155
Ethylbenzene	20.0	19.7		ug/L		99	37 - 162
Methylene Chloride	20.0	18.5		ug/L		93	1 - 221
Tetrachloroethene	20.0	21.4		ug/L		107	64 - 148
Toluene	20.0	19.3		ug/L		97	47 - 150
trans-1,3-Dichloropropene	20.0	19.1		ug/L		95	17 - 183
Trichloroethene	20.0	22.1		ug/L		110	71 - 157
Trichlorofluoromethane	20.0	23.7		ug/L		118	17 - 181
Vinyl chloride	20.0	18.9		ug/L		94	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*
4-Bromofluorobenzene (Surr)	*92*		*76 - 123*
Toluene-d8 (Surr)	*89*		*77 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-668385/1-A
Matrix: Water
Analysis Batch: 668560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		05/05/23 14:55	05/08/23 14:18	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		05/05/23 14:55	05/08/23 14:18	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		05/05/23 14:55	05/08/23 14:18	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		05/05/23 14:55	05/08/23 14:18	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		05/05/23 14:55	05/08/23 14:18	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		05/05/23 14:55	05/08/23 14:18	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-668385/1-A
Matrix: Water
Analysis Batch: 668560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		05/05/23 14:55	05/08/23 14:18	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		05/05/23 14:55	05/08/23 14:18	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		05/05/23 14:55	05/08/23 14:18	1
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		05/05/23 14:55	05/08/23 14:18	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		05/05/23 14:55	05/08/23 14:18	1
2-Chlorophenol	ND		4.8	0.16	ug/L		05/05/23 14:55	05/08/23 14:18	1
2-Nitrophenol	ND		4.8	0.17	ug/L		05/05/23 14:55	05/08/23 14:18	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		05/05/23 14:55	05/08/23 14:18	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		05/05/23 14:55	05/08/23 14:18	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		05/05/23 14:55	05/08/23 14:18	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		05/05/23 14:55	05/08/23 14:18	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		05/05/23 14:55	05/08/23 14:18	1
4-Nitrophenol	ND		14	0.46	ug/L		05/05/23 14:55	05/08/23 14:18	1
Acenaphthene	ND		4.8	0.19	ug/L		05/05/23 14:55	05/08/23 14:18	1
Acenaphthylene	ND		4.8	0.21	ug/L		05/05/23 14:55	05/08/23 14:18	1
Anthracene	ND		4.8	0.33	ug/L		05/05/23 14:55	05/08/23 14:18	1
Benzidine	ND		76	13	ug/L		05/05/23 14:55	05/08/23 14:18	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		05/05/23 14:55	05/08/23 14:18	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		05/05/23 14:55	05/08/23 14:18	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		05/05/23 14:55	05/08/23 14:18	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		05/05/23 14:55	05/08/23 14:18	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		05/05/23 14:55	05/08/23 14:18	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		05/05/23 14:55	05/08/23 14:18	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		05/05/23 14:55	05/08/23 14:18	1
Bis(2-ethylhexyl) phthalate	ND		9.5	0.29	ug/L		05/05/23 14:55	05/08/23 14:18	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		05/05/23 14:55	05/08/23 14:18	1
Chrysene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1
Decane	ND		9.5	0.38	ug/L		05/05/23 14:55	05/08/23 14:18	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		05/05/23 14:55	05/08/23 14:18	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		05/05/23 14:55	05/08/23 14:18	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		05/05/23 14:55	05/08/23 14:18	1
Diethyl phthalate	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		05/05/23 14:55	05/08/23 14:18	1
Fluoranthene	ND		4.8	0.38	ug/L		05/05/23 14:55	05/08/23 14:18	1
Fluorene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		05/05/23 14:55	05/08/23 14:18	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		05/05/23 14:55	05/08/23 14:18	1
Hexachloroethane	ND		4.8	0.14	ug/L		05/05/23 14:55	05/08/23 14:18	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		05/05/23 14:55	05/08/23 14:18	1
Isophorone	ND		4.8	0.18	ug/L		05/05/23 14:55	05/08/23 14:18	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		05/05/23 14:55	05/08/23 14:18	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		05/05/23 14:55	05/08/23 14:18	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		05/05/23 14:55	05/08/23 14:18	1
Naphthalene	ND		4.8	0.20	ug/L		05/05/23 14:55	05/08/23 14:18	1
Nitrobenzene	ND		4.8	0.19	ug/L		05/05/23 14:55	05/08/23 14:18	1
Pentachlorophenol	ND		9.5	0.75	ug/L		05/05/23 14:55	05/08/23 14:18	1
Phenanthrene	ND		4.8	0.29	ug/L		05/05/23 14:55	05/08/23 14:18	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-668385/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 668560
Prep Batch: 668385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.8	0.083	ug/L		05/05/23 14:55	05/08/23 14:18	1
Pyrene	ND		4.8	0.33	ug/L		05/05/23 14:55	05/08/23 14:18	1
n-Octadecane	ND		9.5	0.29	ug/L		05/05/23 14:55	05/08/23 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*69*		*52 - 151*	*05/05/23 14:55*	*05/08/23 14:18*	*1*
2-Fluorobiphenyl	*89*		*44 - 120*	*05/05/23 14:55*	*05/08/23 14:18*	*1*
2-Fluorophenol	*53*		*17 - 120*	*05/05/23 14:55*	*05/08/23 14:18*	*1*
Nitrobenzene-d5	*82*		*15 - 314*	*05/05/23 14:55*	*05/08/23 14:18*	*1*
p-Terphenyl-d14	*95*		*22 - 125*	*05/05/23 14:55*	*05/08/23 14:18*	*1*
Phenol-d5	*36*		*8 - 424*	*05/05/23 14:55*	*05/08/23 14:18*	*1*

Lab Sample ID: LCS 480-668385/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 668560
Prep Batch: 668385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	47.6	32.4		ug/L		68	44 - 142
1,2-Dichlorobenzene	47.6	30.0		ug/L		63	32 - 129
1,3-Dichlorobenzene	47.6	26.6		ug/L		56	1 - 172
1,4-Dichlorobenzene	47.6	28.4		ug/L		60	20 - 124
2,2'-Oxybis(1-chloropropane)	47.6	35.4		ug/L		74	36 - 166
2,4,6-Trichlorophenol	47.6	45.3		ug/L		95	37 - 144
2,4-Dichlorophenol	47.6	39.7		ug/L		83	39 - 135
2,4-Dimethylphenol	47.6	36.6		ug/L		77	32 - 120
2,4-Dinitrophenol	95.2	101		ug/L		106	1 - 191
2,4-Dinitrotoluene	47.6	50.6		ug/L		106	39 - 139
2,6-Dinitrotoluene	47.6	46.7		ug/L		98	50 - 158
2-Chloronaphthalene	47.6	42.6		ug/L		89	60 - 120
2-Chlorophenol	47.6	37.5		ug/L		79	23 - 134
2-Nitrophenol	47.6	42.5		ug/L		89	29 - 182
3,3'-Dichlorobenzidine	95.2	88.6		ug/L		93	1 - 262
4,6-Dinitro-2-methylphenol	95.2	94.0		ug/L		99	1 - 181
4-Bromophenyl phenyl ether	47.6	41.6		ug/L		87	53 - 127
4-Chloro-3-methylphenol	47.6	42.3		ug/L		89	22 - 147
4-Chlorophenyl phenyl ether	47.6	46.6		ug/L		98	25 - 158
4-Nitrophenol	95.2	56.3		ug/L		59	1 - 132
Acenaphthene	47.6	43.6		ug/L		91	47 - 145
Acenaphthylene	47.6	47.1		ug/L		99	33 - 145
Anthracene	47.6	44.0		ug/L		92	27 - 133
Benzidine	95.2	55.8	J	ug/L		59	1 - 120
Benzo[a]anthracene	47.6	46.0		ug/L		97	33 - 143
Benzo[a]pyrene	47.6	48.3		ug/L		101	17 - 163
Benzo[b]fluoranthene	47.6	47.5		ug/L		100	24 - 159
Benzo[g,h,i]perylene	47.6	45.1		ug/L		95	1 - 219
Benzo[k]fluoranthene	47.6	46.0		ug/L		97	11 - 162
Bis(2-chloroethoxy)methane	47.6	41.6		ug/L		87	33 - 184
Bis(2-chloroethyl)ether	47.6	38.8		ug/L		81	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-668385/2-A
Matrix: Water
Analysis Batch: 668560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	47.6	47.6		ug/L		100	8 - 158
Butyl benzyl phthalate	47.6	45.5		ug/L		96	1 - 152
Chrysene	47.6	42.9		ug/L		90	17 - 168
Di-n-butyl phthalate	47.6	49.1		ug/L		103	1 - 120
Di-n-octyl phthalate	47.6	48.8		ug/L		102	4 - 146
Dibenz(a,h)anthracene	47.6	46.6		ug/L		98	1 - 227
Diethyl phthalate	47.6	48.1		ug/L		101	1 - 120
Dimethyl phthalate	47.6	48.7		ug/L		102	1 - 120
Fluoranthene	47.6	47.9		ug/L		101	26 - 137
Fluorene	47.6	45.4		ug/L		95	59 - 121
Hexachlorobenzene	47.6	42.0		ug/L		88	1 - 152
Hexachlorocyclopentadiene	47.6	31.1		ug/L		65	5 - 120
Hexachloroethane	47.6	25.1		ug/L		53	40 - 120
Indeno[1,2,3-cd]pyrene	47.6	45.3		ug/L		95	1 - 171
Isophorone	47.6	42.1		ug/L		88	21 - 196
N-Nitrosodi-n-propylamine	47.6	38.7		ug/L		81	1 - 230
N-Nitrosodiphenylamine	47.6	42.8		ug/L		90	54 - 125
Naphthalene	47.6	36.4		ug/L		76	21 - 133
Nitrobenzene	47.6	39.3		ug/L		82	35 - 180
Pentachlorophenol	95.2	95.4		ug/L		100	14 - 176
Phenanthrene	47.6	42.7		ug/L		90	54 - 120
Phenol	47.6	19.4		ug/L		41	5 - 120
Pyrene	47.6	44.2		ug/L		93	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*86*		*52 - 151*
2-Fluorobiphenyl	*86*		*44 - 120*
2-Fluorophenol	*44*		*17 - 120*
Nitrobenzene-d5	*75*		*15 - 314*
p-Terphenyl-d14	*86*		*22 - 125*
Phenol-d5	*32*		*8 - 424*

Lab Sample ID: LCSD 480-668385/3-A
Matrix: Water
Analysis Batch: 668560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 668385

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	47.6	34.8		ug/L		73	44 - 142	7	34
1,2-Dichlorobenzene	47.6	29.9		ug/L		63	32 - 129	0	38
1,3-Dichlorobenzene	47.6	28.4		ug/L		60	1 - 172	6	37
1,4-Dichlorobenzene	47.6	29.2		ug/L		61	20 - 124	3	40
2,2'-Oxybis(1-chloropropane)	47.6	36.5		ug/L		77	36 - 166	3	36
2,4,6-Trichlorophenol	47.6	47.0		ug/L		99	37 - 144	4	20
2,4-Dichlorophenol	47.6	43.0		ug/L		90	39 - 135	8	23
2,4-Dimethylphenol	47.6	36.6		ug/L		77	32 - 120	0	18
2,4-Dinitrophenol	95.2	97.1		ug/L		102	1 - 191	4	29
2,4-Dinitrotoluene	47.6	47.4		ug/L		99	39 - 139	7	20
2,6-Dinitrotoluene	47.6	46.8		ug/L		98	50 - 158	0	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-668385/3-A
Matrix: Water
Analysis Batch: 668560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 668385

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			47.6	44.0		ug/L		92	60 - 120	3	30
2-Chlorophenol			47.6	37.8		ug/L		79	23 - 134	1	26
2-Nitrophenol			47.6	45.3		ug/L		95	29 - 182	6	28
3,3'-Dichlorobenzidine			95.2	95.2		ug/L		100	1 - 262	7	31
4,6-Dinitro-2-methylphenol			95.2	101		ug/L		107	1 - 181	8	30
4-Bromophenyl phenyl ether			47.6	44.8		ug/L		94	53 - 127	7	16
4-Chloro-3-methylphenol			47.6	42.1		ug/L		88	22 - 147	0	16
4-Chlorophenyl phenyl ether			47.6	44.8		ug/L		94	25 - 158	4	15
4-Nitrophenol			95.2	49.6		ug/L		52	1 - 132	13	24
Acenaphthene			47.6	44.7		ug/L		94	47 - 145	3	25
Acenaphthylene			47.6	48.6		ug/L		102	33 - 145	3	22
Anthracene			47.6	47.0		ug/L		99	27 - 133	7	15
Benzidine			95.2	34.0	J	ug/L		36	1 - 120	48	50
Benzo[a]anthracene			47.6	47.3		ug/L		99	33 - 143	3	15
Benzo[a]pyrene			47.6	49.3		ug/L		104	17 - 163	2	15
Benzo[b]fluoranthene			47.6	50.6		ug/L		106	24 - 159	6	17
Benzo[g,h,i]perylene			47.6	48.1		ug/L		101	1 - 219	6	19
Benzo[k]fluoranthene			47.6	46.3		ug/L		97	11 - 162	1	19
Bis(2-chloroethoxy)methane			47.6	41.9		ug/L		88	33 - 184	1	23
Bis(2-chloroethyl)ether			47.6	39.0		ug/L		82	12 - 158	1	33
Bis(2-ethylhexyl) phthalate			47.6	48.0		ug/L		101	8 - 158	1	15
Butyl benzyl phthalate			47.6	45.1		ug/L		95	1 - 152	1	15
Chrysene			47.6	45.5		ug/L		95	17 - 168	6	15
Di-n-butyl phthalate			47.6	48.3		ug/L		101	1 - 120	2	15
Di-n-octyl phthalate			47.6	52.0		ug/L		109	4 - 146	6	15
Dibenz(a,h)anthracene			47.6	50.2		ug/L		105	1 - 227	7	18
Diethyl phthalate			47.6	44.2		ug/L		93	1 - 120	8	15
Dimethyl phthalate			47.6	46.4		ug/L		98	1 - 120	5	15
Fluoranthene			47.6	48.9		ug/L		103	26 - 137	2	15
Fluorene			47.6	45.2		ug/L		95	59 - 121	0	18
Hexachlorobenzene			47.6	46.7		ug/L		98	1 - 152	11	15
Hexachlorocyclopentadiene			47.6	34.7		ug/L		73	5 - 120	11	50
Hexachloroethane			47.6	25.6		ug/L		54	40 - 120	2	43
Indeno[1,2,3-cd]pyrene			47.6	48.6		ug/L		102	1 - 171	7	17
Isophorone			47.6	42.8		ug/L		90	21 - 196	2	21
N-Nitrosodi-n-propylamine			47.6	39.1		ug/L		82	1 - 230	1	23
N-Nitrosodiphenylamine			47.6	46.1		ug/L		97	54 - 125	7	15
Naphthalene			47.6	38.0		ug/L		80	21 - 133	4	31
Nitrobenzene			47.6	42.2		ug/L		89	35 - 180	7	27
Pentachlorophenol			95.2	103		ug/L		108	14 - 176	7	21
Phenanthrene			47.6	45.8		ug/L		96	54 - 120	7	16
Phenol			47.6	18.9		ug/L		40	5 - 120	3	36
Pyrene			47.6	43.7		ug/L		92	52 - 120	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*92*		*52 - 151*
2-Fluorobiphenyl	*90*		*44 - 120*
2-Fluorophenol	*47*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-668385/3-A
Matrix: Water
Analysis Batch: 668560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 668385

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*79*		*15 - 314*
p-Terphenyl-d14	*82*		*22 - 125*
Phenol-d5	*32*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-668376/1-A
Matrix: Water
Analysis Batch: 669066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		05/08/23 08:41	05/10/23 13:03	1

Lab Sample ID: LCS 480-668376/2-A
Matrix: Water
Analysis Batch: 669066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.203		mg/L		101	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-668343/1-A
Matrix: Water
Analysis Batch: 668414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		05/05/23 11:10	05/05/23 15:27	1

Lab Sample ID: LCS 480-668343/2-A
Matrix: Water
Analysis Batch: 668414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00691		mg/L		103	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-671026/105
Matrix: Water
Analysis Batch: 671026

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00650	J ^+	0.010	0.0041	mg/L			05/25/23 17:19	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: MB 480-671026/77
Matrix: Water
Analysis Batch: 671026

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00630	J	0.010	0.0041	mg/L			05/25/23 16:04	1

Lab Sample ID: HLCS 480-671026/22
Matrix: Water
Analysis Batch: 671026

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.400		mg/L		100	90 - 110

Lab Sample ID: LCS 480-671026/106
Matrix: Water
Analysis Batch: 671026

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.239	^+	mg/L		96	90 - 110

Lab Sample ID: LCS 480-671026/78
Matrix: Water
Analysis Batch: 671026

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.249		mg/L		99	90 - 110

Lab Sample ID: 480-208565-6 MS
Matrix: Water
Analysis Batch: 671026

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.082	H B ^+	0.100	0.174	^+	mg/L		92	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-669716/23
Matrix: Water
Analysis Batch: 669716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: 480-208565-6 DU
Matrix: Water
Analysis Batch: 669716

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.1	HF	7.1		SU		0.1	5
Temperature	20.4	HF	20.4		Degrees C		0.1	10

GC/MS VOA

Analysis Batch: 668108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-5	TRIP BLANK	Total/NA	Water	624.1	
480-208565-6	001 LAB COMP	Total/NA	Water	624.1	
MB 480-668108/8	Method Blank	Total/NA	Water	624.1	
LCS 480-668108/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 668385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	625	
MB 480-668385/1-A	Method Blank	Total/NA	Water	625	
LCS 480-668385/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-668385/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 668560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	625.1	668385
MB 480-668385/1-A	Method Blank	Total/NA	Water	625.1	668385
LCS 480-668385/2-A	Lab Control Sample	Total/NA	Water	625.1	668385
LCSD 480-668385/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	668385

Metals

Prep Batch: 668343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	245.1	
MB 480-668343/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-668343/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 668376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	200.7	
MB 480-668376/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-668376/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 668414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	245.1	668343
MB 480-668343/1-A	Method Blank	Total/NA	Water	245.1	668343
LCS 480-668343/2-A	Lab Control Sample	Total/NA	Water	245.1	668343

Analysis Batch: 669066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	668376
MB 480-668376/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	668376
LCS 480-668376/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	668376

General Chemistry

Analysis Batch: 669716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 669716 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-669716/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-208565-6 DU	001 LAB COMP	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 671026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208565-6	001 LAB COMP	Total/NA	Water	335.4	
MB 480-671026/105	Method Blank	Total/NA	Water	335.4	
MB 480-671026/77	Method Blank	Total/NA	Water	335.4	
HLCS 480-671026/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-671026/106	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-671026/78	Lab Control Sample	Total/NA	Water	335.4	
480-208565-6 MS	001 LAB COMP	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-208565-5
Date Collected: 05/04/23 00:00
Matrix: Water
Date Received: 05/04/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	668108	ATG	EET BUF	05/04/23 18:35

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-208565-6
Date Collected: 05/04/23 12:35
Matrix: Water
Date Received: 05/04/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	668108	ATG	EET BUF	05/04/23 19:00
Total/NA	Prep	625			668385	LSC	EET BUF	05/05/23 14:55
Total/NA	Analysis	625.1		1	668560	JMM	EET BUF	05/08/23 17:38
Total/NA	Prep	200.7			668376	VAK	EET BUF	05/08/23 08:41
Total/NA	Analysis	200.7 Rev 4.4		1	669066	LMH	EET BUF	05/10/23 14:04
Total/NA	Prep	245.1			668343	NVK	EET BUF	05/05/23 11:10
Total/NA	Analysis	245.1		1	668414	NVK	EET BUF	05/05/23 15:52
Total/NA	Analysis	335.4		1	671026	CLT	EET BUF	05/25/23 17:23
Total/NA	Analysis	SM 4500 H+ B		1	669716	DSC	EET BUF	05/16/23 18:26

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,2-Dichloroethene, Total
624.1		Water	Ethyl methacrylate
625.1	625	Water	1,2-Dichlorobenzene
625.1	625	Water	1,3-Dichlorobenzene
625.1	625	Water	1,4-Dichlorobenzene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208565-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-208565-5	TRIP BLANK	Water	05/04/23 00:00	05/04/23 14:50
480-208565-6	001 LAB COMP	Water	05/04/23 12:35	05/04/23 14:50

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

Chain of Custody Record

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Client Information	Sampler: Jason Gutkowski	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-181779-34075.1
Client Contact: Jason Gutkowski	Phone: 315 436 3605	E-Mail: Steve.Hartmann@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site:	SSOW#:			

Analysis Requested

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)	625.1_PREC - Priority Pollutant List - SVOA - 6	624.1_PREC - Priority Pollutant List - VOA - 62	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	624.1_PREC - Priority Pollutant List - VOA	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	D	N	B	N		
001-1	5/4/23	0635	G	Water			X	X	X	X	X			
001-2		0835		Water			X	X	X	X	X			
001-3		1035					X	X	X	X	X			
001-4		1235					X	X	X	X	X			
Trip Blank		—										X		

480-208565 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Y - Trizma
	Z - other (specify)

Other:

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:	Date/Time: 5/4/23 / 1313	Company: Arcadis	Received by:	Date/Time: 5/4/23 1313	Company: TA		
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: 1.6 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-208565-1

Login Number: 208565
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	ARCADIS
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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 6/19/2023 5:12:59 PM

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.Monthly

JOB NUMBER

480-209520-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Eurofins Buffalo

Job Notes

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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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

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.

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.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-209520-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-209520-1

Receipt
The samples were received on 6/6/2023 2:04 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 17.9°C

GC/MS VOA
Method 624.1_PREC: The following Volatile sample was composited by the laboratory on 06/06/2023 as requested by the client: 001 LAB COMP (480-209520-6). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-672239.

Method 625.1_PREC: The continuing calibration verification (CCV) associated with batch 480-672348 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: 001 LAB COMP (480-209520-6).

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

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

General Chemistry
Method SM4500_H+: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-209520-6).

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-209520-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-209520-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.098	B F1	0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	19.0	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-209520-5

Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			06/06/23 21:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			06/06/23 21:18	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			06/06/23 21:18	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/06/23 21:18	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			06/06/23 21:18	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			06/06/23 21:18	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			06/06/23 21:18	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			06/06/23 21:18	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			06/06/23 21:18	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			06/06/23 21:18	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			06/06/23 21:18	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			06/06/23 21:18	1
Acrolein	ND		100	17	ug/L			06/06/23 21:18	1
Acrylonitrile	ND		50	1.9	ug/L			06/06/23 21:18	1
Benzene	ND		5.0	0.60	ug/L			06/06/23 21:18	1
Bromoform	ND		5.0	0.47	ug/L			06/06/23 21:18	1
Bromomethane	ND		5.0	1.2	ug/L			06/06/23 21:18	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			06/06/23 21:18	1
Chlorobenzene	ND		5.0	0.48	ug/L			06/06/23 21:18	1
Dibromochloromethane	ND		5.0	0.41	ug/L			06/06/23 21:18	1
Chloroethane	ND		5.0	0.87	ug/L			06/06/23 21:18	1
Chloroform	ND		5.0	0.54	ug/L			06/06/23 21:18	1
Chloromethane	ND		5.0	0.64	ug/L			06/06/23 21:18	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			06/06/23 21:18	1
Bromodichloromethane	ND		5.0	0.54	ug/L			06/06/23 21:18	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			06/06/23 21:18	1
Ethylbenzene	ND		5.0	0.46	ug/L			06/06/23 21:18	1
Methylene Chloride	ND		5.0	0.81	ug/L			06/06/23 21:18	1
Tetrachloroethene	ND		5.0	0.34	ug/L			06/06/23 21:18	1
Toluene	ND		5.0	0.45	ug/L			06/06/23 21:18	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			06/06/23 21:18	1
Trichloroethene	ND		5.0	0.60	ug/L			06/06/23 21:18	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			06/06/23 21:18	1
Vinyl chloride	ND		5.0	0.75	ug/L			06/06/23 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*		*06/06/23 21:18*	*1*
4-Bromofluorobenzene (Surr)	*92*		*76 - 123*		*06/06/23 21:18*	*1*
Toluene-d8 (Surr)	*91*		*77 - 120*		*06/06/23 21:18*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*06/06/23 21:18*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-209520-6

Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			06/06/23 21:42	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			06/06/23 21:42	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			06/06/23 21:42	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-209520-6
Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/06/23 21:42	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			06/06/23 21:42	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			06/06/23 21:42	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			06/06/23 21:42	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			06/06/23 21:42	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			06/06/23 21:42	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			06/06/23 21:42	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			06/06/23 21:42	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			06/06/23 21:42	1
Acrolein	ND		100	17	ug/L			06/06/23 21:42	1
Acrylonitrile	ND		50	1.9	ug/L			06/06/23 21:42	1
Benzene	ND		5.0	0.60	ug/L			06/06/23 21:42	1
Bromoform	ND		5.0	0.47	ug/L			06/06/23 21:42	1
Bromomethane	ND		5.0	1.2	ug/L			06/06/23 21:42	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			06/06/23 21:42	1
Chlorobenzene	ND		5.0	0.48	ug/L			06/06/23 21:42	1
Dibromochloromethane	ND		5.0	0.41	ug/L			06/06/23 21:42	1
Chloroethane	ND		5.0	0.87	ug/L			06/06/23 21:42	1
Chloroform	ND		5.0	0.54	ug/L			06/06/23 21:42	1
Chloromethane	ND		5.0	0.64	ug/L			06/06/23 21:42	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			06/06/23 21:42	1
Bromodichloromethane	ND		5.0	0.54	ug/L			06/06/23 21:42	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			06/06/23 21:42	1
Ethylbenzene	ND		5.0	0.46	ug/L			06/06/23 21:42	1
Methylene Chloride	ND		5.0	0.81	ug/L			06/06/23 21:42	1
Tetrachloroethene	ND		5.0	0.34	ug/L			06/06/23 21:42	1
Toluene	ND		5.0	0.45	ug/L			06/06/23 21:42	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			06/06/23 21:42	1
Trichloroethene	ND		5.0	0.60	ug/L			06/06/23 21:42	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			06/06/23 21:42	1
Vinyl chloride	ND		5.0	0.75	ug/L			06/06/23 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*		*06/06/23 21:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*76 - 123*		*06/06/23 21:42*	*1*
Toluene-d8 (Surr)	*90*		*77 - 120*		*06/06/23 21:42*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*06/06/23 21:42*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.8	0.20	ug/L		06/07/23 14:30	06/08/23 14:10	1
1,2-Dichlorobenzene	ND		9.8	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
1,2-Diphenylhydrazine	ND		9.8	0.19	ug/L		06/07/23 14:30	06/08/23 14:10	1
1,3-Dichlorobenzene	ND		9.8	0.17	ug/L		06/07/23 14:30	06/08/23 14:10	1
1,4-Dichlorobenzene	ND		9.8	0.20	ug/L		06/07/23 14:30	06/08/23 14:10	1
2,2'-Oxybis(1-chloropropane)	ND		4.9	0.21	ug/L		06/07/23 14:30	06/08/23 14:10	1
2,4,6-Trichlorophenol	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
2,4-Dichlorophenol	ND		4.9	0.19	ug/L		06/07/23 14:30	06/08/23 14:10	1
2,4-Dimethylphenol	ND		4.9	0.34	ug/L		06/07/23 14:30	06/08/23 14:10	1
2,4-Dinitrophenol	ND		9.8	1.2	ug/L		06/07/23 14:30	06/08/23 14:10	1

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-209520-6
Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		9.8	0.39	ug/L		06/07/23 14:30	06/08/23 14:10	1
2,6-Dinitrotoluene	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
2-Chloronaphthalene	ND		4.9	0.22	ug/L		06/07/23 14:30	06/08/23 14:10	1
2-Chlorophenol	ND		4.9	0.16	ug/L		06/07/23 14:30	06/08/23 14:10	1
2-Nitrophenol	ND		4.9	0.17	ug/L		06/07/23 14:30	06/08/23 14:10	1
3,3'-Dichlorobenzidine	ND		4.9	0.39	ug/L		06/07/23 14:30	06/08/23 14:10	1
4,6-Dinitro-2-methylphenol	ND		9.8	0.44	ug/L		06/07/23 14:30	06/08/23 14:10	1
4-Bromophenyl phenyl ether	ND		4.9	0.34	ug/L		06/07/23 14:30	06/08/23 14:10	1
4-Chloro-3-methylphenol	ND		4.9	0.27	ug/L		06/07/23 14:30	06/08/23 14:10	1
4-Chlorophenyl phenyl ether	ND		4.9	0.32	ug/L		06/07/23 14:30	06/08/23 14:10	1
4-Nitrophenol	ND		15	0.48	ug/L		06/07/23 14:30	06/08/23 14:10	1
Acenaphthene	ND		4.9	0.20	ug/L		06/07/23 14:30	06/08/23 14:10	1
Acenaphthylene	ND		4.9	0.21	ug/L		06/07/23 14:30	06/08/23 14:10	1
Anthracene	ND		4.9	0.34	ug/L		06/07/23 14:30	06/08/23 14:10	1
Benzidine	ND		78	13	ug/L		06/07/23 14:30	06/08/23 14:10	1
Benzo[a]anthracene	ND		4.9	0.27	ug/L		06/07/23 14:30	06/08/23 14:10	1
Benzo[a]pyrene	ND		4.9	0.32	ug/L		06/07/23 14:30	06/08/23 14:10	1
Benzo[b]fluoranthene	ND		4.9	0.29	ug/L		06/07/23 14:30	06/08/23 14:10	1
Benzo[g,h,i]perylene	ND		4.9	0.37	ug/L		06/07/23 14:30	06/08/23 14:10	1
Benzo[k]fluoranthene	ND		4.9	0.32	ug/L		06/07/23 14:30	06/08/23 14:10	1
Bis(2-chloroethoxy)methane	ND		4.9	0.18	ug/L		06/07/23 14:30	06/08/23 14:10	1
Bis(2-chloroethyl)ether	ND		4.9	0.23	ug/L		06/07/23 14:30	06/08/23 14:10	1
Bis(2-ethylhexyl) phthalate	ND		9.8	0.29	ug/L		06/07/23 14:30	06/08/23 14:10	1
Butyl benzyl phthalate	ND		4.9	0.27	ug/L		06/07/23 14:30	06/08/23 14:10	1
Chrysene	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
Decane	ND		9.8	0.39	ug/L		06/07/23 14:30	06/08/23 14:10	1
Di-n-butyl phthalate	ND		4.9	0.39	ug/L		06/07/23 14:30	06/08/23 14:10	1
Di-n-octyl phthalate	ND		4.9	0.29	ug/L		06/07/23 14:30	06/08/23 14:10	1
Dibenz(a,h)anthracene	ND		4.9	0.37	ug/L		06/07/23 14:30	06/08/23 14:10	1
Diethyl phthalate	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
Dimethyl phthalate	ND		4.9	0.22	ug/L		06/07/23 14:30	06/08/23 14:10	1
Fluoranthene	ND		4.9	0.39	ug/L		06/07/23 14:30	06/08/23 14:10	1
Fluorene	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
Hexachlorobenzene	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
Hexachlorobutadiene	ND		4.9	0.25	ug/L		06/07/23 14:30	06/08/23 14:10	1
Hexachlorocyclopentadiene	ND		9.8	0.52	ug/L		06/07/23 14:30	06/08/23 14:10	1
Hexachloroethane	ND		4.9	0.15	ug/L		06/07/23 14:30	06/08/23 14:10	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.37	ug/L		06/07/23 14:30	06/08/23 14:10	1
Isophorone	ND		4.9	0.18	ug/L		06/07/23 14:30	06/08/23 14:10	1
N-Nitrosodi-n-propylamine	ND		4.9	0.22	ug/L		06/07/23 14:30	06/08/23 14:10	1
N-Nitrosodimethylamine	ND		9.8	0.14	ug/L		06/07/23 14:30	06/08/23 14:10	1
N-Nitrosodiphenylamine	ND		4.9	0.20	ug/L		06/07/23 14:30	06/08/23 14:10	1
Naphthalene	ND		4.9	0.21	ug/L		06/07/23 14:30	06/08/23 14:10	1
Nitrobenzene	ND		4.9	0.20	ug/L		06/07/23 14:30	06/08/23 14:10	1
Pentachlorophenol	ND		9.8	0.77	ug/L		06/07/23 14:30	06/08/23 14:10	1
Phenanthrene	ND		4.9	0.29	ug/L		06/07/23 14:30	06/08/23 14:10	1
Phenol	ND		4.9	0.086	ug/L		06/07/23 14:30	06/08/23 14:10	1
Pyrene	ND		4.9	0.34	ug/L		06/07/23 14:30	06/08/23 14:10	1
n-Octadecane	ND		9.8	0.29	ug/L		06/07/23 14:30	06/08/23 14:10	1

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-209520-6

Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*84*		*52 - 151*	*06/07/23 14:30*	*06/08/23 14:10*	*1*
2-Fluorobiphenyl	*82*		*44 - 120*	*06/07/23 14:30*	*06/08/23 14:10*	*1*
2-Fluorophenol	*51*		*17 - 120*	*06/07/23 14:30*	*06/08/23 14:10*	*1*
Nitrobenzene-d5	*86*		*15 - 314*	*06/07/23 14:30*	*06/08/23 14:10*	*1*
p-Terphenyl-d14	*82*		*22 - 125*	*06/07/23 14:30*	*06/08/23 14:10*	*1*
Phenol-d5	*38*		*8 - 424*	*06/07/23 14:30*	*06/08/23 14:10*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		06/08/23 08:09	06/10/23 20:17	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/08/23 09:42	06/08/23 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.098**	**B F1**	0.010	0.0041	mg/L			06/14/23 09:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.4**	**HF**	0.1	0.1	SU			06/08/23 14:35	1
Temperature (SM 4500 H+ B)	**19.0**	**HF**	0.001	0.001	Degrees C			06/08/23 14:35	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-209520-5	TRIP BLANK	100	92	91	108
480-209520-6	001 LAB COMP	100	92	90	109
LCS 480-672073/6	Lab Control Sample	101	92	92	108
MB 480-672073/8	Method Blank	101	88	90	107

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-209520-6	001 LAB COMP	84	82	51	86	82	38
LCS 480-672239/2-A	Lab Control Sample	103	82	48	87	85	38
LCSD 480-672239/3-A	Lab Control Sample Dup	99	88	50	87	83	36
MB 480-672239/1-A	Method Blank	91	82	48	90	88	38

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-672073/8
Matrix: Water
Analysis Batch: 672073

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			06/06/23 17:52	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			06/06/23 17:52	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			06/06/23 17:52	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			06/06/23 17:52	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			06/06/23 17:52	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			06/06/23 17:52	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			06/06/23 17:52	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			06/06/23 17:52	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			06/06/23 17:52	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			06/06/23 17:52	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			06/06/23 17:52	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			06/06/23 17:52	1
Acrolein	ND		100	17	ug/L			06/06/23 17:52	1
Acrylonitrile	ND		50	1.9	ug/L			06/06/23 17:52	1
Benzene	ND		5.0	0.60	ug/L			06/06/23 17:52	1
Bromoform	ND		5.0	0.47	ug/L			06/06/23 17:52	1
Bromomethane	ND		5.0	1.2	ug/L			06/06/23 17:52	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			06/06/23 17:52	1
Chlorobenzene	ND		5.0	0.48	ug/L			06/06/23 17:52	1
Dibromochloromethane	ND		5.0	0.41	ug/L			06/06/23 17:52	1
Chloroethane	ND		5.0	0.87	ug/L			06/06/23 17:52	1
Chloroform	ND		5.0	0.54	ug/L			06/06/23 17:52	1
Chloromethane	ND		5.0	0.64	ug/L			06/06/23 17:52	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			06/06/23 17:52	1
Bromodichloromethane	ND		5.0	0.54	ug/L			06/06/23 17:52	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			06/06/23 17:52	1
Ethylbenzene	ND		5.0	0.46	ug/L			06/06/23 17:52	1
Methylene Chloride	ND		5.0	0.81	ug/L			06/06/23 17:52	1
Tetrachloroethene	ND		5.0	0.34	ug/L			06/06/23 17:52	1
Toluene	ND		5.0	0.45	ug/L			06/06/23 17:52	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			06/06/23 17:52	1
Trichloroethene	ND		5.0	0.60	ug/L			06/06/23 17:52	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			06/06/23 17:52	1
Vinyl chloride	ND		5.0	0.75	ug/L			06/06/23 17:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*06/06/23 17:52*	*1*
4-Bromofluorobenzene (Surr)	*88*		*76 - 123*		*06/06/23 17:52*	*1*
Toluene-d8 (Surr)	*90*		*77 - 120*		*06/06/23 17:52*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/06/23 17:52*	*1*

Lab Sample ID: LCS 480-672073/6
Matrix: Water
Analysis Batch: 672073

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	20.5		ug/L		103	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	17.2		ug/L		86	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-672073/6
Matrix: Water
Analysis Batch: 672073

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	17.5		ug/L		88	52 - 150
1,1-Dichloroethane	20.0	17.5		ug/L		87	59 - 155
1,1-Dichloroethene	20.0	18.3		ug/L		92	1 - 234
1,2-Dichlorobenzene	20.0	19.5		ug/L		97	18 - 190
1,2-Dichloroethane	20.0	20.0		ug/L		100	49 - 155
1,2-Dichloropropane	20.0	18.0		ug/L		90	1 - 210
1,3-Dichlorobenzene	20.0	19.6		ug/L		98	59 - 156
1,4-Dichlorobenzene	20.0	19.4		ug/L		97	18 - 190
2-Chloroethyl vinyl ether	20.0	17.2	J	ug/L		86	1 - 305
Benzene	20.0	17.7		ug/L		89	37 - 151
Bromoform	20.0	20.7		ug/L		103	45 - 169
Bromomethane	20.0	20.2		ug/L		101	1 - 242
Carbon tetrachloride	20.0	22.3		ug/L		112	70 - 140
Chlorobenzene	20.0	19.6		ug/L		98	37 - 160
Dibromochloromethane	20.0	21.7		ug/L		108	53 - 149
Chloroethane	20.0	18.4		ug/L		92	14 - 230
Chloroform	20.0	18.5		ug/L		92	51 - 138
Chloromethane	20.0	17.6		ug/L		88	1 - 273
cis-1,3-Dichloropropene	20.0	18.5		ug/L		93	1 - 227
Bromodichloromethane	20.0	19.5		ug/L		97	35 - 155
Ethylbenzene	20.0	18.2		ug/L		91	37 - 162
Methylene Chloride	20.0	17.0		ug/L		85	1 - 221
Tetrachloroethene	20.0	19.9		ug/L		99	64 - 148
Toluene	20.0	18.0		ug/L		90	47 - 150
trans-1,3-Dichloropropene	20.0	17.7		ug/L		89	17 - 183
Trichloroethene	20.0	19.7		ug/L		98	71 - 157
Trichlorofluoromethane	20.0	25.0		ug/L		125	17 - 181
Vinyl chloride	20.0	15.5		ug/L		77	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*
4-Bromofluorobenzene (Surr)	*92*		*76 - 123*
Toluene-d8 (Surr)	*92*		*77 - 120*
Dibromofluoromethane (Surr)	*108*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-672239/1-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		06/07/23 14:30	06/08/23 12:30	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		06/07/23 14:30	06/08/23 12:30	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		06/07/23 14:30	06/08/23 12:30	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		06/07/23 14:30	06/08/23 12:30	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		06/07/23 14:30	06/08/23 12:30	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		06/07/23 14:30	06/08/23 12:30	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-672239/1-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		06/07/23 14:30	06/08/23 12:30	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		06/07/23 14:30	06/08/23 12:30	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		06/07/23 14:30	06/08/23 12:30	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		06/07/23 14:30	06/08/23 12:30	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		06/07/23 14:30	06/08/23 12:30	1
2-Chlorophenol	ND		5.0	0.17	ug/L		06/07/23 14:30	06/08/23 12:30	1
2-Nitrophenol	ND		5.0	0.18	ug/L		06/07/23 14:30	06/08/23 12:30	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		06/07/23 14:30	06/08/23 12:30	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		06/07/23 14:30	06/08/23 12:30	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		06/07/23 14:30	06/08/23 12:30	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		06/07/23 14:30	06/08/23 12:30	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		06/07/23 14:30	06/08/23 12:30	1
4-Nitrophenol	ND		15	0.49	ug/L		06/07/23 14:30	06/08/23 12:30	1
Acenaphthene	ND		5.0	0.20	ug/L		06/07/23 14:30	06/08/23 12:30	1
Acenaphthylene	ND		5.0	0.22	ug/L		06/07/23 14:30	06/08/23 12:30	1
Anthracene	ND		5.0	0.35	ug/L		06/07/23 14:30	06/08/23 12:30	1
Benzidine	ND		80	14	ug/L		06/07/23 14:30	06/08/23 12:30	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		06/07/23 14:30	06/08/23 12:30	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		06/07/23 14:30	06/08/23 12:30	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		06/07/23 14:30	06/08/23 12:30	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		06/07/23 14:30	06/08/23 12:30	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		06/07/23 14:30	06/08/23 12:30	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		06/07/23 14:30	06/08/23 12:30	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		06/07/23 14:30	06/08/23 12:30	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		06/07/23 14:30	06/08/23 12:30	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		06/07/23 14:30	06/08/23 12:30	1
Chrysene	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1
Decane	ND		10	0.40	ug/L		06/07/23 14:30	06/08/23 12:30	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		06/07/23 14:30	06/08/23 12:30	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		06/07/23 14:30	06/08/23 12:30	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		06/07/23 14:30	06/08/23 12:30	1
Diethyl phthalate	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		06/07/23 14:30	06/08/23 12:30	1
Fluoranthene	ND		5.0	0.40	ug/L		06/07/23 14:30	06/08/23 12:30	1
Fluorene	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		06/07/23 14:30	06/08/23 12:30	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		06/07/23 14:30	06/08/23 12:30	1
Hexachloroethane	ND		5.0	0.15	ug/L		06/07/23 14:30	06/08/23 12:30	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		06/07/23 14:30	06/08/23 12:30	1
Isophorone	ND		5.0	0.19	ug/L		06/07/23 14:30	06/08/23 12:30	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		06/07/23 14:30	06/08/23 12:30	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		06/07/23 14:30	06/08/23 12:30	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		06/07/23 14:30	06/08/23 12:30	1
Naphthalene	ND		5.0	0.22	ug/L		06/07/23 14:30	06/08/23 12:30	1
Nitrobenzene	ND		5.0	0.20	ug/L		06/07/23 14:30	06/08/23 12:30	1
Pentachlorophenol	ND		10	0.79	ug/L		06/07/23 14:30	06/08/23 12:30	1
Phenanthrene	ND		5.0	0.30	ug/L		06/07/23 14:30	06/08/23 12:30	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-672239/1-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		06/07/23 14:30	06/08/23 12:30	1
Pyrene	ND		5.0	0.35	ug/L		06/07/23 14:30	06/08/23 12:30	1
n-Octadecane	ND		10	0.30	ug/L		06/07/23 14:30	06/08/23 12:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*52 - 151*	*06/07/23 14:30*	*06/08/23 12:30*	*1*
2-Fluorobiphenyl	*82*		*44 - 120*	*06/07/23 14:30*	*06/08/23 12:30*	*1*
2-Fluorophenol	*48*		*17 - 120*	*06/07/23 14:30*	*06/08/23 12:30*	*1*
Nitrobenzene-d5	*90*		*15 - 314*	*06/07/23 14:30*	*06/08/23 12:30*	*1*
p-Terphenyl-d14	*88*		*22 - 125*	*06/07/23 14:30*	*06/08/23 12:30*	*1*
Phenol-d5	*38*		*8 - 424*	*06/07/23 14:30*	*06/08/23 12:30*	*1*

Lab Sample ID: LCS 480-672239/2-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	34.8		ug/L		70	44 - 142
1,2-Dichlorobenzene	50.0	31.6		ug/L		63	32 - 129
1,3-Dichlorobenzene	50.0	29.3		ug/L		59	1 - 172
1,4-Dichlorobenzene	50.0	29.3		ug/L		59	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	39.9		ug/L		80	36 - 166
2,4,6-Trichlorophenol	50.0	49.7		ug/L		99	37 - 144
2,4-Dichlorophenol	50.0	47.5		ug/L		95	39 - 135
2,4-Dimethylphenol	50.0	41.3		ug/L		83	32 - 120
2,4-Dinitrophenol	100	115		ug/L		115	1 - 191
2,4-Dinitrotoluene	50.0	54.0		ug/L		108	39 - 139
2,6-Dinitrotoluene	50.0	50.9		ug/L		102	50 - 158
2-Chloronaphthalene	50.0	41.5		ug/L		83	60 - 120
2-Chlorophenol	50.0	42.2		ug/L		84	23 - 134
2-Nitrophenol	50.0	48.3		ug/L		97	29 - 182
3,3'-Dichlorobenzidine	100	95.1		ug/L		95	1 - 262
4,6-Dinitro-2-methylphenol	100	115		ug/L		115	1 - 181
4-Bromophenyl phenyl ether	50.0	47.9		ug/L		96	53 - 127
4-Chloro-3-methylphenol	50.0	53.8		ug/L		108	22 - 147
4-Chlorophenyl phenyl ether	50.0	50.8		ug/L		102	25 - 158
4-Nitrophenol	100	65.7		ug/L		66	1 - 132
Acenaphthene	50.0	45.2		ug/L		90	47 - 145
Acenaphthylene	50.0	48.5		ug/L		97	33 - 145
Anthracene	50.0	47.2		ug/L		94	27 - 133
Benzidine	100	36.0	J	ug/L		36	1 - 120
Benzo[a]anthracene	50.0	46.6		ug/L		93	33 - 143
Benzo[a]pyrene	50.0	49.1		ug/L		98	17 - 163
Benzo[b]fluoranthene	50.0	46.3		ug/L		93	24 - 159
Benzo[g,h,i]perylene	50.0	44.5		ug/L		89	1 - 219
Benzo[k]fluoranthene	50.0	49.8		ug/L		100	11 - 162
Bis(2-chloroethoxy)methane	50.0	46.8		ug/L		94	33 - 184
Bis(2-chloroethyl)ether	50.0	43.8		ug/L		88	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-672239/2-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	47.2		ug/L		94	8 - 158
Butyl benzyl phthalate	50.0	45.3		ug/L		91	1 - 152
Chrysene	50.0	44.6		ug/L		89	17 - 168
Di-n-butyl phthalate	50.0	52.8		ug/L		106	1 - 120
Di-n-octyl phthalate	50.0	48.4		ug/L		97	4 - 146
Dibenz(a,h)anthracene	50.0	48.1		ug/L		96	1 - 227
Diethyl phthalate	50.0	51.1		ug/L		102	1 - 120
Dimethyl phthalate	50.0	50.7		ug/L		101	1 - 120
Fluoranthene	50.0	53.1		ug/L		106	26 - 137
Fluorene	50.0	47.7		ug/L		95	59 - 121
Hexachlorobenzene	50.0	51.3		ug/L		103	1 - 152
Hexachlorocyclopentadiene	50.0	27.5		ug/L		55	5 - 120
Hexachloroethane	50.0	24.5		ug/L		49	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	47.2		ug/L		94	1 - 171
Isophorone	50.0	50.9		ug/L		102	21 - 196
N-Nitrosodi-n-propylamine	50.0	48.7		ug/L		97	1 - 230
N-Nitrosodiphenylamine	50.0	45.1		ug/L		90	54 - 125
Naphthalene	50.0	40.4		ug/L		81	21 - 133
Nitrobenzene	50.0	47.2		ug/L		94	35 - 180
Pentachlorophenol	100	124		ug/L		124	14 - 176
Phenanthrene	50.0	47.7		ug/L		95	54 - 120
Phenol	50.0	22.9		ug/L		46	5 - 120
Pyrene	50.0	43.7		ug/L		87	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*103*		*52 - 151*
2-Fluorobiphenyl	*82*		*44 - 120*
2-Fluorophenol	*48*		*17 - 120*
Nitrobenzene-d5	*87*		*15 - 314*
p-Terphenyl-d14	*85*		*22 - 125*
Phenol-d5	*38*		*8 - 424*

Lab Sample ID: LCSD 480-672239/3-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 672239

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	34.3		ug/L		69	44 - 142	1	34
1,2-Dichlorobenzene	50.0	32.3		ug/L		65	32 - 129	2	38
1,3-Dichlorobenzene	50.0	28.8		ug/L		58	1 - 172	2	37
1,4-Dichlorobenzene	50.0	29.5		ug/L		59	20 - 124	1	40
2,2'-Oxybis(1-chloropropane)	50.0	38.7		ug/L		77	36 - 166	3	36
2,4,6-Trichlorophenol	50.0	50.2		ug/L		100	37 - 144	1	20
2,4-Dichlorophenol	50.0	44.7		ug/L		89	39 - 135	6	23
2,4-Dimethylphenol	50.0	39.6		ug/L		79	32 - 120	4	18
2,4-Dinitrophenol	100	113		ug/L		113	1 - 191	2	29
2,4-Dinitrotoluene	50.0	50.0		ug/L		100	39 - 139	8	20
2,6-Dinitrotoluene	50.0	49.0		ug/L		98	50 - 158	4	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-672239/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 672348
Prep Batch: 672239

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	43.2		ug/L		86	60 - 120	4	30
2-Chlorophenol			50.0	41.8		ug/L		84	23 - 134	1	26
2-Nitrophenol			50.0	49.2		ug/L		98	29 - 182	2	28
3,3'-Dichlorobenzidine			100	96.0		ug/L		96	1 - 262	1	31
4,6-Dinitro-2-methylphenol			100	113		ug/L		113	1 - 181	2	30
4-Bromophenyl phenyl ether			50.0	49.2		ug/L		98	53 - 127	3	16
4-Chloro-3-methylphenol			50.0	49.2		ug/L		98	22 - 147	9	16
4-Chlorophenyl phenyl ether			50.0	49.5		ug/L		99	25 - 158	2	15
4-Nitrophenol			100	64.2		ug/L		64	1 - 132	2	24
Acenaphthene			50.0	45.2		ug/L		90	47 - 145	0	25
Acenaphthylene			50.0	50.0		ug/L		100	33 - 145	3	22
Anthracene			50.0	48.2		ug/L		96	27 - 133	2	15
Benzidine			100	36.2	J	ug/L		36	1 - 120	1	50
Benzo[a]anthracene			50.0	48.4		ug/L		97	33 - 143	4	15
Benzo[a]pyrene			50.0	51.0		ug/L		102	17 - 163	4	15
Benzo[b]fluoranthene			50.0	45.6		ug/L		91	24 - 159	1	17
Benzo[g,h,i]perylene			50.0	49.0		ug/L		98	1 - 219	10	19
Benzo[k]fluoranthene			50.0	52.2		ug/L		104	11 - 162	5	19
Bis(2-chloroethoxy)methane			50.0	45.5		ug/L		91	33 - 184	3	23
Bis(2-chloroethyl)ether			50.0	42.5		ug/L		85	12 - 158	3	33
Bis(2-ethylhexyl) phthalate			50.0	47.3		ug/L		95	8 - 158	0	15
Butyl benzyl phthalate			50.0	47.3		ug/L		95	1 - 152	4	15
Chrysene			50.0	45.3		ug/L		91	17 - 168	2	15
Di-n-butyl phthalate			50.0	51.9		ug/L		104	1 - 120	2	15
Di-n-octyl phthalate			50.0	49.1		ug/L		98	4 - 146	2	15
Dibenz(a,h)anthracene			50.0	51.6		ug/L		103	1 - 227	7	18
Diethyl phthalate			50.0	49.4		ug/L		99	1 - 120	3	15
Dimethyl phthalate			50.0	50.6		ug/L		101	1 - 120	0	15
Fluoranthene			50.0	54.2		ug/L		108	26 - 137	2	15
Fluorene			50.0	47.2		ug/L		94	59 - 121	1	18
Hexachlorobenzene			50.0	51.5		ug/L		103	1 - 152	0	15
Hexachlorocyclopentadiene			50.0	28.5		ug/L		57	5 - 120	4	50
Hexachloroethane			50.0	26.8		ug/L		54	40 - 120	9	43
Indeno[1,2,3-cd]pyrene			50.0	49.9		ug/L		100	1 - 171	6	17
Isophorone			50.0	47.8		ug/L		96	21 - 196	6	21
N-Nitrosodi-n-propylamine			50.0	45.8		ug/L		92	1 - 230	6	23
N-Nitrosodiphenylamine			50.0	46.5		ug/L		93	54 - 125	3	15
Naphthalene			50.0	39.6		ug/L		79	21 - 133	2	31
Nitrobenzene			50.0	46.8		ug/L		94	35 - 180	1	27
Pentachlorophenol			100	122		ug/L		122	14 - 176	2	21
Phenanthrene			50.0	47.0		ug/L		94	54 - 120	2	16
Phenol			50.0	22.1		ug/L		44	5 - 120	4	36
Pyrene			50.0	44.8		ug/L		90	52 - 120	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*99*		*52 - 151*
2-Fluorobiphenyl	*88*		*44 - 120*
2-Fluorophenol	*50*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-672239/3-A
Matrix: Water
Analysis Batch: 672348

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 672239

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*87*		*15 - 314*
p-Terphenyl-d14	*83*		*22 - 125*
Phenol-d5	*36*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-672245/1-A
Matrix: Water
Analysis Batch: 672688

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672245

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		06/08/23 08:09	06/10/23 19:58	1

Lab Sample ID: LCS 480-672245/2-A
Matrix: Water
Analysis Batch: 672688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.189		mg/L		95	85 - 115

Lab Sample ID: 480-209520-6 MS
Matrix: Water
Analysis Batch: 672688

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 672245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	ND		0.200	0.189		mg/L		94	70 - 130

Lab Sample ID: 480-209520-6 MSD
Matrix: Water
Analysis Batch: 672688

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 672245

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		0.200	0.187		mg/L		93	70 - 130	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-672159/1-A
Matrix: Water
Analysis Batch: 672403

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672159

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		06/08/23 09:42	06/08/23 13:40	1

Lab Sample ID: LCS 480-672159/2-A
Matrix: Water
Analysis Batch: 672403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00624		mg/L		93	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-673032/21
Matrix: Water
Analysis Batch: 673032

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00580	J	0.010	0.0041	mg/L			06/14/23 08:00	1

Lab Sample ID: MB 480-673032/49
Matrix: Water
Analysis Batch: 673032

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00690	J	0.010	0.0041	mg/L			06/14/23 09:13	1

Lab Sample ID: HLCS 480-673032/22
Matrix: Water
Analysis Batch: 673032

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

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.401		mg/L		100	90 - 110		

Lab Sample ID: LCS 480-673032/23
Matrix: Water
Analysis Batch: 673032

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.239		mg/L		95	90 - 110		

Lab Sample ID: LCS 480-673032/50
Matrix: Water
Analysis Batch: 673032

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.227		mg/L		91	90 - 110		

Lab Sample ID: LCSD 480-673032/25
Matrix: Water
Analysis Batch: 673032

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total			0.250	0.237		mg/L		95	90 - 110	1	15

Lab Sample ID: 480-209520-6 MS
Matrix: Water
Analysis Batch: 673032

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	0.098	B F1	0.100	0.185	F1	mg/L		87	90 - 110		

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-672404/1
Matrix: Water
Analysis Batch: 672404

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100	99 - 101		

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

GC/MS VOA

Analysis Batch: 672073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-5	TRIP BLANK	Total/NA	Water	624.1	
480-209520-6	001 LAB COMP	Total/NA	Water	624.1	
MB 480-672073/8	Method Blank	Total/NA	Water	624.1	
LCS 480-672073/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 672239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	625	
MB 480-672239/1-A	Method Blank	Total/NA	Water	625	
LCS 480-672239/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-672239/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 672348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	625.1	672239
MB 480-672239/1-A	Method Blank	Total/NA	Water	625.1	672239
LCS 480-672239/2-A	Lab Control Sample	Total/NA	Water	625.1	672239
LCSD 480-672239/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	672239

Metals

Prep Batch: 672159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	245.1	
MB 480-672159/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-672159/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 672245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	200.7	
MB 480-672245/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-672245/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-209520-6 MS	001 LAB COMP	Total/NA	Water	200.7	
480-209520-6 MSD	001 LAB COMP	Total/NA	Water	200.7	

Analysis Batch: 672403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	245.1	672159
MB 480-672159/1-A	Method Blank	Total/NA	Water	245.1	672159
LCS 480-672159/2-A	Lab Control Sample	Total/NA	Water	245.1	672159

Analysis Batch: 672688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	672245
MB 480-672245/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	672245
LCS 480-672245/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	672245
480-209520-6 MS	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	672245
480-209520-6 MSD	001 LAB COMP	Total/NA	Water	200.7 Rev 4.4	672245

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

General Chemistry

Analysis Batch: 672404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	SM 4500 H+ B	
LCS 480-672404/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 673032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-209520-6	001 LAB COMP	Total/NA	Water	335.4	
MB 480-673032/21	Method Blank	Total/NA	Water	335.4	
MB 480-673032/49	Method Blank	Total/NA	Water	335.4	
HLCS 480-673032/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-673032/23	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-673032/50	Lab Control Sample	Total/NA	Water	335.4	
LCSD 480-673032/25	Lab Control Sample Dup	Total/NA	Water	335.4	
480-209520-6 MS	001 LAB COMP	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-209520-5
Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	672073	ATG	EET BUF	06/06/23 21:18

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-209520-6
Date Collected: 06/06/23 00:00
Matrix: Water
Date Received: 06/06/23 14:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	672073	ATG	EET BUF	06/06/23 21:42
Total/NA	Prep	625			672239	LSC	EET BUF	06/07/23 14:30
Total/NA	Analysis	625.1		1	672348	JMM	EET BUF	06/08/23 14:10
Total/NA	Prep	200.7			672245	VAK	EET BUF	06/08/23 08:09
Total/NA	Analysis	200.7 Rev 4.4		1	672688	LMH	EET BUF	06/10/23 20:17
Total/NA	Prep	245.1			672159	NVK	EET BUF	06/08/23 09:42
Total/NA	Analysis	245.1		1	672403	NVK	EET BUF	06/08/23 14:16
Total/NA	Analysis	335.4		1	673032	CLT	EET BUF	06/14/23 09:19
Total/NA	Analysis	SM 4500 H+ B		1	672404	DSC	EET BUF	06/08/23 14:35

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,2-Dichloroethene, Total
624.1		Water	Ethyl methacrylate
625.1	625	Water	1,2-Dichlorobenzene
625.1	625	Water	1,3-Dichlorobenzene
625.1	625	Water	1,4-Dichlorobenzene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-209520-1
Project/Site: Iroquois Gas/Westwood Pharm.Monthly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-209520-5	TRIP BLANK	Water	06/06/23 00:00	06/06/23 14:04
480-209520-6	001 LAB COMP	Water	06/06/23 00:00	06/06/23 14:04

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: Jason Gutkowski	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-181780-34075.1
Client Contact: Jason Gutkowski	Phone: 315 436 3605	E-Mail: Steve.Hartmann@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:

Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:	Analysis Requested
City: Syracuse	TAT Requested (days): Standard Turn	
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No	
Phone:	PO #: Needed 30125855	
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001	
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056	
Site:	SSOW#:	

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
ecahydrate
ecify)

480-209520 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)	625.1_PREC - Priority Pollutant List - SVOA - 6	624.1_PREC - Priority Pollutant List - VOA - 62	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	624.1_PREC - Priority Pollutant List - VOA	Total Number of c	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B	N		
001-1	6/6/23	0607	G	Water			X	X	X	X	X			Lab To Composite Samples
001-2		0807		Water			X	X	X	X	X			
001-3		1007					X	X	X	X	X			
001-4		1207					X	X	X	X	X			
Trip Blank		—					X	X	X	X	X	X		Short Hold Time

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	Date/Time	Company	Received by	Date/Time	Company
Dan Gutt	6/6/23 / 1245	Arcadis	Christow Lindb	6/6/23 1245	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: CW	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 17.9 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-209520-1

Login Number: 209520
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	ARCADIS
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	

Ms. Leslie Sedita
Industrial Waste Section
Buffalo Sewer Authority Treatment Plant
90 West Ferry Street
Buffalo, NY 14213-1799

Arcadis of New York, Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse
New York 13202
Phone: 315 446 9120
Fax: 315 449 0017
www.arcadis.com

Date: September 29, 2023
Our Ref: 30185775
Subject: **Discharge Monitoring Report – Third Quarter 2023**
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY 14213
BSA Discharge Permit # 21-07-BU174

Dear Ms. Sedita,

On behalf of Bristol-Myers Squibb Company, Arcadis of New York, Inc. (Arcadis) is pleased to submit this third quarter 2023 Discharge Monitoring Report (DMR) for the above-referenced site, which covers the period July 1, to September 30, 2023. The monthly discharge sampling and DMR preparation were completed in accordance with the Buffalo Sewer Authority (BSA) Sampling Measurement and Analytical Guidelines Sheet. A total of 77,988 gallons of water were discharged during the reporting period (i.e., flow meter totalizer readings from 6/27/2023 to 9/26/2023). Laboratory analytical results indicate that the remedial system operated within BSA permit requirements during the third quarter 2023.

The sampling protocol and calculated discharges are based on the following: (1) total flows are a daily average taken over approximately 7 days; and (2) monthly composite samples are collected over an 8-hour period, where grab samples are collected every 2 hours. A total of four grab samples are collected throughout the 8-hour period. The discharge sample point location, following carbon treatment, is labeled as “C001 Sample Location” on the Process Flow Diagram (**Attachment A**). The Sample Collection and Log Sheets for the July, August, and September monthly sampling events are provided in **Attachment B**.

The monthly grab samples were submitted to Eurofins TestAmerica in Amherst, New York, where samples are composited and analyzed for pH via Method 4500 H+B, Total Mercury via United States Environmental Protection Agency (EPA) Method 245.1, Total Zinc via EPA Method 200.7, Total Cyanide via EPA Method 335.4, Volatile Organic Compounds via EPA Method 624.1, and Semi-Volatile Organic Compounds via EPA Method 625.1.

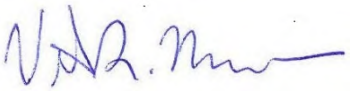
Laboratory analytical results and average daily flows are provided in the Quarterly Analytical Data Table (**Attachment C**). No exceedances of Daily Maximum or Maximum Allowable Instantaneous Discharge Limitations were observed during the reporting period. BSA Permit Specific Conditions require reporting of any compounds analyzed by EPA Methods 624 and 625 that are detected at a concentration above a threshold of 0.01 milligrams per liter (mg/L). In July, August, and September 2023, there were no detections above the reporting threshold. The laboratory analytical data packages are provided in **Attachment D**.

If you have any questions or would like to discuss further, please feel free to contact the undersigned.

Ms. Leslie Sedita
Buffalo Sewer Authority Treatment Plant
September 29, 2023

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation.

Signed on behalf of Bristol-Myers Squibb Company and submitted by:



Vincent S. Maresco
Arcadis of New York, Inc.
Project Manager

Email: Vin.Maresco@arcadis.com
Direct Line: 315 671 9256

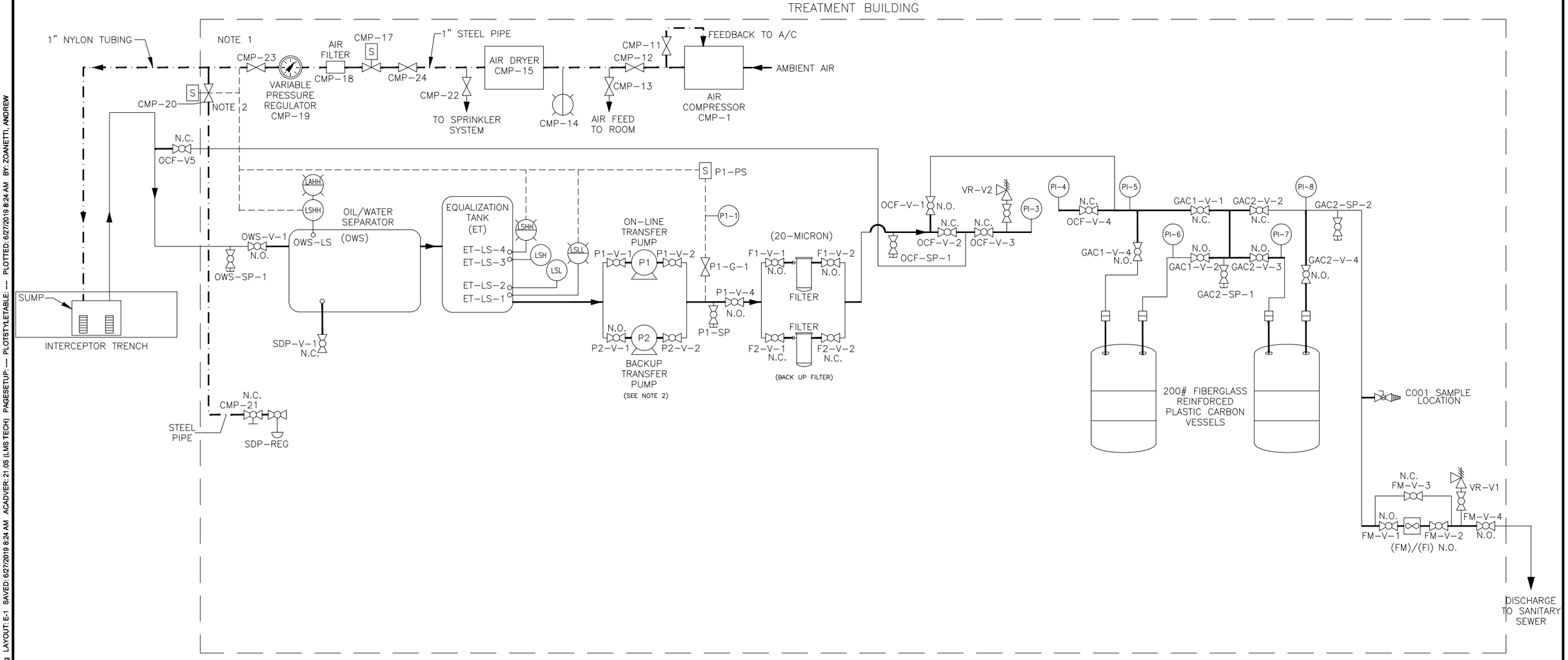
CC. Traserra Adams, BSA
Richard Mator, BMS
John Alonzo, de maximis, inc.
Michael J. Hecker, Hodgson Russ LLP
Katie Hoelscher, NFG

Attachments:

A Process Flow Diagram
B Sample Collection and Log Sheets for Monthly Sampling Events
C Quarterly Analytical Data Table
D Laboratory Analytical Data Packages

Attachment A

Process Flow Diagram



NOTES:

1. SOLENOID VALVE IS ACTIVATED TO THE OFF-POSITION UNDER ANY OF THE FOLLOWING CONDITIONS:
   a) LSHH AT THE OIL-WATER SEPARATOR;
   b) LSHH AT THE EQUILIZATION TANK IS ACTIVATED;
   c) P1-PS HIGH PUMP DISCHARGE PRESSURE SWISWITCH IS ACTIVATED.

2. USE OF TRANSFER PUMPS IS ALTERED ON A QUARTERLY BASIS.

CITY: SYRACUSE, NY DIV/GROUP: DB: PM: TM: LYR:ON=*;OFF=*REF*
C:\Users\AZoianetti\Documents\Bristol-Myers Squibb\BMS Buffalo, NY\ATTACHMENT A.dwg LAYOUT: E-1 SAVED: 6/27/2019 8:24 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 6/27/2019 8:24 AM BY: ZOANETTI, ANDREW
XREFS:
TITLE

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REUSED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name

Professional Engineer's No.

State	Date Signed	Project Mgr.
Designed by	Drawn by	Checked by

ARCADIS Design & Consultancy for natural and built assets
ARCADIS OF NEW YORK, INC.

NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

IROQUOIS GAS/WESTWOOD PHARMACEUTICALS TERRESTRIAL SITE NO. 915141A
120 DART STREET AND 40 BRADLEY STREET, BUFFALO, NY

PROCESS FLOW DIAGRAM

ARCADIS Project No.
B0087370.0000.00001

Date
SEPTEMBER 2017

ARCADIS
ARCADIS OF NEW YORK, INC.
110 W. FAYETTE ST., STE 300
SYRACUSE, NY 13202
TEL. 315.446.9120

PFD

Attachment B

Sample Collection and Log Sheets for Monthly Sampling Events

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm Permit #: 12-05-BU174

Sample Location: 001 Sample Type: Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40ml. clear vials every two hours.

Sample Date	7/6/23	→	→	→	JTG
Sample Time	0625	0825	1025	1225	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.33	7.27	7.62	7.49	JTG
Weather	72°F sunny	77°F sunny	82°F sunny	84°F sun/clouds	JTG
Comments	None	→	→	→	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski
Sample Technician

7/6/23
Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm Permit #: 12-05-BU174

Sample Location: 001 Sample Type: Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	8/1/23	→	→	→	JTG
Sample Time	0550	0750	0950	1150	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.61	7.73	7.69	7.44	JTG
Weather	61°F Clear	64°F Sunny	69°F Sunny	77°F Sunny	JTG
Comments	None	→	→	→	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Guthowski 8/1/23

Sample Technician Date

Attachment C

Quarterly Analytical Data Table

Quarterly Analytical Data Table
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY
BSA Discharge Permit No. 18-07-BU174

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	6/27/2023	7/6/2023	7/11/2023	7/21/2023	7/27/2023	8/1/2023	8/11/2023
Totalizer	gal	NA	1,327,667	1,335,285	1,339,582	1,347,901	1,352,974	1,357,273	1,365,528
Total Mercury	lbs	0.00001**	NS	ND	NS	NS	NS	ND	NS
Total Zinc	lbs	3.0**	NS	ND	NS	NS	NS	ND	NS
Total Cyanide	lbs	7.93**	NS	9.16E-04 B	NS	NS	NS	7.88E-04	NS
Total VOCs	mg/L	NA	NS	ND	NS	NS	NS	ND	NS
Total SVOCs	mg/L	NA	NS	ND	NS	NS	NS	ND *+	NS
pH	SU	5.0-12.0	NS	7.4 HF	NS	NS	NS	7.5 HF	NS
Total Daily Flow	gal	14,400	-	846	859	832	846	860	826

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	8/14/2023	8/22/2023	8/29/2023	9/7/2023	9/14/2023	9/22/2023	9/26/2023
Totalizer	gal	NA	1,367,846	1,374,861	1,381,262	1,388,956	1,395,577	1,402,265	1,405,655
Total Mercury	lbs	0.00001**	NS	NS	NS	NS	NS	ND	NS
Total Zinc	lbs	3.0**	NS	NS	NS	NS	NS	ND	NS
Total Cyanide	lbs	7.93**	NS	NS	NS	NS	NS	7.66E-04	NS
Total VOCs	mg/L	NA	NS	NS	NS	NS	NS	ND	NS
Total SVOCs	mg/L	NA	NS	NS	NS	NS	NS	ND *1	NS
pH	SU	5.0-12.0	NS	NS	NS	NS	NS	7.4	NS
Total Daily Flow	gal	14,400	773	877	914	855	946	836	848

Notes:

B = Compound was found in the blank and the sample.
HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at clients request. Analytical performed as required and in compliance by BSA permit.
*1 = LCS/LCSD RPD exceeds control limits.
*+ = LCS and/or LCSD is outside acceptance limits, high biased.
NA = Not Applicable
ND = Not Detected at the reporting limit
NM = Not Measured
NS = Not Sampled
gal = Gallons
lbs = Pounds
mg/L = Milligrams per liter
SU = Standard Units
** = Maximum Allowable Instantaneous Discharge limits are also included in the permit. All analytical data for this quarter in in compliance with the Maximum Allowable Instantaneous Discharge limits. Analytical results are not presented in this table, they can be found in the attached analytical reports.

The permittee must report any compound whose concentration is greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by this test procedure, which may cause or contribute to a violation of water quality incorporated into the permit.

Start of quarter values

Attachment D

Laboratory Analytical Data Packages

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

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JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.
Monthly Testing

JOB NUMBER

480-210514-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

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.

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.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-210514-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-210514-1

Comments
No additional comments.

Receipt
The samples were received on 7/6/2023 12:57 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8º C.

GC/MS VOA
Method 624.1: The following Volatile sample was composited by the laboratory on 07/07/2023 as requested by the client: 001 LA COMP (480-210514-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1: The continuing calibration verification (CCV) associated with batch 480-675536 recovered above the upper contr limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data ha been reported. The associated sample is impacted: 001 LAB COMP (480-210514-6).

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-210514-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-675500.

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-210514-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-210514-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.13	B	0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	19.6	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-210514-5
Date Collected: 07/06/23 00:00
Matrix: WQ
Date Received: 07/06/23 12:57

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			07/07/23 15:16	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			07/07/23 15:16	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			07/07/23 15:16	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			07/07/23 15:16	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			07/07/23 15:16	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			07/07/23 15:16	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			07/07/23 15:16	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			07/07/23 15:16	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			07/07/23 15:16	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			07/07/23 15:16	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			07/07/23 15:16	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			07/07/23 15:16	1
Acrolein	ND		100	17	ug/L			07/07/23 15:16	1
Acrylonitrile	ND		50	1.9	ug/L			07/07/23 15:16	1
Benzene	ND		5.0	0.60	ug/L			07/07/23 15:16	1
Bromoform	ND		5.0	0.47	ug/L			07/07/23 15:16	1
Bromomethane	ND		5.0	1.2	ug/L			07/07/23 15:16	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			07/07/23 15:16	1
Chlorobenzene	ND		5.0	0.48	ug/L			07/07/23 15:16	1
Dibromochloromethane	ND		5.0	0.41	ug/L			07/07/23 15:16	1
Chloroethane	ND		5.0	0.87	ug/L			07/07/23 15:16	1
Chloroform	ND		5.0	0.54	ug/L			07/07/23 15:16	1
Chloromethane	ND		5.0	0.64	ug/L			07/07/23 15:16	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			07/07/23 15:16	1
Bromodichloromethane	ND		5.0	0.54	ug/L			07/07/23 15:16	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			07/07/23 15:16	1
Ethylbenzene	ND		5.0	0.46	ug/L			07/07/23 15:16	1
Methylene Chloride	ND		5.0	0.81	ug/L			07/07/23 15:16	1
Tetrachloroethene	ND		5.0	0.34	ug/L			07/07/23 15:16	1
Toluene	ND		5.0	0.45	ug/L			07/07/23 15:16	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			07/07/23 15:16	1
Trichloroethene	ND		5.0	0.60	ug/L			07/07/23 15:16	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			07/07/23 15:16	1
Vinyl chloride	ND		5.0	0.75	ug/L			07/07/23 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*		*07/07/23 15:16*	*1*
4-Bromofluorobenzene (Surr)	*89*		*76 - 123*		*07/07/23 15:16*	*1*
Toluene-d8 (Surr)	*91*		*77 - 120*		*07/07/23 15:16*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*07/07/23 15:16*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-210514-6
Date Collected: 07/06/23 12:25
Matrix: Wastewater
Date Received: 07/06/23 12:57

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			07/07/23 13:40	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			07/07/23 13:40	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			07/07/23 13:40	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-210514-6
Date Collected: 07/06/23 12:25
Matrix: Wastewater
Date Received: 07/06/23 12:57

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			07/07/23 13:40	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			07/07/23 13:40	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			07/07/23 13:40	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			07/07/23 13:40	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			07/07/23 13:40	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			07/07/23 13:40	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			07/07/23 13:40	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			07/07/23 13:40	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			07/07/23 13:40	1
Acrolein	ND		100	17	ug/L			07/07/23 13:40	1
Acrylonitrile	ND		50	1.9	ug/L			07/07/23 13:40	1
Benzene	ND		5.0	0.60	ug/L			07/07/23 13:40	1
Bromoform	ND		5.0	0.47	ug/L			07/07/23 13:40	1
Bromomethane	ND		5.0	1.2	ug/L			07/07/23 13:40	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			07/07/23 13:40	1
Chlorobenzene	ND		5.0	0.48	ug/L			07/07/23 13:40	1
Dibromochloromethane	ND		5.0	0.41	ug/L			07/07/23 13:40	1
Chloroethane	ND		5.0	0.87	ug/L			07/07/23 13:40	1
Chloroform	ND		5.0	0.54	ug/L			07/07/23 13:40	1
Chloromethane	ND		5.0	0.64	ug/L			07/07/23 13:40	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			07/07/23 13:40	1
Bromodichloromethane	ND		5.0	0.54	ug/L			07/07/23 13:40	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			07/07/23 13:40	1
Ethylbenzene	ND		5.0	0.46	ug/L			07/07/23 13:40	1
Methylene Chloride	ND		5.0	0.81	ug/L			07/07/23 13:40	1
Tetrachloroethene	ND		5.0	0.34	ug/L			07/07/23 13:40	1
Toluene	ND		5.0	0.45	ug/L			07/07/23 13:40	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			07/07/23 13:40	1
Trichloroethene	ND		5.0	0.60	ug/L			07/07/23 13:40	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			07/07/23 13:40	1
Vinyl chloride	ND		5.0	0.75	ug/L			07/07/23 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*68 - 130*		*07/07/23 13:40*	*1*
4-Bromofluorobenzene (Surr)	*87*		*76 - 123*		*07/07/23 13:40*	*1*
Toluene-d8 (Surr)	*90*		*77 - 120*		*07/07/23 13:40*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*07/07/23 13:40*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		07/06/23 14:56	07/07/23 20:07	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		07/06/23 14:56	07/07/23 20:07	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		07/06/23 14:56	07/07/23 20:07	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		07/06/23 14:56	07/07/23 20:07	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		07/06/23 14:56	07/07/23 20:07	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		07/06/23 14:56	07/07/23 20:07	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		07/06/23 14:56	07/07/23 20:07	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		07/06/23 14:56	07/07/23 20:07	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		07/06/23 14:56	07/07/23 20:07	1

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-210514-1

Client Sample ID: 001 LAB COMP
Date Collected: 07/06/23 12:25
Date Received: 07/06/23 12:57

Lab Sample ID: 480-210514-6
Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		07/06/23 14:56	07/07/23 20:07	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		07/06/23 14:56	07/07/23 20:07	1
2-Chlorophenol	ND		4.8	0.16	ug/L		07/06/23 14:56	07/07/23 20:07	1
2-Nitrophenol	ND		4.8	0.17	ug/L		07/06/23 14:56	07/07/23 20:07	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		07/06/23 14:56	07/07/23 20:07	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		07/06/23 14:56	07/07/23 20:07	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		07/06/23 14:56	07/07/23 20:07	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		07/06/23 14:56	07/07/23 20:07	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		07/06/23 14:56	07/07/23 20:07	1
4-Nitrophenol	ND		14	0.46	ug/L		07/06/23 14:56	07/07/23 20:07	1
Acenaphthene	ND		4.8	0.19	ug/L		07/06/23 14:56	07/07/23 20:07	1
Acenaphthylene	ND		4.8	0.21	ug/L		07/06/23 14:56	07/07/23 20:07	1
Anthracene	ND		4.8	0.33	ug/L		07/06/23 14:56	07/07/23 20:07	1
Benzidine	ND		76	13	ug/L		07/06/23 14:56	07/07/23 20:07	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		07/06/23 14:56	07/07/23 20:07	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		07/06/23 14:56	07/07/23 20:07	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		07/06/23 14:56	07/07/23 20:07	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		07/06/23 14:56	07/07/23 20:07	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		07/06/23 14:56	07/07/23 20:07	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		07/06/23 14:56	07/07/23 20:07	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		07/06/23 14:56	07/07/23 20:07	1
Bis(2-ethylhexyl) phthalate	ND		9.5	0.29	ug/L		07/06/23 14:56	07/07/23 20:07	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		07/06/23 14:56	07/07/23 20:07	1
Chrysene	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
Decane	ND		9.5	0.38	ug/L		07/06/23 14:56	07/07/23 20:07	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		07/06/23 14:56	07/07/23 20:07	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		07/06/23 14:56	07/07/23 20:07	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		07/06/23 14:56	07/07/23 20:07	1
Diethyl phthalate	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		07/06/23 14:56	07/07/23 20:07	1
Fluoranthene	ND		4.8	0.38	ug/L		07/06/23 14:56	07/07/23 20:07	1
Fluorene	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		07/06/23 14:56	07/07/23 20:07	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		07/06/23 14:56	07/07/23 20:07	1
Hexachloroethane	ND		4.8	0.14	ug/L		07/06/23 14:56	07/07/23 20:07	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		07/06/23 14:56	07/07/23 20:07	1
Isophorone	ND		4.8	0.18	ug/L		07/06/23 14:56	07/07/23 20:07	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		07/06/23 14:56	07/07/23 20:07	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		07/06/23 14:56	07/07/23 20:07	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		07/06/23 14:56	07/07/23 20:07	1
Naphthalene	ND		4.8	0.20	ug/L		07/06/23 14:56	07/07/23 20:07	1
Nitrobenzene	ND		4.8	0.19	ug/L		07/06/23 14:56	07/07/23 20:07	1
Pentachlorophenol	ND		9.5	0.75	ug/L		07/06/23 14:56	07/07/23 20:07	1
Phenanthrene	ND		4.8	0.29	ug/L		07/06/23 14:56	07/07/23 20:07	1
Phenol	ND		4.8	0.083	ug/L		07/06/23 14:56	07/07/23 20:07	1
Pyrene	ND		4.8	0.33	ug/L		07/06/23 14:56	07/07/23 20:07	1
n-Octadecane	ND		9.5	0.29	ug/L		07/06/23 14:56	07/07/23 20:07	1

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-210514-1

Client Sample ID: 001 LAB COMP
Date Collected: 07/06/23 12:25
Date Received: 07/06/23 12:57

Lab Sample ID: 480-210514-6
Matrix: Wastewater

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*52 - 151*	*07/06/23 14:56*	*07/07/23 20:07*	*1*
2-Fluorobiphenyl	*83*		*44 - 120*	*07/06/23 14:56*	*07/07/23 20:07*	*1*
2-Fluorophenol (Surr)	*51*		*17 - 120*	*07/06/23 14:56*	*07/07/23 20:07*	*1*
Nitrobenzene-d5 (Surr)	*86*		*15 - 314*	*07/06/23 14:56*	*07/07/23 20:07*	*1*
p-Terphenyl-d14 (Surr)	*75*		*22 - 125*	*07/06/23 14:56*	*07/07/23 20:07*	*1*
Phenol-d5 (Surr)	*34*		*8 - 424*	*07/06/23 14:56*	*07/07/23 20:07*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		07/07/23 07:36	07/12/23 17:35	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		07/10/23 11:01	07/10/23 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.13**	**B**	0.010	0.0041	mg/L			07/11/23 15:53	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.4**	**HF**	0.1	0.1	SU			07/11/23 11:25	1
Temperature (SM 4500 H+ B)	**19.6**	**HF**	0.001	0.001	Degrees C			07/11/23 11:25	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-210514-6	001 LAB COMP	91	87	90	107

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-675552/6	Lab Control Sample	95	86	90	108
MB 480-675552/8	Method Blank	93	88	91	110

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-210514-5	TRIP BLANK	95	89	91	112

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-210514-6	001 LAB COMP	69	83	51	86	75	34

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
LCS 480-675500/2-A	Lab Control Sample	105	88	50	94	90	39		
LCSD 480-675500/3-A	Lab Control Sample Dup	104	90	51	94	92	39		
MB 480-675500/1-A	Method Blank	76	84	47	86	91	35		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-675552/8
Matrix: Water
Analysis Batch: 675552

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			07/07/23 13:07	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			07/07/23 13:07	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			07/07/23 13:07	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			07/07/23 13:07	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			07/07/23 13:07	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			07/07/23 13:07	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			07/07/23 13:07	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			07/07/23 13:07	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			07/07/23 13:07	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			07/07/23 13:07	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			07/07/23 13:07	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			07/07/23 13:07	1
Acrolein	ND		100	17	ug/L			07/07/23 13:07	1
Acrylonitrile	ND		50	1.9	ug/L			07/07/23 13:07	1
Benzene	ND		5.0	0.60	ug/L			07/07/23 13:07	1
Bromoform	ND		5.0	0.47	ug/L			07/07/23 13:07	1
Bromomethane	ND		5.0	1.2	ug/L			07/07/23 13:07	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			07/07/23 13:07	1
Chlorobenzene	ND		5.0	0.48	ug/L			07/07/23 13:07	1
Dibromochloromethane	ND		5.0	0.41	ug/L			07/07/23 13:07	1
Chloroethane	ND		5.0	0.87	ug/L			07/07/23 13:07	1
Chloroform	ND		5.0	0.54	ug/L			07/07/23 13:07	1
Chloromethane	ND		5.0	0.64	ug/L			07/07/23 13:07	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			07/07/23 13:07	1
Bromodichloromethane	ND		5.0	0.54	ug/L			07/07/23 13:07	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			07/07/23 13:07	1
Ethylbenzene	ND		5.0	0.46	ug/L			07/07/23 13:07	1
Methylene Chloride	ND		5.0	0.81	ug/L			07/07/23 13:07	1
Tetrachloroethene	ND		5.0	0.34	ug/L			07/07/23 13:07	1
Toluene	ND		5.0	0.45	ug/L			07/07/23 13:07	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			07/07/23 13:07	1
Trichloroethene	ND		5.0	0.60	ug/L			07/07/23 13:07	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			07/07/23 13:07	1
Vinyl chloride	ND		5.0	0.75	ug/L			07/07/23 13:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*07/07/23 13:07*	*1*
4-Bromofluorobenzene (Surr)	*88*		*76 - 123*		*07/07/23 13:07*	*1*
Toluene-d8 (Surr)	*91*		*77 - 120*		*07/07/23 13:07*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*07/07/23 13:07*	*1*

Lab Sample ID: LCS 480-675552/6
Matrix: Water
Analysis Batch: 675552

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	20.5		ug/L		102	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	16.0		ug/L		80	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-675552/6
Matrix: Water
Analysis Batch: 675552

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	17.2		ug/L		86	52 - 150
1,1-Dichloroethane	20.0	19.1		ug/L		96	59 - 155
1,1-Dichloroethene	20.0	20.8		ug/L		104	1 - 234
1,2-Dichlorobenzene	20.0	19.5		ug/L		97	18 - 190
1,2-Dichloroethane	20.0	18.7		ug/L		94	49 - 155
1,2-Dichloropropane	20.0	19.9		ug/L		100	1 - 210
1,3-Dichlorobenzene	20.0	19.7		ug/L		99	59 - 156
1,4-Dichlorobenzene	20.0	19.4		ug/L		97	18 - 190
2-Chloroethyl vinyl ether	20.0	18.8	J	ug/L		94	1 - 305
Benzene	20.0	19.7		ug/L		99	37 - 151
Bromoform	20.0	21.9		ug/L		109	45 - 169
Bromomethane	20.0	18.8		ug/L		94	1 - 242
Carbon tetrachloride	20.0	23.6		ug/L		118	70 - 140
Chlorobenzene	20.0	19.7		ug/L		98	37 - 160
Dibromochloromethane	20.0	20.9		ug/L		104	53 - 149
Chloroethane	20.0	17.2		ug/L		86	14 - 230
Chloroform	20.0	18.9		ug/L		95	51 - 138
Chloromethane	20.0	17.0		ug/L		85	1 - 273
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	1 - 227
Bromodichloromethane	20.0	19.9		ug/L		100	35 - 155
Ethylbenzene	20.0	17.7		ug/L		88	37 - 162
Methylene Chloride	20.0	19.6		ug/L		98	1 - 221
Tetrachloroethene	20.0	21.2		ug/L		106	64 - 148
Toluene	20.0	18.0		ug/L		90	47 - 150
trans-1,3-Dichloropropene	20.0	17.1		ug/L		86	17 - 183
Trichloroethene	20.0	21.6		ug/L		108	71 - 157
Trichlorofluoromethane	20.0	22.3		ug/L		112	17 - 181
Vinyl chloride	20.0	15.9		ug/L		79	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*
4-Bromofluorobenzene (Surr)	*86*		*76 - 123*
Toluene-d8 (Surr)	*90*		*77 - 120*
Dibromofluoromethane (Surr)	*108*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-675500/1-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675500

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		07/06/23 14:56	07/07/23 16:27	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		07/06/23 14:56	07/07/23 16:27	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		07/06/23 14:56	07/07/23 16:27	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		07/06/23 14:56	07/07/23 16:27	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		07/06/23 14:56	07/07/23 16:27	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		07/06/23 14:56	07/07/23 16:27	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-675500/1-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675500

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		07/06/23 14:56	07/07/23 16:27	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		07/06/23 14:56	07/07/23 16:27	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		07/06/23 14:56	07/07/23 16:27	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		07/06/23 14:56	07/07/23 16:27	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		07/06/23 14:56	07/07/23 16:27	1
2-Chlorophenol	ND		5.0	0.17	ug/L		07/06/23 14:56	07/07/23 16:27	1
2-Nitrophenol	ND		5.0	0.18	ug/L		07/06/23 14:56	07/07/23 16:27	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/06/23 14:56	07/07/23 16:27	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		07/06/23 14:56	07/07/23 16:27	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		07/06/23 14:56	07/07/23 16:27	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		07/06/23 14:56	07/07/23 16:27	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		07/06/23 14:56	07/07/23 16:27	1
4-Nitrophenol	ND		15	0.49	ug/L		07/06/23 14:56	07/07/23 16:27	1
Acenaphthene	ND		5.0	0.20	ug/L		07/06/23 14:56	07/07/23 16:27	1
Acenaphthylene	ND		5.0	0.22	ug/L		07/06/23 14:56	07/07/23 16:27	1
Anthracene	ND		5.0	0.35	ug/L		07/06/23 14:56	07/07/23 16:27	1
Benzidine	ND		80	14	ug/L		07/06/23 14:56	07/07/23 16:27	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		07/06/23 14:56	07/07/23 16:27	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		07/06/23 14:56	07/07/23 16:27	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		07/06/23 14:56	07/07/23 16:27	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		07/06/23 14:56	07/07/23 16:27	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		07/06/23 14:56	07/07/23 16:27	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		07/06/23 14:56	07/07/23 16:27	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		07/06/23 14:56	07/07/23 16:27	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		07/06/23 14:56	07/07/23 16:27	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		07/06/23 14:56	07/07/23 16:27	1
Chrysene	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1
Decane	ND		10	0.40	ug/L		07/06/23 14:56	07/07/23 16:27	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		07/06/23 14:56	07/07/23 16:27	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		07/06/23 14:56	07/07/23 16:27	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		07/06/23 14:56	07/07/23 16:27	1
Diethyl phthalate	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		07/06/23 14:56	07/07/23 16:27	1
Fluoranthene	ND		5.0	0.40	ug/L		07/06/23 14:56	07/07/23 16:27	1
Fluorene	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		07/06/23 14:56	07/07/23 16:27	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		07/06/23 14:56	07/07/23 16:27	1
Hexachloroethane	ND		5.0	0.15	ug/L		07/06/23 14:56	07/07/23 16:27	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		07/06/23 14:56	07/07/23 16:27	1
Isophorone	ND		5.0	0.19	ug/L		07/06/23 14:56	07/07/23 16:27	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		07/06/23 14:56	07/07/23 16:27	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		07/06/23 14:56	07/07/23 16:27	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		07/06/23 14:56	07/07/23 16:27	1
Naphthalene	ND		5.0	0.22	ug/L		07/06/23 14:56	07/07/23 16:27	1
Nitrobenzene	ND		5.0	0.20	ug/L		07/06/23 14:56	07/07/23 16:27	1
Pentachlorophenol	ND		10	0.79	ug/L		07/06/23 14:56	07/07/23 16:27	1
Phenanthrene	ND		5.0	0.30	ug/L		07/06/23 14:56	07/07/23 16:27	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-675500/1-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675500

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		07/06/23 14:56	07/07/23 16:27	1
Pyrene	ND		5.0	0.35	ug/L		07/06/23 14:56	07/07/23 16:27	1
n-Octadecane	ND		10	0.30	ug/L		07/06/23 14:56	07/07/23 16:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*52 - 151*	*07/06/23 14:56*	*07/07/23 16:27*	*1*
2-Fluorobiphenyl	*84*		*44 - 120*	*07/06/23 14:56*	*07/07/23 16:27*	*1*
2-Fluorophenol (Surr)	*47*		*17 - 120*	*07/06/23 14:56*	*07/07/23 16:27*	*1*
Nitrobenzene-d5 (Surr)	*86*		*15 - 314*	*07/06/23 14:56*	*07/07/23 16:27*	*1*
p-Terphenyl-d14 (Surr)	*91*		*22 - 125*	*07/06/23 14:56*	*07/07/23 16:27*	*1*
Phenol-d5 (Surr)	*35*		*8 - 424*	*07/06/23 14:56*	*07/07/23 16:27*	*1*

Lab Sample ID: LCS 480-675500/2-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675500

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	35.5		ug/L		71	44 - 142
1,2-Dichlorobenzene	50.0	31.3		ug/L		63	32 - 129
1,3-Dichlorobenzene	50.0	27.2		ug/L		54	1 - 172
1,4-Dichlorobenzene	50.0	29.7		ug/L		59	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	39.6		ug/L		79	36 - 166
2,4,6-Trichlorophenol	50.0	52.3		ug/L		105	37 - 144
2,4-Dichlorophenol	50.0	51.2		ug/L		102	39 - 135
2,4-Dimethylphenol	50.0	41.0		ug/L		82	32 - 120
2,4-Dinitrophenol	100	118		ug/L		118	1 - 191
2,4-Dinitrotoluene	50.0	61.4		ug/L		123	39 - 139
2,6-Dinitrotoluene	50.0	55.7		ug/L		111	50 - 158
2-Chloronaphthalene	50.0	42.7		ug/L		85	60 - 120
2-Chlorophenol	50.0	42.8		ug/L		86	23 - 134
2-Nitrophenol	50.0	53.3		ug/L		107	29 - 182
3,3'-Dichlorobenzidine	100	103		ug/L		103	1 - 262
4,6-Dinitro-2-methylphenol	100	115		ug/L		115	1 - 181
4-Bromophenyl phenyl ether	50.0	53.3		ug/L		107	53 - 127
4-Chloro-3-methylphenol	50.0	58.7		ug/L		117	22 - 147
4-Chlorophenyl phenyl ether	50.0	54.9		ug/L		110	25 - 158
4-Nitrophenol	100	75.7		ug/L		76	1 - 132
Acenaphthene	50.0	49.0		ug/L		98	47 - 145
Acenaphthylene	50.0	51.4		ug/L		103	33 - 145
Anthracene	50.0	52.2		ug/L		104	27 - 133
Benzidine	100	65.3	J	ug/L		65	1 - 120
Benzo[a]anthracene	50.0	50.4		ug/L		101	33 - 143
Benzo[a]pyrene	50.0	54.7		ug/L		109	17 - 163
Benzo[b]fluoranthene	50.0	49.8		ug/L		100	24 - 159
Benzo[g,h,i]perylene	50.0	52.5		ug/L		105	1 - 219
Benzo[k]fluoranthene	50.0	55.2		ug/L		110	11 - 162
Bis(2-chloroethoxy)methane	50.0	50.0		ug/L		100	33 - 184
Bis(2-chloroethyl)ether	50.0	42.8		ug/L		86	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-675500/2-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675500

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	46.9		ug/L		94	8 - 158
Butyl benzyl phthalate	50.0	48.2		ug/L		96	1 - 152
Chrysene	50.0	48.3		ug/L		97	17 - 168
Di-n-butyl phthalate	50.0	56.9		ug/L		114	1 - 120
Di-n-octyl phthalate	50.0	48.9		ug/L		98	4 - 146
Dibenz(a,h)anthracene	50.0	56.2		ug/L		112	1 - 227
Diethyl phthalate	50.0	55.4		ug/L		111	1 - 120
Dimethyl phthalate	50.0	57.5		ug/L		115	1 - 120
Fluoranthene	50.0	59.7		ug/L		119	26 - 137
Fluorene	50.0	51.9		ug/L		104	59 - 121
Hexachlorobenzene	50.0	53.9		ug/L		108	1 - 152
Hexachlorocyclopentadiene	50.0	24.8		ug/L		50	5 - 120
Hexachloroethane	50.0	25.8		ug/L		52	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	54.3		ug/L		109	1 - 171
Isophorone	50.0	52.8		ug/L		106	21 - 196
N-Nitrosodi-n-propylamine	50.0	52.4		ug/L		105	1 - 230
N-Nitrosodiphenylamine	50.0	48.5		ug/L		97	54 - 125
Naphthalene	50.0	42.7		ug/L		85	21 - 133
Nitrobenzene	50.0	48.9		ug/L		98	35 - 180
Pentachlorophenol	100	112		ug/L		112	14 - 176
Phenanthrene	50.0	50.1		ug/L		100	54 - 120
Phenol	50.0	23.0		ug/L		46	5 - 120
Pyrene	50.0	49.2		ug/L		98	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*52 - 151*
2-Fluorobiphenyl	*88*		*44 - 120*
2-Fluorophenol (Surr)	*50*		*17 - 120*
Nitrobenzene-d5 (Surr)	*94*		*15 - 314*
p-Terphenyl-d14 (Surr)	*90*		*22 - 125*
Phenol-d5 (Surr)	*39*		*8 - 424*

Lab Sample ID: LCSD 480-675500/3-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 675500

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	36.3		ug/L		73	44 - 142	2	34
1,2-Dichlorobenzene	50.0	32.5		ug/L		65	32 - 129	4	38
1,3-Dichlorobenzene	50.0	30.0		ug/L		60	1 - 172	10	37
1,4-Dichlorobenzene	50.0	30.3		ug/L		61	20 - 124	2	40
2,2'-Oxybis(1-chloropropane)	50.0	39.7		ug/L		79	36 - 166	0	36
2,4,6-Trichlorophenol	50.0	52.4		ug/L		105	37 - 144	0	20
2,4-Dichlorophenol	50.0	51.4		ug/L		103	39 - 135	0	23
2,4-Dimethylphenol	50.0	42.2		ug/L		84	32 - 120	3	18
2,4-Dinitrophenol	100	127		ug/L		127	1 - 191	7	29
2,4-Dinitrotoluene	50.0	59.3		ug/L		119	39 - 139	4	20
2,6-Dinitrotoluene	50.0	57.2		ug/L		114	50 - 158	3	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-675500/3-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 675500

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	43.3		ug/L		87	60 - 120	1	30
2-Chlorophenol			50.0	44.6		ug/L		89	23 - 134	4	26
2-Nitrophenol			50.0	52.3		ug/L		105	29 - 182	2	28
3,3'-Dichlorobenzidine			100	108		ug/L		108	1 - 262	5	31
4,6-Dinitro-2-methylphenol			100	119		ug/L		119	1 - 181	3	30
4-Bromophenyl phenyl ether			50.0	50.4		ug/L		101	53 - 127	6	16
4-Chloro-3-methylphenol			50.0	58.7		ug/L		117	22 - 147	0	16
4-Chlorophenyl phenyl ether			50.0	57.4		ug/L		115	25 - 158	4	15
4-Nitrophenol			100	77.1		ug/L		77	1 - 132	2	24
Acenaphthene			50.0	49.1		ug/L		98	47 - 145	0	25
Acenaphthylene			50.0	50.8		ug/L		102	33 - 145	1	22
Anthracene			50.0	50.6		ug/L		101	27 - 133	3	15
Benzidine			100	80.4		ug/L		80	1 - 120	21	50
Benzo[a]anthracene			50.0	53.1		ug/L		106	33 - 143	5	15
Benzo[a]pyrene			50.0	53.3		ug/L		107	17 - 163	3	15
Benzo[b]fluoranthene			50.0	49.9		ug/L		100	24 - 159	0	17
Benzo[g,h,i]perylene			50.0	49.5		ug/L		99	1 - 219	6	19
Benzo[k]fluoranthene			50.0	56.6		ug/L		113	11 - 162	3	19
Bis(2-chloroethoxy)methane			50.0	50.9		ug/L		102	33 - 184	2	23
Bis(2-chloroethyl)ether			50.0	45.1		ug/L		90	12 - 158	5	33
Bis(2-ethylhexyl) phthalate			50.0	47.6		ug/L		95	8 - 158	1	15
Butyl benzyl phthalate			50.0	49.6		ug/L		99	1 - 152	3	15
Chrysene			50.0	48.2		ug/L		96	17 - 168	0	15
Di-n-butyl phthalate			50.0	56.6		ug/L		113	1 - 120	0	15
Di-n-octyl phthalate			50.0	50.4		ug/L		101	4 - 146	3	15
Dibenz(a,h)anthracene			50.0	52.7		ug/L		105	1 - 227	6	18
Diethyl phthalate			50.0	58.9		ug/L		118	1 - 120	6	15
Dimethyl phthalate			50.0	57.9		ug/L		116	1 - 120	1	15
Fluoranthene			50.0	58.4		ug/L		117	26 - 137	2	15
Fluorene			50.0	52.7		ug/L		105	59 - 121	1	18
Hexachlorobenzene			50.0	58.3		ug/L		117	1 - 152	8	15
Hexachlorocyclopentadiene			50.0	25.2		ug/L		50	5 - 120	2	50
Hexachloroethane			50.0	25.8		ug/L		52	40 - 120	0	43
Indeno[1,2,3-cd]pyrene			50.0	51.7		ug/L		103	1 - 171	5	17
Isophorone			50.0	55.9		ug/L		112	21 - 196	6	21
N-Nitrosodi-n-propylamine			50.0	50.1		ug/L		100	1 - 230	5	23
N-Nitrosodiphenylamine			50.0	48.9		ug/L		98	54 - 125	1	15
Naphthalene			50.0	43.5		ug/L		87	21 - 133	2	31
Nitrobenzene			50.0	53.9		ug/L		108	35 - 180	10	27
Pentachlorophenol			100	115		ug/L		115	14 - 176	2	21
Phenanthrene			50.0	49.9		ug/L		100	54 - 120	0	16
Phenol			50.0	22.2		ug/L		44	5 - 120	4	36
Pyrene			50.0	49.1		ug/L		98	52 - 120	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*104*		*52 - 151*
2-Fluorobiphenyl	*90*		*44 - 120*
2-Fluorophenol (Surr)	*51*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-675500/3-A
Matrix: Water
Analysis Batch: 675536

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 675500

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*94*		*15 - 314*
p-Terphenyl-d14 (Surr)	*92*		*22 - 125*
Phenol-d5 (Surr)	*39*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-675497/1-A
Matrix: Water
Analysis Batch: 676146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		07/07/23 07:36	07/12/23 16:00	1

Lab Sample ID: LCS 480-675497/2-A
Matrix: Water
Analysis Batch: 676146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.196		mg/L		98	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-675742/1-A
Matrix: Water
Analysis Batch: 675805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675742

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		07/10/23 11:01	07/10/23 14:25	1

Lab Sample ID: LCS 480-675742/2-A
Matrix: Water
Analysis Batch: 675805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675742

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00659		mg/L		99	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-676011/21
Matrix: Water
Analysis Batch: 676011

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00880	J	0.010	0.0041	mg/L			07/11/23 14:23	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: MB 480-676011/49
Matrix: Water
Analysis Batch: 676011

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00840	J	0.010	0.0041	mg/L			07/11/23 15:37	1

Lab Sample ID: HLCS 480-676011/22
Matrix: Water
Analysis Batch: 676011

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.409		mg/L		102	90 - 110

Lab Sample ID: LCS 480-676011/23
Matrix: Water
Analysis Batch: 676011

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.258		mg/L		103	90 - 110

Lab Sample ID: LCS 480-676011/50
Matrix: Water
Analysis Batch: 676011

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.250		mg/L		100	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-675910/1
Matrix: Water
Analysis Batch: 675910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

GC/MS VOA

Analysis Batch: 675552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-5	TRIP BLANK	Total/NA	WQ	624.1	
480-210514-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-675552/8	Method Blank	Total/NA	Water	624.1	
LCS 480-675552/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 675500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-675500/1-A	Method Blank	Total/NA	Water	625	
LCS 480-675500/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-675500/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 675536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	625.1	675500
MB 480-675500/1-A	Method Blank	Total/NA	Water	625.1	675500
LCS 480-675500/2-A	Lab Control Sample	Total/NA	Water	625.1	675500
LCSD 480-675500/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	675500

Metals

Prep Batch: 675497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-675497/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-675497/2-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 675742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-675742/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-675742/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 675805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	245.1	675742
MB 480-675742/1-A	Method Blank	Total/NA	Water	245.1	675742
LCS 480-675742/2-A	Lab Control Sample	Total/NA	Water	245.1	675742

Analysis Batch: 676146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	675497
MB 480-675497/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	675497
LCS 480-675497/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	675497

General Chemistry

Analysis Batch: 675910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 675910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-675910/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 676011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-210514-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-676011/21	Method Blank	Total/NA	Water	335.4	
MB 480-676011/49	Method Blank	Total/NA	Water	335.4	
HLCS 480-676011/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-676011/23	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-676011/50	Lab Control Sample	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-210514-5
Date Collected: 07/06/23 00:00
Matrix: WQ
Date Received: 07/06/23 12:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	675552	AXK	EET BUF	07/07/23 15:16

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-210514-6
Date Collected: 07/06/23 12:25
Matrix: Wastewater
Date Received: 07/06/23 12:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	675552	AXK	EET BUF	07/07/23 13:40
Total/NA	Prep	625			675500	LSC	EET BUF	07/06/23 14:56
Total/NA	Analysis	625.1		1	675536	JMM	EET BUF	07/07/23 20:07
Total/NA	Prep	200.7			675497	VAK	EET BUF	07/07/23 07:36
Total/NA	Analysis	200.7 Rev 4.4		1	676146	LMH	EET BUF	07/12/23 17:35
Total/NA	Prep	245.1			675742	NVK	EET BUF	07/10/23 11:01
Total/NA	Analysis	245.1		1	675805	NVK	EET BUF	07/10/23 14:29
Total/NA	Analysis	335.4		1	676011	CLT	EET BUF	07/11/23 15:53
Total/NA	Analysis	SM 4500 H+ B		1	675910	DSC	EET BUF	07/11/23 11:25

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-210514-1
Project/Site: Iroquois Gas/Westwood Pharm.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-210514-5	TRIP BLANK	WQ	07/06/23 00:00	07/06/23 12:57
480-210514-6	001 LAB COMP	Wastewater	07/06/23 12:25	07/06/23 12:57

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

Chain of Custody Record

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Client Information	Sampler: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-181781-34075.1
Client Contact: Jason Gutkowski	Phone: 3154363605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:	Analysis Requested		Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, M - Hexane, N - None, O - AsNaO2
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125855			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			Other:

480-210514 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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of con	Special Instructions/Note:
Preservation Code:							N	N	D	N	B		
001-1	7/6/23	0625	G	Water			X	X	X	X	X		Lab To
001-2	↓	0825	↓	Water			X	X	X	X	X		Composite
001-3		1025		↓			X	X	X	X	X		Samples
001-4		1225					X	X	X	X	X		
Trip Blank	—	—						X					Short Hold Time

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	Date/Time	Company	Received by	Date/Time	Company
[signature]	7/6/23 / 1257	Arcadis	[signature]	7/6/23 1257	TAB
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 3.8

Ver: 06/08/2021

7/19/2023

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-210514-1

Login Number: 210514
List Number: 1
Creator: Wallace, Cameron

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	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 8/7/2023 5:15:50 PM

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.
Monthly Testing

JOB NUMBER

480-211358-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Authorized for release by
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Designee for
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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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

Job ID: 480-211358-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-211358-1

Receipt
The samples were received on 8/1/2023 12:27 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

GC/MS VOA
Method 624.1_PREC: The following Volatile sample was composited by the laboratory on 08/01/2023 as requested by the client: 001 LAB COMP (480-211358-6). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-678551.

Method 625.1_PREC: The laboratory control sample (LCS) for preparation batch 480-678551 and analytical batch 480-678607 recovered outside control limits for the following analytes: Di-n-butyl phthalate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 625.1_PREC: The continuing calibration verification (CCV) associated with batch 480-678607 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: 001 LAB COMP (480-211358-6).

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

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

General Chemistry
Method SM4500_H+: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-211358-6).

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-211358-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-211358-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.11		0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	19.5	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-211358-5
Date Collected: 08/01/23 00:00
Matrix: WQ
Date Received: 08/01/23 12:27

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			08/01/23 14:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			08/01/23 14:20	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			08/01/23 14:20	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			08/01/23 14:20	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			08/01/23 14:20	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			08/01/23 14:20	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			08/01/23 14:20	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			08/01/23 14:20	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			08/01/23 14:20	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			08/01/23 14:20	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			08/01/23 14:20	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			08/01/23 14:20	1
Acrolein	ND		100	17	ug/L			08/01/23 14:20	1
Acrylonitrile	ND		50	1.9	ug/L			08/01/23 14:20	1
Benzene	ND		5.0	0.60	ug/L			08/01/23 14:20	1
Bromoform	ND		5.0	0.47	ug/L			08/01/23 14:20	1
Bromomethane	ND		5.0	1.2	ug/L			08/01/23 14:20	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			08/01/23 14:20	1
Chlorobenzene	ND		5.0	0.48	ug/L			08/01/23 14:20	1
Dibromochloromethane	ND		5.0	0.41	ug/L			08/01/23 14:20	1
Chloroethane	ND		5.0	0.87	ug/L			08/01/23 14:20	1
Chloroform	ND		5.0	0.54	ug/L			08/01/23 14:20	1
Chloromethane	ND		5.0	0.64	ug/L			08/01/23 14:20	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			08/01/23 14:20	1
Bromodichloromethane	ND		5.0	0.54	ug/L			08/01/23 14:20	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			08/01/23 14:20	1
Ethylbenzene	ND		5.0	0.46	ug/L			08/01/23 14:20	1
Methylene Chloride	ND		5.0	0.81	ug/L			08/01/23 14:20	1
Tetrachloroethene	ND		5.0	0.34	ug/L			08/01/23 14:20	1
Toluene	ND		5.0	0.45	ug/L			08/01/23 14:20	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			08/01/23 14:20	1
Trichloroethene	ND		5.0	0.60	ug/L			08/01/23 14:20	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			08/01/23 14:20	1
Vinyl chloride	ND		5.0	0.75	ug/L			08/01/23 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*		*08/01/23 14:20*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*08/01/23 14:20*	*1*
Toluene-d8 (Surr)	*98*		*77 - 120*		*08/01/23 14:20*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*08/01/23 14:20*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-211358-6
Date Collected: 08/01/23 00:00
Matrix: Wastewater
Date Received: 08/01/23 12:27

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			08/01/23 14:44	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			08/01/23 14:44	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			08/01/23 14:44	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-211358-6
Date Collected: 08/01/23 00:00
Matrix: Wastewater
Date Received: 08/01/23 12:27

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			08/01/23 14:44	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			08/01/23 14:44	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			08/01/23 14:44	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			08/01/23 14:44	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			08/01/23 14:44	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			08/01/23 14:44	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			08/01/23 14:44	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			08/01/23 14:44	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			08/01/23 14:44	1
Acrolein	ND		100	17	ug/L			08/01/23 14:44	1
Acrylonitrile	ND		50	1.9	ug/L			08/01/23 14:44	1
Benzene	ND		5.0	0.60	ug/L			08/01/23 14:44	1
Bromoform	ND		5.0	0.47	ug/L			08/01/23 14:44	1
Bromomethane	ND		5.0	1.2	ug/L			08/01/23 14:44	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			08/01/23 14:44	1
Chlorobenzene	ND		5.0	0.48	ug/L			08/01/23 14:44	1
Dibromochloromethane	ND		5.0	0.41	ug/L			08/01/23 14:44	1
Chloroethane	ND		5.0	0.87	ug/L			08/01/23 14:44	1
Chloroform	ND		5.0	0.54	ug/L			08/01/23 14:44	1
Chloromethane	ND		5.0	0.64	ug/L			08/01/23 14:44	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			08/01/23 14:44	1
Bromodichloromethane	ND		5.0	0.54	ug/L			08/01/23 14:44	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			08/01/23 14:44	1
Ethylbenzene	ND		5.0	0.46	ug/L			08/01/23 14:44	1
Methylene Chloride	ND		5.0	0.81	ug/L			08/01/23 14:44	1
Tetrachloroethene	ND		5.0	0.34	ug/L			08/01/23 14:44	1
Toluene	ND		5.0	0.45	ug/L			08/01/23 14:44	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			08/01/23 14:44	1
Trichloroethene	ND		5.0	0.60	ug/L			08/01/23 14:44	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			08/01/23 14:44	1
Vinyl chloride	ND		5.0	0.75	ug/L			08/01/23 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*		*08/01/23 14:44*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*08/01/23 14:44*	*1*
Toluene-d8 (Surr)	*101*		*77 - 120*		*08/01/23 14:44*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*08/01/23 14:44*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		08/01/23 14:40	08/03/23 00:00	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		08/01/23 14:40	08/03/23 00:00	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		08/01/23 14:40	08/03/23 00:00	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		08/01/23 14:40	08/03/23 00:00	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		08/01/23 14:40	08/03/23 00:00	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		08/01/23 14:40	08/03/23 00:00	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		08/01/23 14:40	08/03/23 00:00	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		08/01/23 14:40	08/03/23 00:00	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		08/01/23 14:40	08/03/23 00:00	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-211358-6
Date Collected: 08/01/23 00:00
Matrix: Wastewater
Date Received: 08/01/23 12:27

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		08/01/23 14:40	08/03/23 00:00	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		08/01/23 14:40	08/03/23 00:00	1
2-Chlorophenol	ND		4.8	0.16	ug/L		08/01/23 14:40	08/03/23 00:00	1
2-Nitrophenol	ND		4.8	0.17	ug/L		08/01/23 14:40	08/03/23 00:00	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		08/01/23 14:40	08/03/23 00:00	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		08/01/23 14:40	08/03/23 00:00	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		08/01/23 14:40	08/03/23 00:00	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		08/01/23 14:40	08/03/23 00:00	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		08/01/23 14:40	08/03/23 00:00	1
4-Nitrophenol	ND		14	0.46	ug/L		08/01/23 14:40	08/03/23 00:00	1
Acenaphthene	ND		4.8	0.19	ug/L		08/01/23 14:40	08/03/23 00:00	1
Acenaphthylene	ND		4.8	0.21	ug/L		08/01/23 14:40	08/03/23 00:00	1
Anthracene	ND		4.8	0.33	ug/L		08/01/23 14:40	08/03/23 00:00	1
Benzidine	ND		76	13	ug/L		08/01/23 14:40	08/03/23 00:00	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		08/01/23 14:40	08/03/23 00:00	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		08/01/23 14:40	08/03/23 00:00	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		08/01/23 14:40	08/03/23 00:00	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		08/01/23 14:40	08/03/23 00:00	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		08/01/23 14:40	08/03/23 00:00	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		08/01/23 14:40	08/03/23 00:00	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		08/01/23 14:40	08/03/23 00:00	1
Bis(2-ethylhexyl) phthalate	ND		9.5	0.29	ug/L		08/01/23 14:40	08/03/23 00:00	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		08/01/23 14:40	08/03/23 00:00	1
Chrysene	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
Decane	ND		9.5	0.38	ug/L		08/01/23 14:40	08/03/23 00:00	1
Di-n-butyl phthalate	ND	*+	4.8	0.38	ug/L		08/01/23 14:40	08/03/23 00:00	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		08/01/23 14:40	08/03/23 00:00	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		08/01/23 14:40	08/03/23 00:00	1
Diethyl phthalate	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		08/01/23 14:40	08/03/23 00:00	1
Fluoranthene	ND		4.8	0.38	ug/L		08/01/23 14:40	08/03/23 00:00	1
Fluorene	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		08/01/23 14:40	08/03/23 00:00	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		08/01/23 14:40	08/03/23 00:00	1
Hexachloroethane	ND		4.8	0.14	ug/L		08/01/23 14:40	08/03/23 00:00	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		08/01/23 14:40	08/03/23 00:00	1
Isophorone	ND		4.8	0.18	ug/L		08/01/23 14:40	08/03/23 00:00	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		08/01/23 14:40	08/03/23 00:00	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		08/01/23 14:40	08/03/23 00:00	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		08/01/23 14:40	08/03/23 00:00	1
Naphthalene	ND		4.8	0.20	ug/L		08/01/23 14:40	08/03/23 00:00	1
Nitrobenzene	ND		4.8	0.19	ug/L		08/01/23 14:40	08/03/23 00:00	1
Pentachlorophenol	ND		9.5	0.75	ug/L		08/01/23 14:40	08/03/23 00:00	1
Phenanthrene	ND		4.8	0.29	ug/L		08/01/23 14:40	08/03/23 00:00	1
Phenol	ND		4.8	0.083	ug/L		08/01/23 14:40	08/03/23 00:00	1
Pyrene	ND		4.8	0.33	ug/L		08/01/23 14:40	08/03/23 00:00	1
n-Octadecane	ND		9.5	0.29	ug/L		08/01/23 14:40	08/03/23 00:00	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-211358-6

Date Collected: 08/01/23 00:00
Matrix: Wastewater
Date Received: 08/01/23 12:27

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*52 - 151*	*08/01/23 14:40*	*08/03/23 00:00*	*1*
2-Fluorobiphenyl	*83*		*44 - 120*	*08/01/23 14:40*	*08/03/23 00:00*	*1*
2-Fluorophenol (Surr)	*50*		*17 - 120*	*08/01/23 14:40*	*08/03/23 00:00*	*1*
Nitrobenzene-d5 (Surr)	*88*		*15 - 314*	*08/01/23 14:40*	*08/03/23 00:00*	*1*
p-Terphenyl-d14 (Surr)	*79*		*22 - 125*	*08/01/23 14:40*	*08/03/23 00:00*	*1*
Phenol-d5 (Surr)	*33*		*8 - 424*	*08/01/23 14:40*	*08/03/23 00:00*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		08/03/23 08:04	08/03/23 15:42	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/02/23 11:39	08/02/23 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.11**		0.010	0.0041	mg/L			08/04/23 00:37	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.5**	**HF**	0.1	0.1	SU			08/01/23 21:03	1
Temperature (SM 4500 H+ B)	**19.5**	**HF**	0.001	0.001	Degrees C			08/01/23 21:03	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-211358-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-211358-6	001 LAB COMP	105	102	101	106

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-678484/6	Lab Control Sample	103	100	101	103
MB 480-678484/8	Method Blank	105	101	104	109

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-211358-5	TRIP BLANK	105	100	98	105

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-211358-6	001 LAB COMP	76	83	50	88	79	33

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
LCS 480-678551/2-A	Lab Control Sample	101	93	59	96	94	43		
LCSD 480-678551/3-A	Lab Control Sample Dup	93	87	54	88	91	41		
MB 480-678551/1-A	Method Blank	77	86	57	93	93	42		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-678484/8
Matrix: Water
Analysis Batch: 678484

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			08/01/23 13:23	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			08/01/23 13:23	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			08/01/23 13:23	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			08/01/23 13:23	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			08/01/23 13:23	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			08/01/23 13:23	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			08/01/23 13:23	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			08/01/23 13:23	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			08/01/23 13:23	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			08/01/23 13:23	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			08/01/23 13:23	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			08/01/23 13:23	1
Acrolein	ND		100	17	ug/L			08/01/23 13:23	1
Acrylonitrile	ND		50	1.9	ug/L			08/01/23 13:23	1
Benzene	ND		5.0	0.60	ug/L			08/01/23 13:23	1
Bromoform	ND		5.0	0.47	ug/L			08/01/23 13:23	1
Bromomethane	ND		5.0	1.2	ug/L			08/01/23 13:23	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			08/01/23 13:23	1
Chlorobenzene	ND		5.0	0.48	ug/L			08/01/23 13:23	1
Dibromochloromethane	ND		5.0	0.41	ug/L			08/01/23 13:23	1
Chloroethane	ND		5.0	0.87	ug/L			08/01/23 13:23	1
Chloroform	ND		5.0	0.54	ug/L			08/01/23 13:23	1
Chloromethane	ND		5.0	0.64	ug/L			08/01/23 13:23	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			08/01/23 13:23	1
Bromodichloromethane	ND		5.0	0.54	ug/L			08/01/23 13:23	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			08/01/23 13:23	1
Ethylbenzene	ND		5.0	0.46	ug/L			08/01/23 13:23	1
Methylene Chloride	ND		5.0	0.81	ug/L			08/01/23 13:23	1
Tetrachloroethene	ND		5.0	0.34	ug/L			08/01/23 13:23	1
Toluene	ND		5.0	0.45	ug/L			08/01/23 13:23	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			08/01/23 13:23	1
Trichloroethene	ND		5.0	0.60	ug/L			08/01/23 13:23	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			08/01/23 13:23	1
Vinyl chloride	ND		5.0	0.75	ug/L			08/01/23 13:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*		*08/01/23 13:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*08/01/23 13:23*	*1*
Toluene-d8 (Surr)	*104*		*77 - 120*		*08/01/23 13:23*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*08/01/23 13:23*	*1*

Lab Sample ID: LCS 480-678484/6
Matrix: Water
Analysis Batch: 678484

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	21.4		ug/L		107	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	19.8		ug/L		99	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-678484/6
Matrix: Water
Analysis Batch: 678484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	20.0		ug/L		100	52 - 150
1,1-Dichloroethane	20.0	20.3		ug/L		102	59 - 155
1,1-Dichloroethene	20.0	20.2		ug/L		101	1 - 234
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	18 - 190
1,2-Dichloroethane	20.0	20.4		ug/L		102	49 - 155
1,2-Dichloropropane	20.0	19.6		ug/L		98	1 - 210
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	59 - 156
1,4-Dichlorobenzene	20.0	20.4		ug/L		102	18 - 190
2-Chloroethyl vinyl ether	20.0	20.1	J	ug/L		100	1 - 305
Benzene	20.0	20.1		ug/L		101	37 - 151
Bromoform	20.0	20.6		ug/L		103	45 - 169
Bromomethane	20.0	21.7		ug/L		108	1 - 242
Carbon tetrachloride	20.0	21.3		ug/L		106	70 - 140
Chlorobenzene	20.0	20.1		ug/L		101	37 - 160
Dibromochloromethane	20.0	20.5		ug/L		103	53 - 149
Chloroethane	20.0	19.2		ug/L		96	14 - 230
Chloroform	20.0	20.2		ug/L		101	51 - 138
Chloromethane	20.0	19.4		ug/L		97	1 - 273
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	1 - 227
Bromodichloromethane	20.0	20.2		ug/L		101	35 - 155
Ethylbenzene	20.0	20.4		ug/L		102	37 - 162
Methylene Chloride	20.0	19.9		ug/L		99	1 - 221
Tetrachloroethene	20.0	20.5		ug/L		103	64 - 148
Toluene	20.0	19.8		ug/L		99	47 - 150
trans-1,3-Dichloropropene	20.0	19.7		ug/L		99	17 - 183
Trichloroethene	20.0	20.0		ug/L		100	71 - 157
Trichlorofluoromethane	20.0	21.6		ug/L		108	17 - 181
Vinyl chloride	20.0	20.1		ug/L		101	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*
Toluene-d8 (Surr)	*101*		*77 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-678551/1-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		08/01/23 14:40	08/02/23 21:35	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		08/01/23 14:40	08/02/23 21:35	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		08/01/23 14:40	08/02/23 21:35	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		08/01/23 14:40	08/02/23 21:35	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		08/01/23 14:40	08/02/23 21:35	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		08/01/23 14:40	08/02/23 21:35	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-678551/1-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		08/01/23 14:40	08/02/23 21:35	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		08/01/23 14:40	08/02/23 21:35	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		08/01/23 14:40	08/02/23 21:35	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		08/01/23 14:40	08/02/23 21:35	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		08/01/23 14:40	08/02/23 21:35	1
2-Chlorophenol	ND		5.0	0.17	ug/L		08/01/23 14:40	08/02/23 21:35	1
2-Nitrophenol	ND		5.0	0.18	ug/L		08/01/23 14:40	08/02/23 21:35	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		08/01/23 14:40	08/02/23 21:35	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		08/01/23 14:40	08/02/23 21:35	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		08/01/23 14:40	08/02/23 21:35	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		08/01/23 14:40	08/02/23 21:35	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		08/01/23 14:40	08/02/23 21:35	1
4-Nitrophenol	ND		15	0.49	ug/L		08/01/23 14:40	08/02/23 21:35	1
Acenaphthene	ND		5.0	0.20	ug/L		08/01/23 14:40	08/02/23 21:35	1
Acenaphthylene	ND		5.0	0.22	ug/L		08/01/23 14:40	08/02/23 21:35	1
Anthracene	ND		5.0	0.35	ug/L		08/01/23 14:40	08/02/23 21:35	1
Benzidine	ND		80	14	ug/L		08/01/23 14:40	08/02/23 21:35	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		08/01/23 14:40	08/02/23 21:35	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		08/01/23 14:40	08/02/23 21:35	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		08/01/23 14:40	08/02/23 21:35	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		08/01/23 14:40	08/02/23 21:35	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		08/01/23 14:40	08/02/23 21:35	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		08/01/23 14:40	08/02/23 21:35	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		08/01/23 14:40	08/02/23 21:35	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		08/01/23 14:40	08/02/23 21:35	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		08/01/23 14:40	08/02/23 21:35	1
Chrysene	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1
Decane	ND		10	0.40	ug/L		08/01/23 14:40	08/02/23 21:35	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		08/01/23 14:40	08/02/23 21:35	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		08/01/23 14:40	08/02/23 21:35	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		08/01/23 14:40	08/02/23 21:35	1
Diethyl phthalate	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		08/01/23 14:40	08/02/23 21:35	1
Fluoranthene	ND		5.0	0.40	ug/L		08/01/23 14:40	08/02/23 21:35	1
Fluorene	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		08/01/23 14:40	08/02/23 21:35	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		08/01/23 14:40	08/02/23 21:35	1
Hexachloroethane	ND		5.0	0.15	ug/L		08/01/23 14:40	08/02/23 21:35	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		08/01/23 14:40	08/02/23 21:35	1
Isophorone	ND		5.0	0.19	ug/L		08/01/23 14:40	08/02/23 21:35	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		08/01/23 14:40	08/02/23 21:35	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		08/01/23 14:40	08/02/23 21:35	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		08/01/23 14:40	08/02/23 21:35	1
Naphthalene	ND		5.0	0.22	ug/L		08/01/23 14:40	08/02/23 21:35	1
Nitrobenzene	ND		5.0	0.20	ug/L		08/01/23 14:40	08/02/23 21:35	1
Pentachlorophenol	ND		10	0.79	ug/L		08/01/23 14:40	08/02/23 21:35	1
Phenanthrene	ND		5.0	0.30	ug/L		08/01/23 14:40	08/02/23 21:35	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-678551/1-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		08/01/23 14:40	08/02/23 21:35	1
Pyrene	ND		5.0	0.35	ug/L		08/01/23 14:40	08/02/23 21:35	1
n-Octadecane	ND		10	0.30	ug/L		08/01/23 14:40	08/02/23 21:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*52 - 151*	*08/01/23 14:40*	*08/02/23 21:35*	*1*
2-Fluorobiphenyl	*86*		*44 - 120*	*08/01/23 14:40*	*08/02/23 21:35*	*1*
2-Fluorophenol (Surr)	*57*		*17 - 120*	*08/01/23 14:40*	*08/02/23 21:35*	*1*
Nitrobenzene-d5 (Surr)	*93*		*15 - 314*	*08/01/23 14:40*	*08/02/23 21:35*	*1*
p-Terphenyl-d14 (Surr)	*93*		*22 - 125*	*08/01/23 14:40*	*08/02/23 21:35*	*1*
Phenol-d5 (Surr)	*42*		*8 - 424*	*08/01/23 14:40*	*08/02/23 21:35*	*1*

Lab Sample ID: LCS 480-678551/2-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	33.2		ug/L		66	44 - 142
1,2-Dichlorobenzene	50.0	30.3		ug/L		61	32 - 129
1,3-Dichlorobenzene	50.0	27.6		ug/L		55	1 - 172
1,4-Dichlorobenzene	50.0	28.4		ug/L		57	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	44.9		ug/L		90	36 - 166
2,4,6-Trichlorophenol	50.0	52.1		ug/L		104	37 - 144
2,4-Dichlorophenol	50.0	50.2		ug/L		100	39 - 135
2,4-Dimethylphenol	50.0	40.4		ug/L		81	32 - 120
2,4-Dinitrophenol	100	118		ug/L		118	1 - 191
2,4-Dinitrotoluene	50.0	59.7		ug/L		119	39 - 139
2,6-Dinitrotoluene	50.0	55.9		ug/L		112	50 - 158
2-Chloronaphthalene	50.0	44.0		ug/L		88	60 - 120
2-Chlorophenol	50.0	46.4		ug/L		93	23 - 134
2-Nitrophenol	50.0	52.3		ug/L		105	29 - 182
3,3'-Dichlorobenzidine	100	102		ug/L		102	1 - 262
4,6-Dinitro-2-methylphenol	100	121		ug/L		121	1 - 181
4-Bromophenyl phenyl ether	50.0	51.5		ug/L		103	53 - 127
4-Chloro-3-methylphenol	50.0	57.9		ug/L		116	22 - 147
4-Chlorophenyl phenyl ether	50.0	53.9		ug/L		108	25 - 158
4-Nitrophenol	100	77.2		ug/L		77	1 - 132
Acenaphthene	50.0	47.8		ug/L		96	47 - 145
Acenaphthylene	50.0	49.6		ug/L		99	33 - 145
Anthracene	50.0	52.1		ug/L		104	27 - 133
Benzidine	100	63.1	J	ug/L		63	1 - 120
Benzo[a]anthracene	50.0	52.0		ug/L		104	33 - 143
Benzo[a]pyrene	50.0	53.3		ug/L		107	17 - 163
Benzo[b]fluoranthene	50.0	52.5		ug/L		105	24 - 159
Benzo[g,h,i]perylene	50.0	53.1		ug/L		106	1 - 219
Benzo[k]fluoranthene	50.0	52.2		ug/L		104	11 - 162
Bis(2-chloroethoxy)methane	50.0	51.6		ug/L		103	33 - 184
Bis(2-chloroethyl)ether	50.0	49.3		ug/L		99	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-678551/2-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	56.2		ug/L		112	8 - 158
Butyl benzyl phthalate	50.0	54.0		ug/L		108	1 - 152
Chrysene	50.0	49.4		ug/L		99	17 - 168
Di-n-butyl phthalate	50.0	60.7	*+	ug/L		121	1 - 120
Di-n-octyl phthalate	50.0	57.4		ug/L		115	4 - 146
Dibenz(a,h)anthracene	50.0	55.2		ug/L		110	1 - 227
Diethyl phthalate	50.0	57.9		ug/L		116	1 - 120
Dimethyl phthalate	50.0	55.5		ug/L		111	1 - 120
Fluoranthene	50.0	56.6		ug/L		113	26 - 137
Fluorene	50.0	51.2		ug/L		102	59 - 121
Hexachlorobenzene	50.0	52.2		ug/L		104	1 - 152
Hexachlorocyclopentadiene	50.0	18.5		ug/L		37	5 - 120
Hexachloroethane	50.0	24.4		ug/L		49	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	53.2		ug/L		106	1 - 171
Isophorone	50.0	55.0		ug/L		110	21 - 196
N-Nitrosodi-n-propylamine	50.0	53.6		ug/L		107	1 - 230
N-Nitrosodiphenylamine	50.0	49.6		ug/L		99	54 - 125
Naphthalene	50.0	41.8		ug/L		84	21 - 133
Nitrobenzene	50.0	51.7		ug/L		103	35 - 180
Pentachlorophenol	100	104		ug/L		104	14 - 176
Phenanthrene	50.0	50.1		ug/L		100	54 - 120
Phenol	50.0	23.0		ug/L		46	5 - 120
Pyrene	50.0	50.8		ug/L		102	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*101*		*52 - 151*
2-Fluorobiphenyl	*93*		*44 - 120*
2-Fluorophenol (Surr)	*59*		*17 - 120*
Nitrobenzene-d5 (Surr)	*96*		*15 - 314*
p-Terphenyl-d14 (Surr)	*94*		*22 - 125*
Phenol-d5 (Surr)	*43*		*8 - 424*

Lab Sample ID: LCSD 480-678551/3-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678551

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	30.4		ug/L		61	44 - 142	9	34
1,2-Dichlorobenzene	50.0	29.9		ug/L		60	32 - 129	1	38
1,3-Dichlorobenzene	50.0	27.0		ug/L		54	1 - 172	2	37
1,4-Dichlorobenzene	50.0	27.5		ug/L		55	20 - 124	3	40
2,2'-Oxybis(1-chloropropane)	50.0	44.6		ug/L		89	36 - 166	1	36
2,4,6-Trichlorophenol	50.0	50.2		ug/L		100	37 - 144	4	20
2,4-Dichlorophenol	50.0	45.6		ug/L		91	39 - 135	10	23
2,4-Dimethylphenol	50.0	37.9		ug/L		76	32 - 120	6	18
2,4-Dinitrophenol	100	108		ug/L		108	1 - 191	9	29
2,4-Dinitrotoluene	50.0	55.0		ug/L		110	39 - 139	8	20
2,6-Dinitrotoluene	50.0	53.5		ug/L		107	50 - 158	4	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-678551/3-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678551

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	40.6		ug/L		81	60 - 120	8	30
2-Chlorophenol			50.0	44.1		ug/L		88	23 - 134	5	26
2-Nitrophenol			50.0	50.8		ug/L		102	29 - 182	3	28
3,3'-Dichlorobenzidine			100	101		ug/L		101	1 - 262	1	31
4,6-Dinitro-2-methylphenol			100	112		ug/L		112	1 - 181	8	30
4-Bromophenyl phenyl ether			50.0	48.1		ug/L		96	53 - 127	7	16
4-Chloro-3-methylphenol			50.0	51.9		ug/L		104	22 - 147	11	16
4-Chlorophenyl phenyl ether			50.0	50.5		ug/L		101	25 - 158	7	15
4-Nitrophenol			100	70.0		ug/L		70	1 - 132	10	24
Acenaphthene			50.0	45.8		ug/L		92	47 - 145	4	25
Acenaphthylene			50.0	48.9		ug/L		98	33 - 145	2	22
Anthracene			50.0	48.0		ug/L		96	27 - 133	8	15
Benzidine			100	40.6	J	ug/L		41	1 - 120	43	50
Benzo[a]anthracene			50.0	48.8		ug/L		98	33 - 143	6	15
Benzo[a]pyrene			50.0	49.2		ug/L		98	17 - 163	8	15
Benzo[b]fluoranthene			50.0	52.1		ug/L		104	24 - 159	1	17
Benzo[g,h,i]perylene			50.0	50.8		ug/L		102	1 - 219	4	19
Benzo[k]fluoranthene			50.0	44.7		ug/L		89	11 - 162	15	19
Bis(2-chloroethoxy)methane			50.0	48.3		ug/L		97	33 - 184	7	23
Bis(2-chloroethyl)ether			50.0	47.4		ug/L		95	12 - 158	4	33
Bis(2-ethylhexyl) phthalate			50.0	50.9		ug/L		102	8 - 158	10	15
Butyl benzyl phthalate			50.0	51.9		ug/L		104	1 - 152	4	15
Chrysene			50.0	46.6		ug/L		93	17 - 168	6	15
Di-n-butyl phthalate			50.0	55.6		ug/L		111	1 - 120	9	15
Di-n-octyl phthalate			50.0	52.2		ug/L		104	4 - 146	9	15
Dibenz(a,h)anthracene			50.0	51.9		ug/L		104	1 - 227	6	18
Diethyl phthalate			50.0	53.2		ug/L		106	1 - 120	8	15
Dimethyl phthalate			50.0	52.5		ug/L		105	1 - 120	5	15
Fluoranthene			50.0	52.0		ug/L		104	26 - 137	8	15
Fluorene			50.0	49.5		ug/L		99	59 - 121	3	18
Hexachlorobenzene			50.0	51.5		ug/L		103	1 - 152	1	15
Hexachlorocyclopentadiene			50.0	19.5		ug/L		39	5 - 120	5	50
Hexachloroethane			50.0	23.9		ug/L		48	40 - 120	2	43
Indeno[1,2,3-cd]pyrene			50.0	50.8		ug/L		102	1 - 171	5	17
Isophorone			50.0	51.2		ug/L		102	21 - 196	7	21
N-Nitrosodi-n-propylamine			50.0	49.6		ug/L		99	1 - 230	8	23
N-Nitrosodiphenylamine			50.0	45.6		ug/L		91	54 - 125	8	15
Naphthalene			50.0	38.7		ug/L		77	21 - 133	8	31
Nitrobenzene			50.0	48.6		ug/L		97	35 - 180	6	27
Pentachlorophenol			100	102		ug/L		102	14 - 176	2	21
Phenanthrene			50.0	46.9		ug/L		94	54 - 120	7	16
Phenol			50.0	21.6		ug/L		43	5 - 120	7	36
Pyrene			50.0	48.2		ug/L		96	52 - 120	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*52 - 151*
2-Fluorobiphenyl	*87*		*44 - 120*
2-Fluorophenol (Surr)	*54*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-678551/3-A
Matrix: Water
Analysis Batch: 678607

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678551

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*88*		*15 - 314*
p-Terphenyl-d14 (Surr)	*91*		*22 - 125*
Phenol-d5 (Surr)	*41*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-678716/1-A
Matrix: Water
Analysis Batch: 678951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		08/03/23 08:04	08/03/23 15:34	1

Lab Sample ID: LCS 480-678716/2-A
Matrix: Water
Analysis Batch: 678951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.192		mg/L		96	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-678637/1-A
Matrix: Water
Analysis Batch: 678735

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/02/23 11:39	08/02/23 15:02	1

Lab Sample ID: LCS 480-678637/2-A
Matrix: Water
Analysis Batch: 678735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00656		mg/L		98	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-678932/179
Matrix: Water
Analysis Batch: 678932

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			08/04/23 00:19	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: HLCS 480-678932/22
Matrix: Water
Analysis Batch: 678932

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

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.403	^-	mg/L		101	90 - 110		

Lab Sample ID: LCS 480-678932/180
Matrix: Water
Analysis Batch: 678932

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.235		mg/L		94	90 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-678681/23
Matrix: Water
Analysis Batch: 678681

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101	99 - 101		

Lab Sample ID: 480-211358-6 DU
Matrix: Wastewater
Analysis Batch: 678681

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.5	HF		7.5		SU				0.1	5
Temperature	19.5	HF		19.7		Degrees C				1	10

GC/MS VOA

Analysis Batch: 678484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-5	TRIP BLANK	Total/NA	WQ	624.1	
480-211358-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-678484/8	Method Blank	Total/NA	Water	624.1	
LCS 480-678484/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 678551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-678551/1-A	Method Blank	Total/NA	Water	625	
LCS 480-678551/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-678551/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 678607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	625.1	678551
MB 480-678551/1-A	Method Blank	Total/NA	Water	625.1	678551
LCS 480-678551/2-A	Lab Control Sample	Total/NA	Water	625.1	678551
LCSD 480-678551/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	678551

Metals

Prep Batch: 678637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-678637/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-678637/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 678716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-678716/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-678716/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 678735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	245.1	678637
MB 480-678637/1-A	Method Blank	Total/NA	Water	245.1	678637
LCS 480-678637/2-A	Lab Control Sample	Total/NA	Water	245.1	678637

Analysis Batch: 678951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	678716
MB 480-678716/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	678716
LCS 480-678716/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	678716

General Chemistry

Analysis Batch: 678681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 678681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-678681/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-211358-6 DU	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	

Analysis Batch: 678932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-211358-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-678932/179	Method Blank	Total/NA	Water	335.4	
HLCS 480-678932/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-678932/180	Lab Control Sample	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-211358-5
Date Collected: 08/01/23 00:00
Matrix: WQ
Date Received: 08/01/23 12:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	678484	AXK	EET BUF	08/01/23 14:20

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-211358-6
Date Collected: 08/01/23 00:00
Matrix: Wastewater
Date Received: 08/01/23 12:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	678484	AXK	EET BUF	08/01/23 14:44
Total/NA	Prep	625			678551	LSC	EET BUF	08/01/23 14:40
Total/NA	Analysis	625.1		1	678607	JMM	EET BUF	08/03/23 00:00
Total/NA	Prep	200.7			678716	MP	EET BUF	08/03/23 08:04
Total/NA	Analysis	200.7 Rev 4.4		1	678951	BMB	EET BUF	08/03/23 15:42
Total/NA	Prep	245.1			678637	NVK	EET BUF	08/02/23 11:39
Total/NA	Analysis	245.1		1	678735	NVK	EET BUF	08/02/23 15:47
Total/NA	Analysis	335.4		1	678932	GW	EET BUF	08/04/23 00:37
Total/NA	Analysis	SM 4500 H+ B		1	678681	DSC	EET BUF	08/01/23 21:03

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-211358-1
Project/Site: Iroquois Gas/Westwood Pharm.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-211358-5	TRIP BLANK	WQ	08/01/23 00:00	08/01/23 12:27
480-211358-6	001 LAB COMP	Wastewater	08/01/23 00:00	08/01/23 12:27

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

Chain of Custody Record

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Client Information	Sampler: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-181782-34075.1
Client Contact: Jason Gutkowski	Phone: 3154363605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): ~~30125955~~ Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125955			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Analysis Requested

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B		
001-1	8/1/23	0550	G	Water			X	X	X	X	X		Lab To Composite Samples
001-2		0750		Water			X	X	X	X	X		
001-3		0950					X	X	X	X	X		
001-4		1150					X	X	X	X	X		
Trip Blank		—						X					Short Hold Time

480-211358 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Y - Trizma
	Z - other (specify)

Other:

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: [signature]	Date/Time: 8/1/23 1210	Company: Arcadis	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: / Date/Time: / Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature] Date/Time: 8/1/23 1210 Company: DHL

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

Cooler Temperature(s) °C and Other Remarks: 3.8 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-211358-1

Login Number: 211358
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		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time (Excluding tests with immediate HTs)..		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

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JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.
Monthly Testing

JOB NUMBER

480-213010-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Job ID: 480-213010-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-213010-1

Receipt
The samples were received on 9/22/2023 12:28 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.5º C.

GC/MS VOA
Method 624.1: The following Volatile sample was composited by the laboratory on 09/22/2023 as requested by the client: 001 LAB COMP (480-213010-6). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-684844 and analytical batch 480-684994 recovered outside control limits for the following analytes: Butyl benzyl phthalate.

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

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

General Chemistry
Methods 9040B, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-213010-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-684844.

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-213010-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213010-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.11		0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	18.5	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-213010-5
Date Collected: 09/22/23 00:00
Matrix: WQ
Date Received: 09/22/23 12:28

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			09/22/23 17:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/22/23 17:08	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/22/23 17:08	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/22/23 17:08	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/22/23 17:08	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/22/23 17:08	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/22/23 17:08	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/22/23 17:08	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/22/23 17:08	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/22/23 17:08	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/22/23 17:08	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/22/23 17:08	1
Acrolein	ND		100	17	ug/L			09/22/23 17:08	1
Acrylonitrile	ND		50	1.9	ug/L			09/22/23 17:08	1
Benzene	ND		5.0	0.60	ug/L			09/22/23 17:08	1
Bromoform	ND		5.0	0.47	ug/L			09/22/23 17:08	1
Bromomethane	ND		5.0	1.2	ug/L			09/22/23 17:08	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/22/23 17:08	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/22/23 17:08	1
Dibromochloromethane	ND		5.0	0.41	ug/L			09/22/23 17:08	1
Chloroethane	ND		5.0	0.87	ug/L			09/22/23 17:08	1
Chloroform	ND		5.0	0.54	ug/L			09/22/23 17:08	1
Chloromethane	ND		5.0	0.64	ug/L			09/22/23 17:08	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/22/23 17:08	1
Bromodichloromethane	ND		5.0	0.54	ug/L			09/22/23 17:08	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			09/22/23 17:08	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/22/23 17:08	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/22/23 17:08	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/22/23 17:08	1
Toluene	ND		5.0	0.45	ug/L			09/22/23 17:08	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/22/23 17:08	1
Trichloroethene	ND		5.0	0.60	ug/L			09/22/23 17:08	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			09/22/23 17:08	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/22/23 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*09/22/23 17:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*09/22/23 17:08*	*1*
Toluene-d8 (Surr)	*85*		*77 - 120*		*09/22/23 17:08*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*09/22/23 17:08*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213010-6
Date Collected: 09/22/23 12:11
Matrix: Wastewater
Date Received: 09/22/23 12:28

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			09/22/23 16:44	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/22/23 16:44	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/22/23 16:44	1

Client Sample ID: 001 LAB COMP
Date Collected: 09/22/23 12:11
Date Received: 09/22/23 12:28

Lab Sample ID: 480-213010-6
Matrix: Wastewater

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/22/23 16:44	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/22/23 16:44	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/22/23 16:44	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/22/23 16:44	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/22/23 16:44	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/22/23 16:44	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/22/23 16:44	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/22/23 16:44	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/22/23 16:44	1
Acrolein	ND		100	17	ug/L			09/22/23 16:44	1
Acrylonitrile	ND		50	1.9	ug/L			09/22/23 16:44	1
Benzene	ND		5.0	0.60	ug/L			09/22/23 16:44	1
Bromoform	ND		5.0	0.47	ug/L			09/22/23 16:44	1
Bromomethane	ND		5.0	1.2	ug/L			09/22/23 16:44	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/22/23 16:44	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/22/23 16:44	1
Dibromochloromethane	ND		5.0	0.41	ug/L			09/22/23 16:44	1
Chloroethane	ND		5.0	0.87	ug/L			09/22/23 16:44	1
Chloroform	ND		5.0	0.54	ug/L			09/22/23 16:44	1
Chloromethane	ND		5.0	0.64	ug/L			09/22/23 16:44	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/22/23 16:44	1
Bromodichloromethane	ND		5.0	0.54	ug/L			09/22/23 16:44	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			09/22/23 16:44	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/22/23 16:44	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/22/23 16:44	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/22/23 16:44	1
Toluene	ND		5.0	0.45	ug/L			09/22/23 16:44	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/22/23 16:44	1
Trichloroethene	ND		5.0	0.60	ug/L			09/22/23 16:44	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			09/22/23 16:44	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/22/23 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*68 - 130*		*09/22/23 16:44*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*09/22/23 16:44*	*1*
Toluene-d8 (Surr)	*84*		*77 - 120*		*09/22/23 16:44*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*09/22/23 16:44*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		09/25/23 09:29	09/26/23 17:58	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		09/25/23 09:29	09/26/23 17:58	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		09/25/23 09:29	09/26/23 17:58	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		09/25/23 09:29	09/26/23 17:58	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		09/25/23 09:29	09/26/23 17:58	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		09/25/23 09:29	09/26/23 17:58	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		09/25/23 09:29	09/26/23 17:58	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		09/25/23 09:29	09/26/23 17:58	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		09/25/23 09:29	09/26/23 17:58	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213010-6
Date Collected: 09/22/23 12:11
Matrix: Wastewater
Date Received: 09/22/23 12:28

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		09/25/23 09:29	09/26/23 17:58	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		09/25/23 09:29	09/26/23 17:58	1
2-Chlorophenol	ND		4.8	0.16	ug/L		09/25/23 09:29	09/26/23 17:58	1
2-Nitrophenol	ND		4.8	0.17	ug/L		09/25/23 09:29	09/26/23 17:58	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		09/25/23 09:29	09/26/23 17:58	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		09/25/23 09:29	09/26/23 17:58	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		09/25/23 09:29	09/26/23 17:58	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		09/25/23 09:29	09/26/23 17:58	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		09/25/23 09:29	09/26/23 17:58	1
4-Nitrophenol	ND		14	0.46	ug/L		09/25/23 09:29	09/26/23 17:58	1
Acenaphthene	ND		4.8	0.19	ug/L		09/25/23 09:29	09/26/23 17:58	1
Acenaphthylene	ND		4.8	0.21	ug/L		09/25/23 09:29	09/26/23 17:58	1
Anthracene	ND		4.8	0.33	ug/L		09/25/23 09:29	09/26/23 17:58	1
Benzidine	ND		76	13	ug/L		09/25/23 09:29	09/26/23 17:58	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		09/25/23 09:29	09/26/23 17:58	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		09/25/23 09:29	09/26/23 17:58	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		09/25/23 09:29	09/26/23 17:58	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		09/25/23 09:29	09/26/23 17:58	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		09/25/23 09:29	09/26/23 17:58	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		09/25/23 09:29	09/26/23 17:58	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		09/25/23 09:29	09/26/23 17:58	1
Bis(2-ethylhexyl) phthalate	ND		9.5	0.29	ug/L		09/25/23 09:29	09/26/23 17:58	1
Butyl benzyl phthalate	ND	*1	4.8	0.26	ug/L		09/25/23 09:29	09/26/23 17:58	1
Chrysene	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
Decane	ND		9.5	0.38	ug/L		09/25/23 09:29	09/26/23 17:58	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		09/25/23 09:29	09/26/23 17:58	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		09/25/23 09:29	09/26/23 17:58	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		09/25/23 09:29	09/26/23 17:58	1
Diethyl phthalate	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		09/25/23 09:29	09/26/23 17:58	1
Fluoranthene	ND		4.8	0.38	ug/L		09/25/23 09:29	09/26/23 17:58	1
Fluorene	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		09/25/23 09:29	09/26/23 17:58	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		09/25/23 09:29	09/26/23 17:58	1
Hexachloroethane	ND		4.8	0.14	ug/L		09/25/23 09:29	09/26/23 17:58	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		09/25/23 09:29	09/26/23 17:58	1
Isophorone	ND		4.8	0.18	ug/L		09/25/23 09:29	09/26/23 17:58	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		09/25/23 09:29	09/26/23 17:58	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		09/25/23 09:29	09/26/23 17:58	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		09/25/23 09:29	09/26/23 17:58	1
Naphthalene	ND		4.8	0.20	ug/L		09/25/23 09:29	09/26/23 17:58	1
Nitrobenzene	ND		4.8	0.19	ug/L		09/25/23 09:29	09/26/23 17:58	1
Pentachlorophenol	ND		9.5	0.75	ug/L		09/25/23 09:29	09/26/23 17:58	1
Phenanthrene	ND		4.8	0.29	ug/L		09/25/23 09:29	09/26/23 17:58	1
Phenol	ND		4.8	0.083	ug/L		09/25/23 09:29	09/26/23 17:58	1
Pyrene	ND		4.8	0.33	ug/L		09/25/23 09:29	09/26/23 17:58	1
n-Octadecane	ND		9.5	0.29	ug/L		09/25/23 09:29	09/26/23 17:58	1

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-213010-1

Client Sample ID: 001 LAB COMP

Date Collected: 09/22/23 12:11
Date Received: 09/22/23 12:28

Lab Sample ID: 480-213010-6

Matrix: Wastewater

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*52 - 151*	*09/25/23 09:29*	*09/26/23 17:58*	*1*
2-Fluorobiphenyl	*85*		*44 - 120*	*09/25/23 09:29*	*09/26/23 17:58*	*1*
2-Fluorophenol (Surr)	*48*		*17 - 120*	*09/25/23 09:29*	*09/26/23 17:58*	*1*
Nitrobenzene-d5 (Surr)	*86*		*15 - 314*	*09/25/23 09:29*	*09/26/23 17:58*	*1*
p-Terphenyl-d14 (Surr)	*82*		*22 - 125*	*09/25/23 09:29*	*09/26/23 17:58*	*1*
Phenol-d5 (Surr)	*31*		*8 - 424*	*09/25/23 09:29*	*09/26/23 17:58*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		09/26/23 07:59	09/27/23 15:27	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 15:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.11**		0.010	0.0041	mg/L			09/26/23 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.4**	**HF**	0.1	0.1	SU			09/26/23 17:31	1
Temperature (SM 4500 H+ B)	**18.5**	**HF**	0.001	0.001	Degrees C			09/26/23 17:31	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-213010-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-213010-6	001 LAB COMP	91	98	84	99

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-684615/6	Lab Control Sample	91	98	86	100
MB 480-684615/8	Method Blank	96	102	87	105

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-213010-5	TRIP BLANK	93	100	85	98

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-213010-6	001 LAB COMP	82	85	48	86	82	31

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
LCS 480-684844/2-A	Lab Control Sample	97	89	52	92	102	41		
LCSD 480-684844/3-A	Lab Control Sample Dup	95	83	46	91	90	37		
MB 480-684844/1-A	Method Blank	72	80	46	84	92	31		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-684615/8
Matrix: Water
Analysis Batch: 684615

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			09/22/23 16:10	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			09/22/23 16:10	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			09/22/23 16:10	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			09/22/23 16:10	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			09/22/23 16:10	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			09/22/23 16:10	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			09/22/23 16:10	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			09/22/23 16:10	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			09/22/23 16:10	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			09/22/23 16:10	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			09/22/23 16:10	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			09/22/23 16:10	1
Acrolein	ND		100	17	ug/L			09/22/23 16:10	1
Acrylonitrile	ND		50	1.9	ug/L			09/22/23 16:10	1
Benzene	ND		5.0	0.60	ug/L			09/22/23 16:10	1
Bromoform	ND		5.0	0.47	ug/L			09/22/23 16:10	1
Bromomethane	ND		5.0	1.2	ug/L			09/22/23 16:10	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			09/22/23 16:10	1
Chlorobenzene	ND		5.0	0.48	ug/L			09/22/23 16:10	1
Dibromochloromethane	ND		5.0	0.41	ug/L			09/22/23 16:10	1
Chloroethane	ND		5.0	0.87	ug/L			09/22/23 16:10	1
Chloroform	ND		5.0	0.54	ug/L			09/22/23 16:10	1
Chloromethane	ND		5.0	0.64	ug/L			09/22/23 16:10	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			09/22/23 16:10	1
Bromodichloromethane	ND		5.0	0.54	ug/L			09/22/23 16:10	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			09/22/23 16:10	1
Ethylbenzene	ND		5.0	0.46	ug/L			09/22/23 16:10	1
Methylene Chloride	ND		5.0	0.81	ug/L			09/22/23 16:10	1
Tetrachloroethene	ND		5.0	0.34	ug/L			09/22/23 16:10	1
Toluene	ND		5.0	0.45	ug/L			09/22/23 16:10	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			09/22/23 16:10	1
Trichloroethene	ND		5.0	0.60	ug/L			09/22/23 16:10	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			09/22/23 16:10	1
Vinyl chloride	ND		5.0	0.75	ug/L			09/22/23 16:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*		*09/22/23 16:10*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*09/22/23 16:10*	*1*
Toluene-d8 (Surr)	*87*		*77 - 120*		*09/22/23 16:10*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*09/22/23 16:10*	*1*

Lab Sample ID: LCS 480-684615/6
Matrix: Water
Analysis Batch: 684615

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	19.9		ug/L		100	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	21.2		ug/L		106	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-684615/6
Matrix: Water
Analysis Batch: 684615

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	21.3		ug/L		107	52 - 150
1,1-Dichloroethane	20.0	19.5		ug/L		97	59 - 155
1,1-Dichloroethene	20.0	19.9		ug/L		100	1 - 234
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	18 - 190
1,2-Dichloroethane	20.0	21.5		ug/L		107	49 - 155
1,2-Dichloropropane	20.0	19.2		ug/L		96	1 - 210
1,3-Dichlorobenzene	20.0	21.9		ug/L		109	59 - 156
1,4-Dichlorobenzene	20.0	22.0		ug/L		110	18 - 190
2-Chloroethyl vinyl ether	20.0	16.5	J	ug/L		83	1 - 305
Benzene	20.0	20.6		ug/L		103	37 - 151
Bromoform	20.0	19.4		ug/L		97	45 - 169
Bromomethane	20.0	21.3		ug/L		106	1 - 242
Carbon tetrachloride	20.0	19.9		ug/L		100	70 - 140
Chlorobenzene	20.0	21.6		ug/L		108	37 - 160
Dibromochloromethane	20.0	21.1		ug/L		105	53 - 149
Chloroethane	20.0	21.2		ug/L		106	14 - 230
Chloroform	20.0	21.4		ug/L		107	51 - 138
Chloromethane	20.0	17.5		ug/L		88	1 - 273
cis-1,3-Dichloropropene	20.0	18.7		ug/L		94	1 - 227
Bromodichloromethane	20.0	21.0		ug/L		105	35 - 155
Ethylbenzene	20.0	21.8		ug/L		109	37 - 162
Methylene Chloride	20.0	20.9		ug/L		105	1 - 221
Tetrachloroethene	20.0	22.2		ug/L		111	64 - 148
Toluene	20.0	21.3		ug/L		106	47 - 150
trans-1,3-Dichloropropene	20.0	18.5		ug/L		93	17 - 183
Trichloroethene	20.0	21.4		ug/L		107	71 - 157
Trichlorofluoromethane	20.0	23.4		ug/L		117	17 - 181
Vinyl chloride	20.0	19.0		ug/L		95	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*68 - 130*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*
Toluene-d8 (Surr)	*86*		*77 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-684844/1-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		09/25/23 09:29	09/26/23 15:29	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		09/25/23 09:29	09/26/23 15:29	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		09/25/23 09:29	09/26/23 15:29	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		09/25/23 09:29	09/26/23 15:29	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		09/25/23 09:29	09/26/23 15:29	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		09/25/23 09:29	09/26/23 15:29	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-684844/1-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		09/25/23 09:29	09/26/23 15:29	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		09/25/23 09:29	09/26/23 15:29	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		09/25/23 09:29	09/26/23 15:29	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		09/25/23 09:29	09/26/23 15:29	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		09/25/23 09:29	09/26/23 15:29	1
2-Chlorophenol	ND		5.0	0.17	ug/L		09/25/23 09:29	09/26/23 15:29	1
2-Nitrophenol	ND		5.0	0.18	ug/L		09/25/23 09:29	09/26/23 15:29	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/25/23 09:29	09/26/23 15:29	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		09/25/23 09:29	09/26/23 15:29	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		09/25/23 09:29	09/26/23 15:29	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		09/25/23 09:29	09/26/23 15:29	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		09/25/23 09:29	09/26/23 15:29	1
4-Nitrophenol	ND		15	0.49	ug/L		09/25/23 09:29	09/26/23 15:29	1
Acenaphthene	ND		5.0	0.20	ug/L		09/25/23 09:29	09/26/23 15:29	1
Acenaphthylene	ND		5.0	0.22	ug/L		09/25/23 09:29	09/26/23 15:29	1
Anthracene	ND		5.0	0.35	ug/L		09/25/23 09:29	09/26/23 15:29	1
Benzidine	ND		80	14	ug/L		09/25/23 09:29	09/26/23 15:29	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		09/25/23 09:29	09/26/23 15:29	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		09/25/23 09:29	09/26/23 15:29	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		09/25/23 09:29	09/26/23 15:29	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		09/25/23 09:29	09/26/23 15:29	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		09/25/23 09:29	09/26/23 15:29	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		09/25/23 09:29	09/26/23 15:29	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		09/25/23 09:29	09/26/23 15:29	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		09/25/23 09:29	09/26/23 15:29	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		09/25/23 09:29	09/26/23 15:29	1
Chrysene	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1
Decane	ND		10	0.40	ug/L		09/25/23 09:29	09/26/23 15:29	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		09/25/23 09:29	09/26/23 15:29	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		09/25/23 09:29	09/26/23 15:29	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		09/25/23 09:29	09/26/23 15:29	1
Diethyl phthalate	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		09/25/23 09:29	09/26/23 15:29	1
Fluoranthene	ND		5.0	0.40	ug/L		09/25/23 09:29	09/26/23 15:29	1
Fluorene	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		09/25/23 09:29	09/26/23 15:29	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		09/25/23 09:29	09/26/23 15:29	1
Hexachloroethane	ND		5.0	0.15	ug/L		09/25/23 09:29	09/26/23 15:29	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		09/25/23 09:29	09/26/23 15:29	1
Isophorone	ND		5.0	0.19	ug/L		09/25/23 09:29	09/26/23 15:29	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		09/25/23 09:29	09/26/23 15:29	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		09/25/23 09:29	09/26/23 15:29	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		09/25/23 09:29	09/26/23 15:29	1
Naphthalene	ND		5.0	0.22	ug/L		09/25/23 09:29	09/26/23 15:29	1
Nitrobenzene	ND		5.0	0.20	ug/L		09/25/23 09:29	09/26/23 15:29	1
Pentachlorophenol	ND		10	0.79	ug/L		09/25/23 09:29	09/26/23 15:29	1
Phenanthrene	ND		5.0	0.30	ug/L		09/25/23 09:29	09/26/23 15:29	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-684844/1-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		09/25/23 09:29	09/26/23 15:29	1
Pyrene	ND		5.0	0.35	ug/L		09/25/23 09:29	09/26/23 15:29	1
n-Octadecane	ND		10	0.30	ug/L		09/25/23 09:29	09/26/23 15:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*72*		*52 - 151*	*09/25/23 09:29*	*09/26/23 15:29*	*1*
2-Fluorobiphenyl	*80*		*44 - 120*	*09/25/23 09:29*	*09/26/23 15:29*	*1*
2-Fluorophenol (Surr)	*46*		*17 - 120*	*09/25/23 09:29*	*09/26/23 15:29*	*1*
Nitrobenzene-d5 (Surr)	*84*		*15 - 314*	*09/25/23 09:29*	*09/26/23 15:29*	*1*
p-Terphenyl-d14 (Surr)	*92*		*22 - 125*	*09/25/23 09:29*	*09/26/23 15:29*	*1*
Phenol-d5 (Surr)	*31*		*8 - 424*	*09/25/23 09:29*	*09/26/23 15:29*	*1*

Lab Sample ID: LCS 480-684844/2-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 684844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	39.1		ug/L		78	44 - 142
1,2-Dichlorobenzene	50.0	38.8		ug/L		78	32 - 129
1,3-Dichlorobenzene	50.0	34.8		ug/L		70	1 - 172
1,4-Dichlorobenzene	50.0	36.8		ug/L		74	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	44.3		ug/L		89	36 - 166
2,4,6-Trichlorophenol	50.0	46.5		ug/L		93	37 - 144
2,4-Dichlorophenol	50.0	51.1		ug/L		102	39 - 135
2,4-Dimethylphenol	50.0	37.9		ug/L		76	32 - 120
2,4-Dinitrophenol	100	92.1		ug/L		92	1 - 191
2,4-Dinitrotoluene	50.0	47.5		ug/L		95	39 - 139
2,6-Dinitrotoluene	50.0	51.0		ug/L		102	50 - 158
2-Chloronaphthalene	50.0	42.3		ug/L		85	60 - 120
2-Chlorophenol	50.0	47.7		ug/L		95	23 - 134
2-Nitrophenol	50.0	45.8		ug/L		92	29 - 182
3,3'-Dichlorobenzidine	100	107		ug/L		107	1 - 262
4,6-Dinitro-2-methylphenol	100	94.4		ug/L		94	1 - 181
4-Bromophenyl phenyl ether	50.0	47.0		ug/L		94	53 - 127
4-Chloro-3-methylphenol	50.0	50.2		ug/L		100	22 - 147
4-Chlorophenyl phenyl ether	50.0	46.5		ug/L		93	25 - 158
4-Nitrophenol	100	56.9		ug/L		57	1 - 132
Acenaphthene	50.0	49.5		ug/L		99	47 - 145
Acenaphthylene	50.0	47.7		ug/L		95	33 - 145
Anthracene	50.0	51.0		ug/L		102	27 - 133
Benzidine	100	72.8	J	ug/L		73	1 - 120
Benzo[a]anthracene	50.0	53.1		ug/L		106	33 - 143
Benzo[a]pyrene	50.0	50.8		ug/L		102	17 - 163
Benzo[b]fluoranthene	50.0	53.2		ug/L		106	24 - 159
Benzo[g,h,i]perylene	50.0	52.0		ug/L		104	1 - 219
Benzo[k]fluoranthene	50.0	43.4		ug/L		87	11 - 162
Bis(2-chloroethoxy)methane	50.0	48.0		ug/L		96	33 - 184
Bis(2-chloroethyl)ether	50.0	47.9		ug/L		96	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-684844/2-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 684844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	52.8		ug/L		106	8 - 158
Butyl benzyl phthalate	50.0	54.9		ug/L		110	1 - 152
Chrysene	50.0	53.9		ug/L		108	17 - 168
Di-n-butyl phthalate	50.0	57.5		ug/L		115	1 - 120
Di-n-octyl phthalate	50.0	54.8		ug/L		110	4 - 146
Dibenz(a,h)anthracene	50.0	51.8		ug/L		104	1 - 227
Diethyl phthalate	50.0	53.1		ug/L		106	1 - 120
Dimethyl phthalate	50.0	52.7		ug/L		105	1 - 120
Fluoranthene	50.0	54.0		ug/L		108	26 - 137
Fluorene	50.0	47.4		ug/L		95	59 - 121
Hexachlorobenzene	50.0	52.3		ug/L		105	1 - 152
Hexachlorocyclopentadiene	50.0	24.1		ug/L		48	5 - 120
Hexachloroethane	50.0	35.9		ug/L		72	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	53.0		ug/L		106	1 - 171
Isophorone	50.0	52.8		ug/L		106	21 - 196
N-Nitrosodi-n-propylamine	50.0	55.5		ug/L		111	1 - 230
N-Nitrosodiphenylamine	50.0	47.1		ug/L		94	54 - 125
Naphthalene	50.0	42.2		ug/L		84	21 - 133
Nitrobenzene	50.0	47.7		ug/L		95	35 - 180
Pentachlorophenol	100	102		ug/L		102	14 - 176
Phenanthrene	50.0	51.0		ug/L		102	54 - 120
Phenol	50.0	21.9		ug/L		44	5 - 120
Pyrene	50.0	50.9		ug/L		102	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*97*		*52 - 151*
2-Fluorobiphenyl	*89*		*44 - 120*
2-Fluorophenol (Surr)	*52*		*17 - 120*
Nitrobenzene-d5 (Surr)	*92*		*15 - 314*
p-Terphenyl-d14 (Surr)	*102*		*22 - 125*
Phenol-d5 (Surr)	*41*		*8 - 424*

Lab Sample ID: LCSD 480-684844/3-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 684844

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	37.0		ug/L		74	44 - 142	5	34
1,2-Dichlorobenzene	50.0	34.1		ug/L		68	32 - 129	13	38
1,3-Dichlorobenzene	50.0	30.8		ug/L		62	1 - 172	12	37
1,4-Dichlorobenzene	50.0	31.6		ug/L		63	20 - 124	15	40
2,2'-Oxybis(1-chloropropane)	50.0	37.8		ug/L		76	36 - 166	16	36
2,4,6-Trichlorophenol	50.0	45.8		ug/L		92	37 - 144	2	20
2,4-Dichlorophenol	50.0	45.1		ug/L		90	39 - 135	12	23
2,4-Dimethylphenol	50.0	35.8		ug/L		72	32 - 120	6	18
2,4-Dinitrophenol	100	88.9		ug/L		89	1 - 191	4	29
2,4-Dinitrotoluene	50.0	50.4		ug/L		101	39 - 139	6	20
2,6-Dinitrotoluene	50.0	47.3		ug/L		95	50 - 158	8	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-684844/3-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 684844

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene	50.0	41.1		ug/L		82	60 - 120	3	30
2-Chlorophenol	50.0	42.2		ug/L		84	23 - 134	12	26
2-Nitrophenol	50.0	39.9		ug/L		80	29 - 182	14	28
3,3'-Dichlorobenzidine	100	94.9		ug/L		95	1 - 262	12	31
4,6-Dinitro-2-methylphenol	100	89.8		ug/L		90	1 - 181	5	30
4-Bromophenyl phenyl ether	50.0	47.6		ug/L		95	53 - 127	1	16
4-Chloro-3-methylphenol	50.0	47.4		ug/L		95	22 - 147	6	16
4-Chlorophenyl phenyl ether	50.0	43.6		ug/L		87	25 - 158	6	15
4-Nitrophenol	100	52.2		ug/L		52	1 - 132	9	24
Acenaphthene	50.0	44.5		ug/L		89	47 - 145	10	25
Acenaphthylene	50.0	46.4		ug/L		93	33 - 145	3	22
Anthracene	50.0	49.2		ug/L		98	27 - 133	4	15
Benzidine	100	64.7	J	ug/L		65	1 - 120	12	50
Benzo[a]anthracene	50.0	48.4		ug/L		97	33 - 143	9	15
Benzo[a]pyrene	50.0	50.4		ug/L		101	17 - 163	1	15
Benzo[b]fluoranthene	50.0	49.7		ug/L		99	24 - 159	7	17
Benzo[g,h,i]perylene	50.0	48.0		ug/L		96	1 - 219	8	19
Benzo[k]fluoranthene	50.0	43.7		ug/L		87	11 - 162	1	19
Bis(2-chloroethoxy)methane	50.0	45.1		ug/L		90	33 - 184	6	23
Bis(2-chloroethyl)ether	50.0	40.8		ug/L		82	12 - 158	16	33
Bis(2-ethylhexyl) phthalate	50.0	48.6		ug/L		97	8 - 158	8	15
Butyl benzyl phthalate	50.0	46.7	*1	ug/L		93	1 - 152	16	15
Chrysene	50.0	50.3		ug/L		101	17 - 168	7	15
Di-n-butyl phthalate	50.0	54.3		ug/L		109	1 - 120	6	15
Di-n-octyl phthalate	50.0	49.7		ug/L		99	4 - 146	10	15
Dibenz(a,h)anthracene	50.0	47.4		ug/L		95	1 - 227	9	18
Diethyl phthalate	50.0	51.1		ug/L		102	1 - 120	4	15
Dimethyl phthalate	50.0	49.0		ug/L		98	1 - 120	7	15
Fluoranthene	50.0	50.6		ug/L		101	26 - 137	6	15
Fluorene	50.0	45.5		ug/L		91	59 - 121	4	18
Hexachlorobenzene	50.0	47.7		ug/L		95	1 - 152	9	15
Hexachlorocyclopentadiene	50.0	24.8		ug/L		50	5 - 120	3	50
Hexachloroethane	50.0	33.1		ug/L		66	40 - 120	8	43
Indeno[1,2,3-cd]pyrene	50.0	49.4		ug/L		99	1 - 171	7	17
Isophorone	50.0	50.9		ug/L		102	21 - 196	4	21
N-Nitrosodi-n-propylamine	50.0	47.1		ug/L		94	1 - 230	16	23
N-Nitrosodiphenylamine	50.0	48.5		ug/L		97	54 - 125	3	15
Naphthalene	50.0	40.2		ug/L		80	21 - 133	5	31
Nitrobenzene	50.0	47.8		ug/L		96	35 - 180	0	27
Pentachlorophenol	100	92.2		ug/L		92	14 - 176	10	21
Phenanthrene	50.0	48.9		ug/L		98	54 - 120	4	16
Phenol	50.0	19.7		ug/L		39	5 - 120	11	36
Pyrene	50.0	46.6		ug/L		93	52 - 120	9	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*95*		*52 - 151*
2-Fluorobiphenyl	*83*		*44 - 120*
2-Fluorophenol (Surr)	*46*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-684844/3-A
Matrix: Water
Analysis Batch: 684994

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 684844

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*91*		*15 - 314*
p-Terphenyl-d14 (Surr)	*90*		*22 - 125*
Phenol-d5 (Surr)	*37*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-684929/1-A
Matrix: Water
Analysis Batch: 685272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684929

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		09/26/23 07:59	09/27/23 15:20	1

Lab Sample ID: LCS 480-684929/2-A
Matrix: Water
Analysis Batch: 685272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 684929

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.197		mg/L		98	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-684966/1-A
Matrix: Water
Analysis Batch: 685107

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 684966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 14:43	1

Lab Sample ID: LCS 480-684966/2-A
Matrix: Water
Analysis Batch: 685107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 684966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00684		mg/L		102	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-685038/21
Matrix: Water
Analysis Batch: 685038

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			09/26/23 09:21	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: HLCS 480-685038/22
Matrix: Water
Analysis Batch: 685038

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

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.412		mg/L		103	90 - 110		

Lab Sample ID: LCS 480-685038/23
Matrix: Water
Analysis Batch: 685038

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.264		mg/L		105	90 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-685115/1
Matrix: Water
Analysis Batch: 685115

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100	99 - 101		

Lab Sample ID: 480-213010-6 DU
Matrix: Wastewater
Analysis Batch: 685115

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.4	HF		7.4		SU				0.7	5
Temperature	18.5	HF		18.9		Degrees C				2	10

GC/MS VOA

Analysis Batch: 684615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-5	TRIP BLANK	Total/NA	WQ	624.1	
480-213010-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-684615/8	Method Blank	Total/NA	Water	624.1	
LCS 480-684615/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 684844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-684844/1-A	Method Blank	Total/NA	Water	625	
LCS 480-684844/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-684844/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 684994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	625.1	684844
MB 480-684844/1-A	Method Blank	Total/NA	Water	625.1	684844
LCS 480-684844/2-A	Lab Control Sample	Total/NA	Water	625.1	684844
LCSD 480-684844/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	684844

Metals

Prep Batch: 684929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-684929/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-684929/2-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 684966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-684966/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-684966/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 685107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	245.1	684966
MB 480-684966/1-A	Method Blank	Total/NA	Water	245.1	684966
LCS 480-684966/2-A	Lab Control Sample	Total/NA	Water	245.1	684966

Analysis Batch: 685272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	684929
MB 480-684929/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	684929
LCS 480-684929/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	684929

General Chemistry

Analysis Batch: 685038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	335.4	

General Chemistry (Continued)

Analysis Batch: 685038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-685038/21	Method Blank	Total/NA	Water	335.4	
HLCS 480-685038/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-685038/23	Lab Control Sample	Total/NA	Water	335.4	

Analysis Batch: 685115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213010-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-685115/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-213010-6 DU	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-213010-5
Date Collected: 09/22/23 00:00
Matrix: WQ
Date Received: 09/22/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	684615	AXK	EET BUF	09/22/23 17:08

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213010-6
Date Collected: 09/22/23 12:11
Matrix: Wastewater
Date Received: 09/22/23 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	684615	AXK	EET BUF	09/22/23 16:44
Total/NA	Prep	625			684844	JMP	EET BUF	09/25/23 09:29
Total/NA	Analysis	625.1		1	684994	JMM	EET BUF	09/26/23 17:58
Total/NA	Prep	200.7			684929	MP	EET BUF	09/26/23 07:59
Total/NA	Analysis	200.7 Rev 4.4		1	685272	LMH	EET BUF	09/27/23 15:27
Total/NA	Prep	245.1			684966	NVK	EET BUF	09/26/23 11:26
Total/NA	Analysis	245.1		1	685107	NVK	EET BUF	09/26/23 15:20
Total/NA	Analysis	335.4		1	685038	CLT	EET BUF	09/26/23 10:15
Total/NA	Analysis	SM 4500 H+ B		1	685115	KB	EET BUF	09/26/23 17:31

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213010-1
Project/Site: Iroquois Gas/Westwood Pharm.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-213010-5	TRIP BLANK	WQ	09/22/23 00:00	09/22/23 12:28
480-213010-6	001 LAB COMP	Wastewater	09/22/23 12:11	09/22/23 12:28

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: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-188725-34075.1
Client Contact: Jason Gutkowski	Phone: 315 436 3605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): ~~Standard Turn~~ 3 Day Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125855			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCl; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5

480-213010 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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	D	N	B	X	
001-1	9/22/23	0611	G	Water			X	X	X	X	X	3	Lab To
001-2		0811		Water			X	X	X	X	X	3	Composite
001-3		1011		Water			X	X	X	X	X	3	Samples
001-4		1211		Water			X	X	X	X	X	3	
Trip Blank		—		Water				X				2	
													Short Hold Time

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: 4.5 ± C

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	9/22/23 1228	Arcadis	[signature]	9/22/23 1228	TAS
2						
3						

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

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-213010-1

Login Number: 213010
List Number: 1
Creator: Yeager, Brian A

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	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Ms. Traserra Adams
Industrial Waste Section
Buffalo Sewer Authority Treatment Plant
90 West Ferry Street
Buffalo, NY 14213-1799

Arcadis of New York, Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse
New York 13202
Phone: 315 446 9120
Fax: 315 449 0017
www.arcadis.com

Date: December 29, 2023
Our Ref: 30185775
Subject: **Discharge Monitoring Report – Fourth Quarter 2023**
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY 14213
BSA Discharge Permit # 21-07-BU174

Dear Ms. Adams,

On behalf of Bristol-Myers Squibb Company, Arcadis of New York, Inc. (Arcadis) is pleased to submit this fourth quarter 2023 Discharge Monitoring Report (DMR) for the above-referenced site, which covers the period October 1, to December 31, 2023. The monthly discharge sampling and DMR preparation were completed in accordance with the Buffalo Sewer Authority (BSA) Sampling Measurement and Analytical Guidelines Sheet. A total of 85,554 gallons of water were discharged during the reporting period (i.e., flow meter totalizer readings from 9/26/2023 to 12/26/2034). Laboratory analytical results indicate that the remedial system operated within BSA permit requirements during the fourth quarter 2023.

The sampling protocol and calculated discharges are based on the following: (1) total flows are a daily average taken over approximately 7 days; and (2) monthly composite samples are collected over an 8-hour period, where grab samples are collected every 2 hours. A total of four grab samples are collected throughout the 8-hour period. The discharge sample point location, following carbon treatment, is labeled as “C001 Sample Location” on the Process Flow Diagram (**Attachment A**). The Sample Collection and Log Sheets for the October, November, and December monthly sampling events are provided in **Attachment B**.

The monthly grab samples were submitted to Eurofins TestAmerica in Amherst, New York, where samples are composited and analyzed for pH via Method 4500 H+B, Total Mercury via United States Environmental Protection Agency (EPA) Method 245.1, Total Zinc via EPA Method 200.7, Total Cyanide via EPA Method 335.4, Volatile Organic Compounds via EPA Method 624.1, and Semi-Volatile Organic Compounds via EPA Method 625.1.

Laboratory analytical results and average daily flows are provided in the Quarterly Analytical Data Table (**Attachment C**). No exceedances of Daily Maximum or Maximum Allowable Instantaneous Discharge Limitations were observed during the reporting period. BSA Permit Specific Conditions require reporting of any compounds analyzed by EPA Methods 624 and 625 that are detected at a concentration above a threshold of 0.01 milligrams per liter (mg/L). In October, November, and December 2023, there were no detections above the reporting threshold. The laboratory analytical data packages are provided in **Attachment D**.

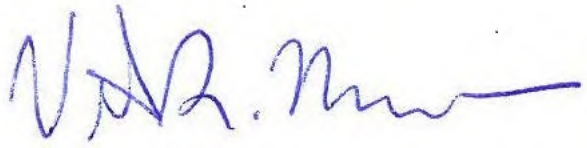
On December 5, 2023, Arcadis replaced the flowmeter to comply with the requirement to have the treatment system flowmeter certified every year. The certification for the new flowmeter is provided in **Attachment E**.

Ms. Traserra Adams
Buffalo Sewer Authority Treatment Plant
December 29, 2023

If you have any questions or would like to discuss further, please feel free to contact the undersigned.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation.

Signed on behalf of Bristol-Myers Squibb Company and submitted by:



Vincent S. Maresco
Arcadis of New York, Inc.
Project Manager

Email: Vin.Maresco@arcadis.com
Direct Line: 315 671 9256

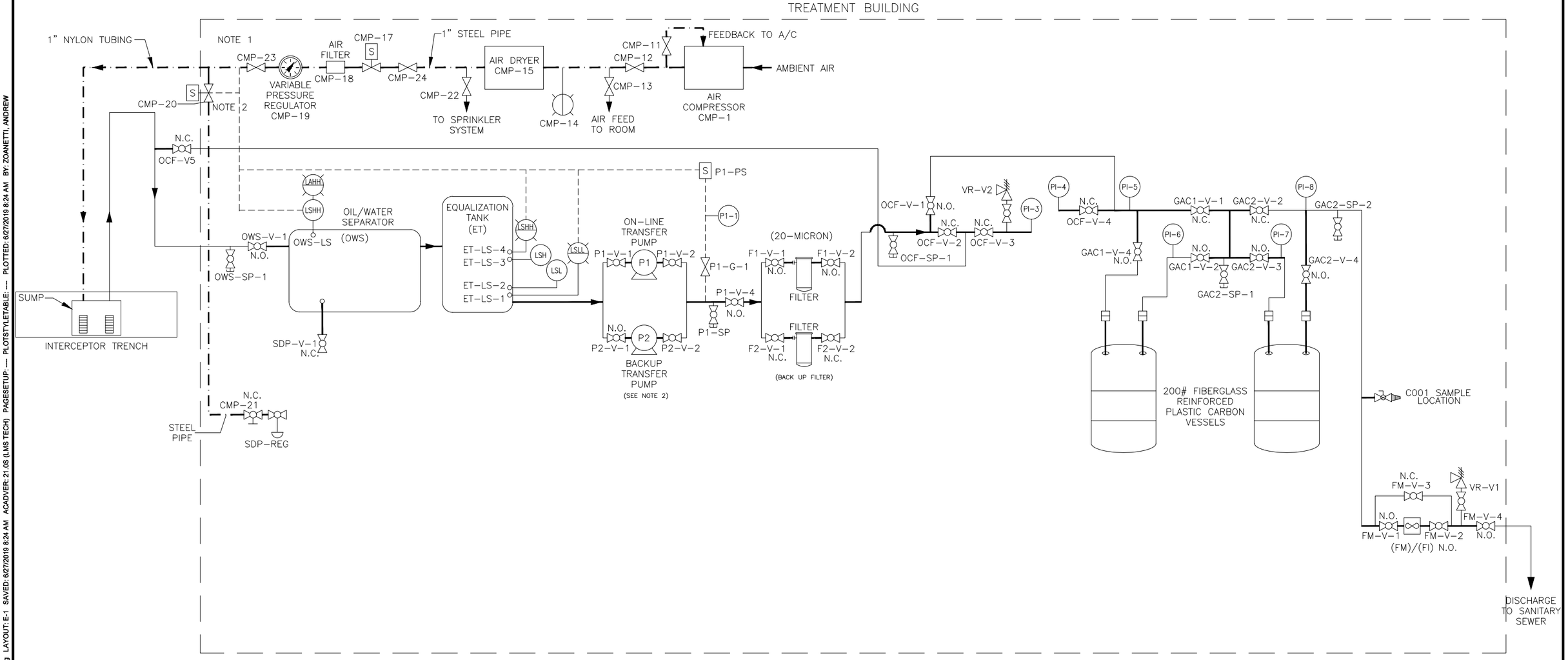
CC. Richard Mator, BMS
John Alonzo, de maximis, inc.
Michael J. Hecker, Hodgson Russ LLP
Katie Hoelscher, NFG

Attachments:

A Process Flow Diagram
B Sample Collection and Log Sheets for Monthly Sampling Events
C Quarterly Analytical Data Table
D Laboratory Analytical Data Packages
E Flowmeter Certificate of Calibration

Attachment A

Process Flow Diagram



NOTES:

1. SOLENOID VALVE IS ACTIVATED TO THE OFF-POSITION UNDER ANY OF THE FOLLOWING CONDITIONS:
   a) LSHH AT THE OIL-WATER SEPARATOR;
   b) LSHH AT THE EQUILIZATION TANK IS ACTIVATED;
   c) P1-PS HIGH PUMP DISCHARGE PRESSURE SWISWITCH IS ACTIVATED.

2. USE OF TRANSFER PUMPS IS ALTERED ON A QUARTERLY BASIS.

CITY: SYRACUSE, NY DIV/GROUP: DB: PM: TM: LYR:ON=*;OFF=*REF*
C:\Users\AZoianetti\Documents\Bristol-Myers Squibb\BMS Buffalo, NY\ATTACHMENT A.dwg LAYOUT: E-1 SAVED: 6/27/2019 8:24 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 6/27/2019 8:24 AM BY: ZOANETTI, ANDREW
XREFS:
TITLE

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REUSED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name

Professional Engineer's No.

State	Date Signed	Project Mgr.
Designed by	Drawn by	Checked by

ARCADIS Design & Consultancy for natural and built assets
ARCADIS OF NEW YORK, INC.

NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

IROQUOIS GAS/WESTWOOD PHARMACEUTICALS TERRESTRIAL SITE NO. 915141A
120 DART STREET AND 40 BRADLEY STREET, BUFFALO, NY

PROCESS FLOW DIAGRAM

ARCADIS Project No.
B0087370.0000.00001

Date
SEPTEMBER 2017

ARCADIS
ARCADIS OF NEW YORK, INC.
110 W. FAYETTE ST., STE 300
SYRACUSE, NY 13202
TEL. 315.446.9120

PFD

Attachment B

Sample Collection and Log Sheets for Monthly Sampling Events

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm Permit #: 12-05-BU174

Sample Location: 001 Sample Type: Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	10/4/23	→	→	→	JTG
Sample Time	0608	0808	1008	1208	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.75	7.78	7.67	7.71	JTG
Weather	62°F Clear	65°F Sunny	72°F Sunny	79°F Sunny	JTG
Comments	None	None	None	None	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gotkowski — Sample Technician

10/4/23 — Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm Permit #: 12-05-BU174

Sample Location: 001 Sample Type: Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	11/1/23	→	→	→	JTG
Sample Time	0611	0811	1011	1211	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.61	7.39	7.34	7.55	JTG
Weather	33°F Cloudy	31°F Sunny	35°F Sunny	37°F Sunny	JTG
Comments	None	None	None	None	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Guthowski 11/1/23

Sample Technician Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroquois Gas/Westwood Pharm Permit #: 12-05-BU174

Sample Location: 001 Sample Type: Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	12/1/23	→	→	→	JTG
Sample Time	0609	0809	1009	1209	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.07	7.33	7.18	7.10	JTG
Weather	50°F Cloudy	45°F Cloudy	45°F Light Rain	45°F Rain	JTG
Comments	None	None	None	None	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski 12/1/23

Sample Technician Date

Attachment C

Quarterly Analytical Data Table

Quarterly Analytical Data Table
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY
BSA Discharge Permit No. 18-07-BU174

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	9/26/2023	10/4/2023	10/11/2023	10/18/2023	10/26/2023	11/1/2023	11/8/2023
Totalizer	gal	NA	1,405,655	1,412,361	1,419,448	1,424,695	1,431,971	1,437,249	1,444,472
Total Mercury	lbs	0.00001**	NS	ND	NS	NS	NS	ND	NS
Total Zinc	lbs	3.0**	NS	ND	NS	NS	NS	ND	NS
Total Cyanide	lbs	7.93**	NS	7.68E-04	NS	NS	NS	8.06E-04 B	NS
Total VOCs	mg/L	NA	NS	ND	NS	NS	NS	ND	NS
Total SVOCs	mg/L	NA	NS	ND	NS	NS	NS	3.90E-03 J *1	NS
pH	SU	5.0-12.0	NS	7.6 HF	NS	NS	NS	7.3 HF	NS
Total Daily Flow	gal	14,400	-	838	1,012	750	910	880	1,032

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	11/17/2023	11/22/2023	12/1/2023	12/5/2023	12/13/2023	12/19/2023	12/26/2023
Totalizer	gal	NA	1,452,577	1,457,254	1,465,531	1,469,347	1,478,096	1,483,879	1,491,209
Total Mercury	lbs	0.00001**	NS	NS	ND	NS	NS	NS	NS
Total Zinc	lbs	3.0**	NS	NS	ND	NS	NS	NS	NS
Total Cyanide	lbs	7.93**	NS	NS	9.96E-04 B	NS	NS	NS	NS
Total VOCs	mg/L	NA	NS	NS	ND	NS	NS	NS	NS
Total SVOCs	mg/L	NA	NS	NS	2.50E-03 J B	NS	NS	NS	NS
pH	SU	5.0-12.0	NS	NS	7.5 HF	NS	NS	NS	NS
Total Daily Flow	gal	14,400	901	935	920	954	1,094	964	1,047

Notes:

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B = Compound was found in the blank and the sample.
HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at clients request. Analytical performed as required and in compliance by BSA permit.
*1 = LCS/LCSD RPD exceeds control limits.
NA = Not Applicable
ND = Not Detected at the reporting limit
NS = Not Sampled
gal = Gallons
lbs = Pounds
mg/L = Milligrams per liter
SU = Standard Units
** = Maximum Allowable Instantaneous Discharge limits are also included in the permit. All analytical data for this quarter in in compliance with the Maximum Allowable Instantaneous Discharge limits. Analytical results are not presented in this table, they can be found in the attached analytical reports.

The permittee must report any compound whose concentration is greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by this test procedure, which may cause or contribute to a violation of water quality incorporated into the permit.

Start of quarter values

Attachment D

Laboratory Analytical Data Packages

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 10/16/2023 10:32:04 AM

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.
Monthly Testing

JOB NUMBER

480-213354-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

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.

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.

Metals

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.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

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

Case Narrative

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-213354-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-213354-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/4/2023 12:31 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 18.7°C

GC/MS VOA
Method 624.1_PREC: The following Volatile sample was composited by the laboratory on 10-05-2023 as requested by the client: 001 LAB COMP (480-213354-6). Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1_PREC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-686260.

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

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

General Chemistry
Method SM4500_H+: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-213354-6).

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-213354-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213354-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.11		0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	18.0	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-213354-1

Client Sample ID: TRIP BLANK
Date Collected: 10/04/23 00:00
Date Received: 10/04/23 12:31

Lab Sample ID: 480-213354-5
Matrix: WQ

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/05/23 15:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/05/23 15:24	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/05/23 15:24	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/05/23 15:24	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/05/23 15:24	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/05/23 15:24	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/05/23 15:24	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/05/23 15:24	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/05/23 15:24	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/05/23 15:24	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/05/23 15:24	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/05/23 15:24	1
Acrolein	ND		100	17	ug/L			10/05/23 15:24	1
Acrylonitrile	ND		50	1.9	ug/L			10/05/23 15:24	1
Benzene	ND		5.0	0.60	ug/L			10/05/23 15:24	1
Bromoform	ND		5.0	0.47	ug/L			10/05/23 15:24	1
Bromomethane	ND		5.0	1.2	ug/L			10/05/23 15:24	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/05/23 15:24	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/05/23 15:24	1
Dibromochloromethane	ND		5.0	0.41	ug/L			10/05/23 15:24	1
Chloroethane	ND		5.0	0.87	ug/L			10/05/23 15:24	1
Chloroform	ND		5.0	0.54	ug/L			10/05/23 15:24	1
Chloromethane	ND		5.0	0.64	ug/L			10/05/23 15:24	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/05/23 15:24	1
Bromodichloromethane	ND		5.0	0.54	ug/L			10/05/23 15:24	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			10/05/23 15:24	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/05/23 15:24	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/05/23 15:24	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/05/23 15:24	1
Toluene	ND		5.0	0.45	ug/L			10/05/23 15:24	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/05/23 15:24	1
Trichloroethene	ND		5.0	0.60	ug/L			10/05/23 15:24	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			10/05/23 15:24	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/05/23 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*10/05/23 15:24*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*10/05/23 15:24*	*1*
Toluene-d8 (Surr)	*86*		*77 - 120*		*10/05/23 15:24*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*10/05/23 15:24*	*1*

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213354-6
Date Collected: 10/04/23 12:08
Matrix: Wastewater
Date Received: 10/04/23 12:31

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/05/23 15:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/05/23 15:48	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/05/23 15:48	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/05/23 15:48	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/05/23 15:48	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/05/23 15:48	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/05/23 15:48	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/05/23 15:48	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/05/23 15:48	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/05/23 15:48	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/05/23 15:48	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/05/23 15:48	1
Acrolein	ND		100	17	ug/L			10/05/23 15:48	1
Acrylonitrile	ND		50	1.9	ug/L			10/05/23 15:48	1
Benzene	ND		5.0	0.60	ug/L			10/05/23 15:48	1
Bromoform	ND		5.0	0.47	ug/L			10/05/23 15:48	1
Bromomethane	ND		5.0	1.2	ug/L			10/05/23 15:48	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/05/23 15:48	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/05/23 15:48	1
Dibromochloromethane	ND		5.0	0.41	ug/L			10/05/23 15:48	1
Chloroethane	ND		5.0	0.87	ug/L			10/05/23 15:48	1
Chloroform	ND		5.0	0.54	ug/L			10/05/23 15:48	1
Chloromethane	ND		5.0	0.64	ug/L			10/05/23 15:48	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/05/23 15:48	1
Bromodichloromethane	ND		5.0	0.54	ug/L			10/05/23 15:48	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			10/05/23 15:48	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/05/23 15:48	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/05/23 15:48	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/05/23 15:48	1
Toluene	ND		5.0	0.45	ug/L			10/05/23 15:48	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/05/23 15:48	1
Trichloroethene	ND		5.0	0.60	ug/L			10/05/23 15:48	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			10/05/23 15:48	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/05/23 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*10/05/23 15:48*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*10/05/23 15:48*	*1*
Toluene-d8 (Surr)	*86*		*77 - 120*		*10/05/23 15:48*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*10/05/23 15:48*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.6	0.20	ug/L		10/05/23 14:41	10/06/23 18:33	1
1,2-Dichlorobenzene	ND		9.6	0.25	ug/L		10/05/23 14:41	10/06/23 18:33	1
1,2-Diphenylhydrazine	ND		9.6	0.19	ug/L		10/05/23 14:41	10/06/23 18:33	1
1,3-Dichlorobenzene	ND		9.6	0.17	ug/L		10/05/23 14:41	10/06/23 18:33	1
1,4-Dichlorobenzene	ND		9.6	0.20	ug/L		10/05/23 14:41	10/06/23 18:33	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		10/05/23 14:41	10/06/23 18:33	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213354-6
Date Collected: 10/04/23 12:08
Matrix: Wastewater
Date Received: 10/04/23 12:31

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.19	ug/L		10/05/23 14:41	10/06/23 18:33	1
2,4-Dimethylphenol	ND		4.8	0.34	ug/L		10/05/23 14:41	10/06/23 18:33	1
2,4-Dinitrophenol	ND		9.6	1.2	ug/L		10/05/23 14:41	10/06/23 18:33	1
2,4-Dinitrotoluene	ND		9.6	0.39	ug/L		10/05/23 14:41	10/06/23 18:33	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		10/05/23 14:41	10/06/23 18:33	1
2-Chlorophenol	ND		4.8	0.16	ug/L		10/05/23 14:41	10/06/23 18:33	1
2-Nitrophenol	ND		4.8	0.17	ug/L		10/05/23 14:41	10/06/23 18:33	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		10/05/23 14:41	10/06/23 18:33	1
4,6-Dinitro-2-methylphenol	ND		9.6	0.43	ug/L		10/05/23 14:41	10/06/23 18:33	1
4-Bromophenyl phenyl ether	ND		4.8	0.34	ug/L		10/05/23 14:41	10/06/23 18:33	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		10/05/23 14:41	10/06/23 18:33	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		10/05/23 14:41	10/06/23 18:33	1
4-Nitrophenol	ND		14	0.47	ug/L		10/05/23 14:41	10/06/23 18:33	1
Acenaphthene	ND		4.8	0.19	ug/L		10/05/23 14:41	10/06/23 18:33	1
Acenaphthylene	ND		4.8	0.21	ug/L		10/05/23 14:41	10/06/23 18:33	1
Anthracene	ND		4.8	0.34	ug/L		10/05/23 14:41	10/06/23 18:33	1
Benzidine	ND		77	13	ug/L		10/05/23 14:41	10/06/23 18:33	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		10/05/23 14:41	10/06/23 18:33	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		10/05/23 14:41	10/06/23 18:33	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		10/05/23 14:41	10/06/23 18:33	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		10/05/23 14:41	10/06/23 18:33	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		10/05/23 14:41	10/06/23 18:33	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		10/05/23 14:41	10/06/23 18:33	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		10/05/23 14:41	10/06/23 18:33	1
Bis(2-ethylhexyl) phthalate	ND		9.6	0.29	ug/L		10/05/23 14:41	10/06/23 18:33	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		10/05/23 14:41	10/06/23 18:33	1
Chrysene	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1
Decane	ND		9.6	0.38	ug/L		10/05/23 14:41	10/06/23 18:33	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		10/05/23 14:41	10/06/23 18:33	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		10/05/23 14:41	10/06/23 18:33	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		10/05/23 14:41	10/06/23 18:33	1
Diethyl phthalate	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		10/05/23 14:41	10/06/23 18:33	1
Fluoranthene	ND		4.8	0.38	ug/L		10/05/23 14:41	10/06/23 18:33	1
Fluorene	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		10/05/23 14:41	10/06/23 18:33	1
Hexachlorocyclopentadiene	ND		9.6	0.51	ug/L		10/05/23 14:41	10/06/23 18:33	1
Hexachloroethane	ND		4.8	0.14	ug/L		10/05/23 14:41	10/06/23 18:33	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		10/05/23 14:41	10/06/23 18:33	1
Isophorone	ND		4.8	0.18	ug/L		10/05/23 14:41	10/06/23 18:33	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		10/05/23 14:41	10/06/23 18:33	1
N-Nitrosodimethylamine	ND		9.6	0.14	ug/L		10/05/23 14:41	10/06/23 18:33	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		10/05/23 14:41	10/06/23 18:33	1
Naphthalene	ND		4.8	0.21	ug/L		10/05/23 14:41	10/06/23 18:33	1
Nitrobenzene	ND		4.8	0.19	ug/L		10/05/23 14:41	10/06/23 18:33	1
Pentachlorophenol	ND		9.6	0.76	ug/L		10/05/23 14:41	10/06/23 18:33	1
Phenanthrene	ND		4.8	0.29	ug/L		10/05/23 14:41	10/06/23 18:33	1

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213354-6
Date Collected: 10/04/23 12:08
Matrix: Wastewater
Date Received: 10/04/23 12:31

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.8	0.084	ug/L		10/05/23 14:41	10/06/23 18:33	1
Pyrene	ND		4.8	0.34	ug/L		10/05/23 14:41	10/06/23 18:33	1
n-Octadecane	ND		9.6	0.29	ug/L		10/05/23 14:41	10/06/23 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*52 - 151*	*10/05/23 14:41*	*10/06/23 18:33*	*1*
2-Fluorobiphenyl	*90*		*44 - 120*	*10/05/23 14:41*	*10/06/23 18:33*	*1*
2-Fluorophenol (Surr)	*48*		*17 - 120*	*10/05/23 14:41*	*10/06/23 18:33*	*1*
Nitrobenzene-d5 (Surr)	*90*		*15 - 314*	*10/05/23 14:41*	*10/06/23 18:33*	*1*
p-Terphenyl-d14 (Surr)	*81*		*22 - 125*	*10/05/23 14:41*	*10/06/23 18:33*	*1*
Phenol-d5 (Surr)	*37*		*8 - 424*	*10/05/23 14:41*	*10/06/23 18:33*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		10/09/23 08:56	10/14/23 00:01	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/06/23 10:36	10/06/23 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.11**		0.010	0.0041	mg/L			10/09/23 17:53	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.6**	**HF**	0.1	0.1	SU			10/05/23 19:33	1
Temperature (SM 4500 H+ B)	**18.0**	**HF**	0.001	0.001	Degrees C			10/05/23 19:33	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-213354-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-213354-6	001 LAB COMP	93	99	86	101

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-686204/6	Lab Control Sample	98	100	87	101
MB 480-686204/8	Method Blank	95	98	86	103

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-213354-5	TRIP BLANK	93	97	86	100

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-213354-6	001 LAB COMP	98	90	48	90	81	37

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
LCS 480-686260/2-A	Lab Control Sample	107	96	61	97	110	43		
LCSD 480-686260/3-A	Lab Control Sample Dup	115	96	62	98	116	45		
MB 480-686260/1-A	Method Blank	99	99	54	90	104	40		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-686204/8
Matrix: Water
Analysis Batch: 686204

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/05/23 12:35	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			10/05/23 12:35	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/05/23 12:35	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/05/23 12:35	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			10/05/23 12:35	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			10/05/23 12:35	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/05/23 12:35	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/05/23 12:35	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			10/05/23 12:35	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			10/05/23 12:35	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			10/05/23 12:35	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			10/05/23 12:35	1
Acrolein	ND		100	17	ug/L			10/05/23 12:35	1
Acrylonitrile	ND		50	1.9	ug/L			10/05/23 12:35	1
Benzene	ND		5.0	0.60	ug/L			10/05/23 12:35	1
Bromoform	ND		5.0	0.47	ug/L			10/05/23 12:35	1
Bromomethane	ND		5.0	1.2	ug/L			10/05/23 12:35	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/05/23 12:35	1
Chlorobenzene	ND		5.0	0.48	ug/L			10/05/23 12:35	1
Dibromochloromethane	ND		5.0	0.41	ug/L			10/05/23 12:35	1
Chloroethane	ND		5.0	0.87	ug/L			10/05/23 12:35	1
Chloroform	ND		5.0	0.54	ug/L			10/05/23 12:35	1
Chloromethane	ND		5.0	0.64	ug/L			10/05/23 12:35	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			10/05/23 12:35	1
Bromodichloromethane	ND		5.0	0.54	ug/L			10/05/23 12:35	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			10/05/23 12:35	1
Ethylbenzene	ND		5.0	0.46	ug/L			10/05/23 12:35	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/05/23 12:35	1
Tetrachloroethene	ND		5.0	0.34	ug/L			10/05/23 12:35	1
Toluene	ND		5.0	0.45	ug/L			10/05/23 12:35	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			10/05/23 12:35	1
Trichloroethene	ND		5.0	0.60	ug/L			10/05/23 12:35	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			10/05/23 12:35	1
Vinyl chloride	ND		5.0	0.75	ug/L			10/05/23 12:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*		*10/05/23 12:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*10/05/23 12:35*	*1*
Toluene-d8 (Surr)	*86*		*77 - 120*		*10/05/23 12:35*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*10/05/23 12:35*	*1*

Lab Sample ID: LCS 480-686204/6
Matrix: Water
Analysis Batch: 686204

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	20.7		ug/L		103	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	22.8		ug/L		114	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-686204/6
Matrix: Water
Analysis Batch: 686204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	22.5		ug/L		112	52 - 150
1,1-Dichloroethane	20.0	19.1		ug/L		96	59 - 155
1,1-Dichloroethene	20.0	19.1		ug/L		96	1 - 234
1,2-Dichlorobenzene	20.0	22.4		ug/L		112	18 - 190
1,2-Dichloroethane	20.0	21.5		ug/L		107	49 - 155
1,2-Dichloropropane	20.0	19.9		ug/L		99	1 - 210
1,3-Dichlorobenzene	20.0	22.4		ug/L		112	59 - 156
1,4-Dichlorobenzene	20.0	21.8		ug/L		109	18 - 190
2-Chloroethyl vinyl ether	20.0	18.1	J	ug/L		90	1 - 305
Benzene	20.0	20.6		ug/L		103	37 - 151
Bromoform	20.0	21.4		ug/L		107	45 - 169
Bromomethane	20.0	21.2		ug/L		106	1 - 242
Carbon tetrachloride	20.0	20.7		ug/L		104	70 - 140
Chlorobenzene	20.0	21.6		ug/L		108	37 - 160
Dibromochloromethane	20.0	22.3		ug/L		111	53 - 149
Chloroethane	20.0	21.0		ug/L		105	14 - 230
Chloroform	20.0	21.1		ug/L		106	51 - 138
Chloromethane	20.0	17.1		ug/L		86	1 - 273
cis-1,3-Dichloropropene	20.0	19.4		ug/L		97	1 - 227
Bromodichloromethane	20.0	21.6		ug/L		108	35 - 155
Ethylbenzene	20.0	22.0		ug/L		110	37 - 162
Methylene Chloride	20.0	19.9		ug/L		99	1 - 221
Tetrachloroethene	20.0	22.4		ug/L		112	64 - 148
Toluene	20.0	21.4		ug/L		107	47 - 150
trans-1,3-Dichloropropene	20.0	19.0		ug/L		95	17 - 183
Trichloroethene	20.0	22.0		ug/L		110	71 - 157
Trichlorofluoromethane	20.0	23.9		ug/L		119	17 - 181
Vinyl chloride	20.0	19.0		ug/L		95	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*68 - 130*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*
Toluene-d8 (Surr)	*87*		*77 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-686260/1-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		10/05/23 14:41	10/06/23 16:08	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		10/05/23 14:41	10/06/23 16:08	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		10/05/23 14:41	10/06/23 16:08	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		10/05/23 14:41	10/06/23 16:08	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		10/05/23 14:41	10/06/23 16:08	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		10/05/23 14:41	10/06/23 16:08	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-686260/1-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		10/05/23 14:41	10/06/23 16:08	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		10/05/23 14:41	10/06/23 16:08	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		10/05/23 14:41	10/06/23 16:08	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		10/05/23 14:41	10/06/23 16:08	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		10/05/23 14:41	10/06/23 16:08	1
2-Chlorophenol	ND		5.0	0.17	ug/L		10/05/23 14:41	10/06/23 16:08	1
2-Nitrophenol	ND		5.0	0.18	ug/L		10/05/23 14:41	10/06/23 16:08	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		10/05/23 14:41	10/06/23 16:08	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		10/05/23 14:41	10/06/23 16:08	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		10/05/23 14:41	10/06/23 16:08	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		10/05/23 14:41	10/06/23 16:08	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		10/05/23 14:41	10/06/23 16:08	1
4-Nitrophenol	ND		15	0.49	ug/L		10/05/23 14:41	10/06/23 16:08	1
Acenaphthene	ND		5.0	0.20	ug/L		10/05/23 14:41	10/06/23 16:08	1
Acenaphthylene	ND		5.0	0.22	ug/L		10/05/23 14:41	10/06/23 16:08	1
Anthracene	ND		5.0	0.35	ug/L		10/05/23 14:41	10/06/23 16:08	1
Benzidine	ND		80	14	ug/L		10/05/23 14:41	10/06/23 16:08	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		10/05/23 14:41	10/06/23 16:08	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		10/05/23 14:41	10/06/23 16:08	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		10/05/23 14:41	10/06/23 16:08	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		10/05/23 14:41	10/06/23 16:08	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		10/05/23 14:41	10/06/23 16:08	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		10/05/23 14:41	10/06/23 16:08	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		10/05/23 14:41	10/06/23 16:08	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		10/05/23 14:41	10/06/23 16:08	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		10/05/23 14:41	10/06/23 16:08	1
Chrysene	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1
Decane	ND		10	0.40	ug/L		10/05/23 14:41	10/06/23 16:08	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		10/05/23 14:41	10/06/23 16:08	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		10/05/23 14:41	10/06/23 16:08	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		10/05/23 14:41	10/06/23 16:08	1
Diethyl phthalate	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		10/05/23 14:41	10/06/23 16:08	1
Fluoranthene	ND		5.0	0.40	ug/L		10/05/23 14:41	10/06/23 16:08	1
Fluorene	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		10/05/23 14:41	10/06/23 16:08	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		10/05/23 14:41	10/06/23 16:08	1
Hexachloroethane	ND		5.0	0.15	ug/L		10/05/23 14:41	10/06/23 16:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		10/05/23 14:41	10/06/23 16:08	1
Isophorone	ND		5.0	0.19	ug/L		10/05/23 14:41	10/06/23 16:08	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		10/05/23 14:41	10/06/23 16:08	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		10/05/23 14:41	10/06/23 16:08	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		10/05/23 14:41	10/06/23 16:08	1
Naphthalene	ND		5.0	0.22	ug/L		10/05/23 14:41	10/06/23 16:08	1
Nitrobenzene	ND		5.0	0.20	ug/L		10/05/23 14:41	10/06/23 16:08	1
Pentachlorophenol	ND		10	0.79	ug/L		10/05/23 14:41	10/06/23 16:08	1
Phenanthrene	ND		5.0	0.30	ug/L		10/05/23 14:41	10/06/23 16:08	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-686260/1-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		10/05/23 14:41	10/06/23 16:08	1
Pyrene	ND		5.0	0.35	ug/L		10/05/23 14:41	10/06/23 16:08	1
n-Octadecane	ND		10	0.30	ug/L		10/05/23 14:41	10/06/23 16:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*52 - 151*	*10/05/23 14:41*	*10/06/23 16:08*	*1*
2-Fluorobiphenyl	*99*		*44 - 120*	*10/05/23 14:41*	*10/06/23 16:08*	*1*
2-Fluorophenol (Surr)	*54*		*17 - 120*	*10/05/23 14:41*	*10/06/23 16:08*	*1*
Nitrobenzene-d5 (Surr)	*90*		*15 - 314*	*10/05/23 14:41*	*10/06/23 16:08*	*1*
p-Terphenyl-d14 (Surr)	*104*		*22 - 125*	*10/05/23 14:41*	*10/06/23 16:08*	*1*
Phenol-d5 (Surr)	*40*		*8 - 424*	*10/05/23 14:41*	*10/06/23 16:08*	*1*

Lab Sample ID: LCS 480-686260/2-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	40.2		ug/L		80	44 - 142
1,2-Dichlorobenzene	50.0	37.4		ug/L		75	32 - 129
1,3-Dichlorobenzene	50.0	33.7		ug/L		67	1 - 172
1,4-Dichlorobenzene	50.0	34.7		ug/L		69	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	43.5		ug/L		87	36 - 166
2,4,6-Trichlorophenol	50.0	51.0		ug/L		102	37 - 144
2,4-Dichlorophenol	50.0	53.2		ug/L		106	39 - 135
2,4-Dimethylphenol	50.0	45.8		ug/L		92	32 - 120
2,4-Dinitrophenol	100	115		ug/L		115	1 - 191
2,4-Dinitrotoluene	50.0	54.0		ug/L		108	39 - 139
2,6-Dinitrotoluene	50.0	46.9		ug/L		94	50 - 158
2-Chloronaphthalene	50.0	44.3		ug/L		89	60 - 120
2-Chlorophenol	50.0	44.2		ug/L		88	23 - 134
2-Nitrophenol	50.0	49.6		ug/L		99	29 - 182
3,3'-Dichlorobenzidine	100	106		ug/L		106	1 - 262
4,6-Dinitro-2-methylphenol	100	114		ug/L		114	1 - 181
4-Bromophenyl phenyl ether	50.0	50.9		ug/L		102	53 - 127
4-Chloro-3-methylphenol	50.0	48.9		ug/L		98	22 - 147
4-Chlorophenyl phenyl ether	50.0	51.1		ug/L		102	25 - 158
4-Nitrophenol	100	55.5		ug/L		56	1 - 132
Acenaphthene	50.0	47.8		ug/L		96	47 - 145
Acenaphthylene	50.0	50.2		ug/L		100	33 - 145
Anthracene	50.0	52.6		ug/L		105	27 - 133
Benzidine	100	32.7	J	ug/L		33	1 - 120
Benzo[a]anthracene	50.0	53.6		ug/L		107	33 - 143
Benzo[a]pyrene	50.0	57.1		ug/L		114	17 - 163
Benzo[b]fluoranthene	50.0	54.8		ug/L		110	24 - 159
Benzo[g,h,i]perylene	50.0	52.1		ug/L		104	1 - 219
Benzo[k]fluoranthene	50.0	49.5		ug/L		99	11 - 162
Bis(2-chloroethoxy)methane	50.0	52.7		ug/L		105	33 - 184
Bis(2-chloroethyl)ether	50.0	44.9		ug/L		90	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-686260/2-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	52.2		ug/L		104	8 - 158
Butyl benzyl phthalate	50.0	52.3		ug/L		105	1 - 152
Chrysene	50.0	53.5		ug/L		107	17 - 168
Di-n-butyl phthalate	50.0	53.9		ug/L		108	1 - 120
Di-n-octyl phthalate	50.0	54.4		ug/L		109	4 - 146
Dibenz(a,h)anthracene	50.0	52.5		ug/L		105	1 - 227
Diethyl phthalate	50.0	52.3		ug/L		105	1 - 120
Dimethyl phthalate	50.0	52.8		ug/L		106	1 - 120
Fluoranthene	50.0	51.8		ug/L		104	26 - 137
Fluorene	50.0	49.4		ug/L		99	59 - 121
Hexachlorobenzene	50.0	47.8		ug/L		96	1 - 152
Hexachlorocyclopentadiene	50.0	35.2		ug/L		70	5 - 120
Hexachloroethane	50.0	29.3		ug/L		59	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	56.1		ug/L		112	1 - 171
Isophorone	50.0	52.0		ug/L		104	21 - 196
N-Nitrosodi-n-propylamine	50.0	48.2		ug/L		96	1 - 230
N-Nitrosodiphenylamine	50.0	49.7		ug/L		99	54 - 125
Naphthalene	50.0	44.9		ug/L		90	21 - 133
Nitrobenzene	50.0	48.4		ug/L		97	35 - 180
Pentachlorophenol	100	114		ug/L		114	14 - 176
Phenanthrene	50.0	51.5		ug/L		103	54 - 120
Phenol	50.0	22.7		ug/L		45	5 - 120
Pyrene	50.0	51.0		ug/L		102	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*107*		*52 - 151*
2-Fluorobiphenyl	*96*		*44 - 120*
2-Fluorophenol (Surr)	*61*		*17 - 120*
Nitrobenzene-d5 (Surr)	*97*		*15 - 314*
p-Terphenyl-d14 (Surr)	*110*		*22 - 125*
Phenol-d5 (Surr)	*43*		*8 - 424*

Lab Sample ID: LCSD 480-686260/3-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 686260

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	39.3		ug/L		79	44 - 142	2	34
1,2-Dichlorobenzene	50.0	35.9		ug/L		72	32 - 129	4	38
1,3-Dichlorobenzene	50.0	32.3		ug/L		65	1 - 172	4	37
1,4-Dichlorobenzene	50.0	33.3		ug/L		67	20 - 124	4	40
2,2'-Oxybis(1-chloropropane)	50.0	46.3		ug/L		93	36 - 166	6	36
2,4,6-Trichlorophenol	50.0	52.9		ug/L		106	37 - 144	4	20
2,4-Dichlorophenol	50.0	54.6		ug/L		109	39 - 135	2	23
2,4-Dimethylphenol	50.0	46.4		ug/L		93	32 - 120	1	18
2,4-Dinitrophenol	100	110		ug/L		110	1 - 191	4	29
2,4-Dinitrotoluene	50.0	49.0		ug/L		98	39 - 139	10	20
2,6-Dinitrotoluene	50.0	53.1		ug/L		106	50 - 158	12	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-686260/3-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 686260

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene	50.0	43.9		ug/L		88	60 - 120	1	30
2-Chlorophenol	50.0	46.2		ug/L		92	23 - 134	4	26
2-Nitrophenol	50.0	49.0		ug/L		98	29 - 182	1	28
3,3'-Dichlorobenzidine	100	111		ug/L		111	1 - 262	5	31
4,6-Dinitro-2-methylphenol	100	127		ug/L		127	1 - 181	11	30
4-Bromophenyl phenyl ether	50.0	51.2		ug/L		102	53 - 127	1	16
4-Chloro-3-methylphenol	50.0	52.5		ug/L		105	22 - 147	7	16
4-Chlorophenyl phenyl ether	50.0	51.5		ug/L		103	25 - 158	1	15
4-Nitrophenol	100	55.8		ug/L		56	1 - 132	0	24
Acenaphthene	50.0	47.8		ug/L		96	47 - 145	0	25
Acenaphthylene	50.0	47.8		ug/L		96	33 - 145	5	22
Anthracene	50.0	55.0		ug/L		110	27 - 133	4	15
Benzidine	100	33.4	J	ug/L		33	1 - 120	2	50
Benzo[a]anthracene	50.0	56.8		ug/L		114	33 - 143	6	15
Benzo[a]pyrene	50.0	57.7		ug/L		115	17 - 163	1	15
Benzo[b]fluoranthene	50.0	55.4		ug/L		111	24 - 159	1	17
Benzo[g,h,i]perylene	50.0	52.2		ug/L		104	1 - 219	0	19
Benzo[k]fluoranthene	50.0	51.7		ug/L		103	11 - 162	4	19
Bis(2-chloroethoxy)methane	50.0	50.1		ug/L		100	33 - 184	5	23
Bis(2-chloroethyl)ether	50.0	46.5		ug/L		93	12 - 158	4	33
Bis(2-ethylhexyl) phthalate	50.0	59.3		ug/L		119	8 - 158	13	15
Butyl benzyl phthalate	50.0	58.1		ug/L		116	1 - 152	11	15
Chrysene	50.0	55.9		ug/L		112	17 - 168	4	15
Di-n-butyl phthalate	50.0	57.4		ug/L		115	1 - 120	6	15
Di-n-octyl phthalate	50.0	57.3		ug/L		115	4 - 146	5	15
Dibenz(a,h)anthracene	50.0	52.6		ug/L		105	1 - 227	0	18
Diethyl phthalate	50.0	53.6		ug/L		107	1 - 120	2	15
Dimethyl phthalate	50.0	51.7		ug/L		103	1 - 120	2	15
Fluoranthene	50.0	54.0		ug/L		108	26 - 137	4	15
Fluorene	50.0	48.5		ug/L		97	59 - 121	2	18
Hexachlorobenzene	50.0	54.6		ug/L		109	1 - 152	13	15
Hexachlorocyclopentadiene	50.0	32.2		ug/L		64	5 - 120	9	50
Hexachloroethane	50.0	27.9		ug/L		56	40 - 120	5	43
Indeno[1,2,3-cd]pyrene	50.0	56.0		ug/L		112	1 - 171	0	17
Isophorone	50.0	50.9		ug/L		102	21 - 196	2	21
N-Nitrosodi-n-propylamine	50.0	52.1		ug/L		104	1 - 230	8	23
N-Nitrosodiphenylamine	50.0	54.1		ug/L		108	54 - 125	8	15
Naphthalene	50.0	45.4		ug/L		91	21 - 133	1	31
Nitrobenzene	50.0	48.7		ug/L		97	35 - 180	1	27
Pentachlorophenol	100	119		ug/L		119	14 - 176	4	21
Phenanthrene	50.0	53.8		ug/L		108	54 - 120	4	16
Phenol	50.0	23.5		ug/L		47	5 - 120	4	36
Pyrene	50.0	53.6		ug/L		107	52 - 120	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*115*		*52 - 151*
2-Fluorobiphenyl	*96*		*44 - 120*
2-Fluorophenol (Surr)	*62*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-686260/3-A
Matrix: Water
Analysis Batch: 686334

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 686260

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*98*		*15 - 314*
p-Terphenyl-d14 (Surr)	*116*		*22 - 125*
Phenol-d5 (Surr)	*45*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-686454/1-A
Matrix: Water
Analysis Batch: 687462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686454

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.00204	J	0.010	0.0015	mg/L		10/09/23 08:56	10/13/23 23:54	1

Lab Sample ID: LCS 480-686454/2-A
Matrix: Water
Analysis Batch: 687462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686454

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.202		mg/L		101	85 - 115

Lab Sample ID: 480-213354-6 MS
Matrix: Wastewater
Analysis Batch: 687462

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 686454

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	ND		0.200	0.198		mg/L		99	70 - 130

Lab Sample ID: 480-213354-6 MSD
Matrix: Wastewater
Analysis Batch: 687462

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 686454

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		0.200	0.198		mg/L		99	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-686344/1-A
Matrix: Water
Analysis Batch: 686438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000617	J	0.00020	0.000043	mg/L		10/06/23 10:36	10/06/23 14:27	1

Lab Sample ID: LCS 480-686344/2-A
Matrix: Water
Analysis Batch: 686438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686344

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00627		mg/L		94	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-686679/21
Matrix: Water
Analysis Batch: 686679

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			10/09/23 17:35	1

Lab Sample ID: MB 480-686679/47
Matrix: Water
Analysis Batch: 686679

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			10/09/23 18:45	1

Lab Sample ID: HLCS 480-686679/22
Matrix: Water
Analysis Batch: 686679

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.389		mg/L		97	90 - 110

Lab Sample ID: LCS 480-686679/23
Matrix: Water
Analysis Batch: 686679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.245		mg/L		98	90 - 110

Lab Sample ID: LCS 480-686679/48
Matrix: Water
Analysis Batch: 686679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.241		mg/L		97	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-686300/1
Matrix: Water
Analysis Batch: 686300

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: 480-213354-6 DU
Matrix: Wastewater
Analysis Batch: 686300

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.6	HF	7.6		SU		0.8	5
Temperature	18.0	HF	18.0		Degrees C		0.4	10

GC/MS VOA

Analysis Batch: 686204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-5	TRIP BLANK	Total/NA	WQ	624.1	
480-213354-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-686204/8	Method Blank	Total/NA	Water	624.1	
LCS 480-686204/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 686260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-686260/1-A	Method Blank	Total/NA	Water	625	
LCS 480-686260/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-686260/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 686334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	625.1	686260
MB 480-686260/1-A	Method Blank	Total/NA	Water	625.1	686260
LCS 480-686260/2-A	Lab Control Sample	Total/NA	Water	625.1	686260
LCSD 480-686260/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	686260

Metals

Prep Batch: 686344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-686344/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-686344/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 686438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	245.1	686344
MB 480-686344/1-A	Method Blank	Total/NA	Water	245.1	686344
LCS 480-686344/2-A	Lab Control Sample	Total/NA	Water	245.1	686344

Prep Batch: 686454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-686454/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-686454/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-213354-6 MS	001 LAB COMP	Total/NA	Wastewater	200.7	
480-213354-6 MSD	001 LAB COMP	Total/NA	Wastewater	200.7	

Analysis Batch: 687462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	686454
MB 480-686454/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	686454
LCS 480-686454/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	686454
480-213354-6 MS	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	686454
480-213354-6 MSD	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	686454

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

General Chemistry

Analysis Batch: 686300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-686300/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-213354-6 DU	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	

Analysis Batch: 686679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-213354-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-686679/21	Method Blank	Total/NA	Water	335.4	
MB 480-686679/47	Method Blank	Total/NA	Water	335.4	
HLCS 480-686679/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-686679/23	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-686679/48	Lab Control Sample	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-213354-5
Date Collected: 10/04/23 00:00
Matrix: WQ
Date Received: 10/04/23 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	686204	AXK	EET BUF	10/05/23 15:24

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-213354-6
Date Collected: 10/04/23 12:08
Matrix: Wastewater
Date Received: 10/04/23 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	686204	AXK	EET BUF	10/05/23 15:48
Total/NA	Prep	625			686260	LSC	EET BUF	10/05/23 14:41
Total/NA	Analysis	625.1		1	686334	EMD	EET BUF	10/06/23 18:33
Total/NA	Prep	200.7			686454	MP	EET BUF	10/09/23 08:56
Total/NA	Analysis	200.7 Rev 4.4		1	687462	LMH	EET BUF	10/14/23 00:01
Total/NA	Prep	245.1			686344	NVK	EET BUF	10/06/23 10:36
Total/NA	Analysis	245.1		1	686438	NVK	EET BUF	10/06/23 15:16
Total/NA	Analysis	335.4		1	686679	GW	EET BUF	10/09/23 17:53
Total/NA	Analysis	SM 4500 H+ B		1	686300	KB	EET BUF	10/05/23 19:33

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-213354-1
Project/Site: Iroquois Gas/Westwood Pharm.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-213354-5	TRIP BLANK	WQ	10/04/23 00:00	10/04/23 12:31
480-213354-6	001 LAB COMP	Wastewater	10/04/23 12:08	10/04/23 12:31

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: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-181784-34075.1
Client Contact: Jason Gutkowski	Phone: 315 436 3605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:	Analysis Requested		
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125855			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B		
001-1	10/4/23	0608	G	Water			X	X	X	X	X	3	Lab To
001-2		0808		Water			X	X	X	X	X	3	Composite
001-3		1008					X	X	X	X	X	3	Samples
001-4		1208					X	X	X	X	X	3	
TripBlank		—						X					

Short Hold Time

480-213354 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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: Dan Gute	Date/Time: 10/4/23 / 1231	Company: Arcadis	Received by: [signature]	Date/Time: 10/4/23 1231	Company: TA	
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:	8.7 # 1 ICE		

Ver: 06/08/2021

10/16/2023

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-213354-1

Login Number: 213354
List Number: 1
Creator: Kolb, Chris M

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	Yes: Received same day of collection; chilling process has begun
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	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 11/14/2023 5:16:11 PM

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.
Monthly Testing

JOB NUMBER

480-214394-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Authorized for release by
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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-214394-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-214394-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/1/2023 12:33 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.6º C.

GC/MS VOA
Method 624.1: The following Volatile sample was composited by the laboratory on 11/02/2023 as requested by the client: 001 LAB COMP (480-214394-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

Method 624.1: The continuing calibration verification (CCV) associated with batch 480-690037 recovered outside acceptance criteria, low biased, for Acrolein. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

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

GC/MS Semi VOA
Method 625.1: The continuing calibration verification (CCV) associated with batch 480-690910 recovered outside acceptance criteria, low biased, for N-Nitrosodimethylamine. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-690063 and analytical batch 480-690910 recovered outside control limits for the following analytes: Benzidine.

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-214394-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-690063.

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-214394-5

No Detections.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-214394-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	3.9	J	4.8	0.084	ug/L	1		625.1	Total/NA
Cyanide, Total	0.11	B	0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.3	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	18.7	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-214394-5

Date Collected: 11/01/23 00:00
Matrix: WQ
Date Received: 11/01/23 12:33

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			11/02/23 17:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			11/02/23 17:01	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			11/02/23 17:01	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			11/02/23 17:01	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			11/02/23 17:01	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			11/02/23 17:01	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			11/02/23 17:01	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			11/02/23 17:01	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			11/02/23 17:01	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			11/02/23 17:01	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			11/02/23 17:01	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			11/02/23 17:01	1
Acrolein	ND		100	17	ug/L			11/02/23 17:01	1
Acrylonitrile	ND		50	1.9	ug/L			11/02/23 17:01	1
Benzene	ND		5.0	0.60	ug/L			11/02/23 17:01	1
Bromoform	ND		5.0	0.47	ug/L			11/02/23 17:01	1
Bromomethane	ND		5.0	1.2	ug/L			11/02/23 17:01	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			11/02/23 17:01	1
Chlorobenzene	ND		5.0	0.48	ug/L			11/02/23 17:01	1
Dibromochloromethane	ND		5.0	0.41	ug/L			11/02/23 17:01	1
Chloroethane	ND		5.0	0.87	ug/L			11/02/23 17:01	1
Chloroform	ND		5.0	0.54	ug/L			11/02/23 17:01	1
Chloromethane	ND		5.0	0.64	ug/L			11/02/23 17:01	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			11/02/23 17:01	1
Bromodichloromethane	ND		5.0	0.54	ug/L			11/02/23 17:01	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			11/02/23 17:01	1
Ethylbenzene	ND		5.0	0.46	ug/L			11/02/23 17:01	1
Methylene Chloride	ND		5.0	0.81	ug/L			11/02/23 17:01	1
Tetrachloroethene	ND		5.0	0.34	ug/L			11/02/23 17:01	1
Toluene	ND		5.0	0.45	ug/L			11/02/23 17:01	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			11/02/23 17:01	1
Trichloroethene	ND		5.0	0.60	ug/L			11/02/23 17:01	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			11/02/23 17:01	1
Vinyl chloride	ND		5.0	0.75	ug/L			11/02/23 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*		*11/02/23 17:01*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*11/02/23 17:01*	*1*
Toluene-d8 (Surr)	*111*		*77 - 120*		*11/02/23 17:01*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*11/02/23 17:01*	*1*

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-214394-6

Date Collected: 11/01/23 12:11
Matrix: Wastewater
Date Received: 11/01/23 12:33

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			11/02/23 17:25	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			11/02/23 17:25	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			11/02/23 17:25	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			11/02/23 17:25	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			11/02/23 17:25	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			11/02/23 17:25	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			11/02/23 17:25	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			11/02/23 17:25	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			11/02/23 17:25	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			11/02/23 17:25	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			11/02/23 17:25	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			11/02/23 17:25	1
Acrolein	ND		100	17	ug/L			11/02/23 17:25	1
Acrylonitrile	ND		50	1.9	ug/L			11/02/23 17:25	1
Benzene	ND		5.0	0.60	ug/L			11/02/23 17:25	1
Bromoform	ND		5.0	0.47	ug/L			11/02/23 17:25	1
Bromomethane	ND		5.0	1.2	ug/L			11/02/23 17:25	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			11/02/23 17:25	1
Chlorobenzene	ND		5.0	0.48	ug/L			11/02/23 17:25	1
Dibromochloromethane	ND		5.0	0.41	ug/L			11/02/23 17:25	1
Chloroethane	ND		5.0	0.87	ug/L			11/02/23 17:25	1
Chloroform	ND		5.0	0.54	ug/L			11/02/23 17:25	1
Chloromethane	ND		5.0	0.64	ug/L			11/02/23 17:25	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			11/02/23 17:25	1
Bromodichloromethane	ND		5.0	0.54	ug/L			11/02/23 17:25	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			11/02/23 17:25	1
Ethylbenzene	ND		5.0	0.46	ug/L			11/02/23 17:25	1
Methylene Chloride	ND		5.0	0.81	ug/L			11/02/23 17:25	1
Tetrachloroethene	ND		5.0	0.34	ug/L			11/02/23 17:25	1
Toluene	ND		5.0	0.45	ug/L			11/02/23 17:25	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			11/02/23 17:25	1
Trichloroethene	ND		5.0	0.60	ug/L			11/02/23 17:25	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			11/02/23 17:25	1
Vinyl chloride	ND		5.0	0.75	ug/L			11/02/23 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*		*11/02/23 17:25*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*11/02/23 17:25*	*1*
Toluene-d8 (Surr)	*111*		*77 - 120*		*11/02/23 17:25*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*11/02/23 17:25*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.6	0.20	ug/L		11/02/23 14:21	11/08/23 21:26	1
1,2-Dichlorobenzene	ND		9.6	0.25	ug/L		11/02/23 14:21	11/08/23 21:26	1
1,2-Diphenylhydrazine	ND		9.6	0.19	ug/L		11/02/23 14:21	11/08/23 21:26	1
1,3-Dichlorobenzene	ND		9.6	0.17	ug/L		11/02/23 14:21	11/08/23 21:26	1
1,4-Dichlorobenzene	ND		9.6	0.20	ug/L		11/02/23 14:21	11/08/23 21:26	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		11/02/23 14:21	11/08/23 21:26	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-214394-1

Client Sample ID: 001 LAB COMP
Date Collected: 11/01/23 12:11
Date Received: 11/01/23 12:33

Lab Sample ID: 480-214394-6
Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.19	ug/L		11/02/23 14:21	11/08/23 21:26	1
2,4-Dimethylphenol	ND		4.8	0.34	ug/L		11/02/23 14:21	11/08/23 21:26	1
2,4-Dinitrophenol	ND		9.6	1.2	ug/L		11/02/23 14:21	11/08/23 21:26	1
2,4-Dinitrotoluene	ND		9.6	0.39	ug/L		11/02/23 14:21	11/08/23 21:26	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		11/02/23 14:21	11/08/23 21:26	1
2-Chlorophenol	ND		4.8	0.16	ug/L		11/02/23 14:21	11/08/23 21:26	1
2-Nitrophenol	ND		4.8	0.17	ug/L		11/02/23 14:21	11/08/23 21:26	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		11/02/23 14:21	11/08/23 21:26	1
4,6-Dinitro-2-methylphenol	ND		9.6	0.43	ug/L		11/02/23 14:21	11/08/23 21:26	1
4-Bromophenyl phenyl ether	ND		4.8	0.34	ug/L		11/02/23 14:21	11/08/23 21:26	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		11/02/23 14:21	11/08/23 21:26	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		11/02/23 14:21	11/08/23 21:26	1
4-Nitrophenol	ND		14	0.47	ug/L		11/02/23 14:21	11/08/23 21:26	1
Acenaphthene	ND		4.8	0.19	ug/L		11/02/23 14:21	11/08/23 21:26	1
Acenaphthylene	ND		4.8	0.21	ug/L		11/02/23 14:21	11/08/23 21:26	1
Anthracene	ND		4.8	0.34	ug/L		11/02/23 14:21	11/08/23 21:26	1
Benzidine	ND	*1	77	13	ug/L		11/02/23 14:21	11/08/23 21:26	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		11/02/23 14:21	11/08/23 21:26	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		11/02/23 14:21	11/08/23 21:26	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		11/02/23 14:21	11/08/23 21:26	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		11/02/23 14:21	11/08/23 21:26	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		11/02/23 14:21	11/08/23 21:26	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		11/02/23 14:21	11/08/23 21:26	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		11/02/23 14:21	11/08/23 21:26	1
Bis(2-ethylhexyl) phthalate	ND		9.6	0.29	ug/L		11/02/23 14:21	11/08/23 21:26	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		11/02/23 14:21	11/08/23 21:26	1
Chrysene	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1
Decane	ND		9.6	0.38	ug/L		11/02/23 14:21	11/08/23 21:26	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		11/02/23 14:21	11/08/23 21:26	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		11/02/23 14:21	11/08/23 21:26	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		11/02/23 14:21	11/08/23 21:26	1
Diethyl phthalate	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		11/02/23 14:21	11/08/23 21:26	1
Fluoranthene	ND		4.8	0.38	ug/L		11/02/23 14:21	11/08/23 21:26	1
Fluorene	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		11/02/23 14:21	11/08/23 21:26	1
Hexachlorocyclopentadiene	ND		9.6	0.51	ug/L		11/02/23 14:21	11/08/23 21:26	1
Hexachloroethane	ND		4.8	0.14	ug/L		11/02/23 14:21	11/08/23 21:26	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		11/02/23 14:21	11/08/23 21:26	1
Isophorone	ND		4.8	0.18	ug/L		11/02/23 14:21	11/08/23 21:26	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		11/02/23 14:21	11/08/23 21:26	1
N-Nitrosodimethylamine	ND		9.6	0.14	ug/L		11/02/23 14:21	11/08/23 21:26	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		11/02/23 14:21	11/08/23 21:26	1
Naphthalene	ND		4.8	0.21	ug/L		11/02/23 14:21	11/08/23 21:26	1
Nitrobenzene	ND		4.8	0.19	ug/L		11/02/23 14:21	11/08/23 21:26	1
Pentachlorophenol	ND		9.6	0.76	ug/L		11/02/23 14:21	11/08/23 21:26	1
Phenanthrene	ND		4.8	0.29	ug/L		11/02/23 14:21	11/08/23 21:26	1

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-214394-6

Date Collected: 11/01/23 12:11
Matrix: Wastewater
Date Received: 11/01/23 12:33

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**3.9**	**J**	4.8	0.084	ug/L		11/02/23 14:21	11/08/23 21:26	1
Pyrene	ND		4.8	0.34	ug/L		11/02/23 14:21	11/08/23 21:26	1
n-Octadecane	ND		9.6	0.29	ug/L		11/02/23 14:21	11/08/23 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*52 - 151*	*11/02/23 14:21*	*11/08/23 21:26*	*1*
2-Fluorobiphenyl	*97*		*44 - 120*	*11/02/23 14:21*	*11/08/23 21:26*	*1*
2-Fluorophenol (Surr)	*55*		*17 - 120*	*11/02/23 14:21*	*11/08/23 21:26*	*1*
Nitrobenzene-d5 (Surr)	*88*		*15 - 314*	*11/02/23 14:21*	*11/08/23 21:26*	*1*
p-Terphenyl-d14 (Surr)	*92*		*22 - 125*	*11/02/23 14:21*	*11/08/23 21:26*	*1*
Phenol-d5 (Surr)	*39*		*8 - 424*	*11/02/23 14:21*	*11/08/23 21:26*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		11/06/23 08:53	11/08/23 17:58	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		11/07/23 11:05	11/07/23 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.11**	**B**	0.010	0.0041	mg/L			11/06/23 13:16	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.3**	**HF**	0.1	0.1	SU			11/02/23 21:53	1
Temperature (SM 4500 H+ B)	**18.7**	**HF**	0.001	0.001	Degrees C			11/02/23 21:53	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-214394-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-214394-6	001 LAB COMP	100	99	111	102

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-690037/6	Lab Control Sample	97	104	113	99
MB 480-690037/8	Method Blank	99	101	112	102

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-214394-5	TRIP BLANK	99	101	111	100

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-214394-6	001 LAB COMP	71	97	55	88	92	39

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
LCS 480-690063/2-A	Lab Control Sample	90	94	52	76	100	39		
LCSD 480-690063/3-A	Lab Control Sample Dup	93	93	51	78	98	39		
MB 480-690063/1-A	Method Blank	58	83	46	68	91	34		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-690037/8
Matrix: Water
Analysis Batch: 690037

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			11/02/23 14:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			11/02/23 14:36	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			11/02/23 14:36	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			11/02/23 14:36	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			11/02/23 14:36	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			11/02/23 14:36	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			11/02/23 14:36	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			11/02/23 14:36	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			11/02/23 14:36	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			11/02/23 14:36	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			11/02/23 14:36	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			11/02/23 14:36	1
Acrolein	ND		100	17	ug/L			11/02/23 14:36	1
Acrylonitrile	ND		50	1.9	ug/L			11/02/23 14:36	1
Benzene	ND		5.0	0.60	ug/L			11/02/23 14:36	1
Bromoform	ND		5.0	0.47	ug/L			11/02/23 14:36	1
Bromomethane	ND		5.0	1.2	ug/L			11/02/23 14:36	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			11/02/23 14:36	1
Chlorobenzene	ND		5.0	0.48	ug/L			11/02/23 14:36	1
Dibromochloromethane	ND		5.0	0.41	ug/L			11/02/23 14:36	1
Chloroethane	ND		5.0	0.87	ug/L			11/02/23 14:36	1
Chloroform	ND		5.0	0.54	ug/L			11/02/23 14:36	1
Chloromethane	ND		5.0	0.64	ug/L			11/02/23 14:36	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			11/02/23 14:36	1
Bromodichloromethane	ND		5.0	0.54	ug/L			11/02/23 14:36	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			11/02/23 14:36	1
Ethylbenzene	ND		5.0	0.46	ug/L			11/02/23 14:36	1
Methylene Chloride	ND		5.0	0.81	ug/L			11/02/23 14:36	1
Tetrachloroethene	ND		5.0	0.34	ug/L			11/02/23 14:36	1
Toluene	ND		5.0	0.45	ug/L			11/02/23 14:36	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			11/02/23 14:36	1
Trichloroethene	ND		5.0	0.60	ug/L			11/02/23 14:36	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			11/02/23 14:36	1
Vinyl chloride	ND		5.0	0.75	ug/L			11/02/23 14:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*		*11/02/23 14:36*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*11/02/23 14:36*	*1*
Toluene-d8 (Surr)	*112*		*77 - 120*		*11/02/23 14:36*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*11/02/23 14:36*	*1*

Lab Sample ID: LCS 480-690037/6
Matrix: Water
Analysis Batch: 690037

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	19.9		ug/L		100	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	22.6		ug/L		113	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-690037/6
Matrix: Water
Analysis Batch: 690037

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	23.8		ug/L		119	52 - 150
1,1-Dichloroethane	20.0	18.2		ug/L		91	59 - 155
1,1-Dichloroethene	20.0	20.2		ug/L		101	1 - 234
1,2-Dichlorobenzene	20.0	22.5		ug/L		113	18 - 190
1,2-Dichloroethane	20.0	19.4		ug/L		97	49 - 155
1,2-Dichloropropane	20.0	19.3		ug/L		96	1 - 210
1,3-Dichlorobenzene	20.0	22.6		ug/L		113	59 - 156
1,4-Dichlorobenzene	20.0	23.1		ug/L		115	18 - 190
2-Chloroethyl vinyl ether	20.0	20.2	J	ug/L		101	1 - 305
Benzene	20.0	20.4		ug/L		102	37 - 151
Bromoform	20.0	22.4		ug/L		112	45 - 169
Bromomethane	20.0	21.5		ug/L		108	1 - 242
Carbon tetrachloride	20.0	18.0		ug/L		90	70 - 140
Chlorobenzene	20.0	22.7		ug/L		113	37 - 160
Dibromochloromethane	20.0	23.3		ug/L		117	53 - 149
Chloroethane	20.0	18.9		ug/L		95	14 - 230
Chloroform	20.0	19.6		ug/L		98	51 - 138
Chloromethane	20.0	16.0		ug/L		80	1 - 273
cis-1,3-Dichloropropene	20.0	19.7		ug/L		98	1 - 227
Bromodichloromethane	20.0	20.7		ug/L		104	35 - 155
Ethylbenzene	20.0	22.5		ug/L		113	37 - 162
Methylene Chloride	20.0	20.3		ug/L		102	1 - 221
Tetrachloroethene	20.0	23.1		ug/L		116	64 - 148
Toluene	20.0	22.5		ug/L		112	47 - 150
trans-1,3-Dichloropropene	20.0	20.9		ug/L		104	17 - 183
Trichloroethene	20.0	20.3		ug/L		102	71 - 157
Trichlorofluoromethane	20.0	23.7		ug/L		118	17 - 181
Vinyl chloride	20.0	18.3		ug/L		91	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*68 - 130*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*
Toluene-d8 (Surr)	*113*		*77 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-690063/1-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 690063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		11/02/23 14:21	11/08/23 18:12	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		11/02/23 14:21	11/08/23 18:12	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		11/02/23 14:21	11/08/23 18:12	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		11/02/23 14:21	11/08/23 18:12	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		11/02/23 14:21	11/08/23 18:12	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		11/02/23 14:21	11/08/23 18:12	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-690063/1-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 690063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		11/02/23 14:21	11/08/23 18:12	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		11/02/23 14:21	11/08/23 18:12	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		11/02/23 14:21	11/08/23 18:12	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		11/02/23 14:21	11/08/23 18:12	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		11/02/23 14:21	11/08/23 18:12	1
2-Chlorophenol	ND		5.0	0.17	ug/L		11/02/23 14:21	11/08/23 18:12	1
2-Nitrophenol	ND		5.0	0.18	ug/L		11/02/23 14:21	11/08/23 18:12	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		11/02/23 14:21	11/08/23 18:12	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		11/02/23 14:21	11/08/23 18:12	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		11/02/23 14:21	11/08/23 18:12	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		11/02/23 14:21	11/08/23 18:12	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		11/02/23 14:21	11/08/23 18:12	1
4-Nitrophenol	ND		15	0.49	ug/L		11/02/23 14:21	11/08/23 18:12	1
Acenaphthene	ND		5.0	0.20	ug/L		11/02/23 14:21	11/08/23 18:12	1
Acenaphthylene	ND		5.0	0.22	ug/L		11/02/23 14:21	11/08/23 18:12	1
Anthracene	ND		5.0	0.35	ug/L		11/02/23 14:21	11/08/23 18:12	1
Benzidine	ND		80	14	ug/L		11/02/23 14:21	11/08/23 18:12	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		11/02/23 14:21	11/08/23 18:12	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		11/02/23 14:21	11/08/23 18:12	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		11/02/23 14:21	11/08/23 18:12	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		11/02/23 14:21	11/08/23 18:12	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		11/02/23 14:21	11/08/23 18:12	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		11/02/23 14:21	11/08/23 18:12	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		11/02/23 14:21	11/08/23 18:12	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		11/02/23 14:21	11/08/23 18:12	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		11/02/23 14:21	11/08/23 18:12	1
Chrysene	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1
Decane	ND		10	0.40	ug/L		11/02/23 14:21	11/08/23 18:12	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		11/02/23 14:21	11/08/23 18:12	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		11/02/23 14:21	11/08/23 18:12	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		11/02/23 14:21	11/08/23 18:12	1
Diethyl phthalate	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		11/02/23 14:21	11/08/23 18:12	1
Fluoranthene	ND		5.0	0.40	ug/L		11/02/23 14:21	11/08/23 18:12	1
Fluorene	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		11/02/23 14:21	11/08/23 18:12	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		11/02/23 14:21	11/08/23 18:12	1
Hexachloroethane	ND		5.0	0.15	ug/L		11/02/23 14:21	11/08/23 18:12	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		11/02/23 14:21	11/08/23 18:12	1
Isophorone	ND		5.0	0.19	ug/L		11/02/23 14:21	11/08/23 18:12	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		11/02/23 14:21	11/08/23 18:12	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		11/02/23 14:21	11/08/23 18:12	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		11/02/23 14:21	11/08/23 18:12	1
Naphthalene	ND		5.0	0.22	ug/L		11/02/23 14:21	11/08/23 18:12	1
Nitrobenzene	ND		5.0	0.20	ug/L		11/02/23 14:21	11/08/23 18:12	1
Pentachlorophenol	ND		10	0.79	ug/L		11/02/23 14:21	11/08/23 18:12	1
Phenanthrene	ND		5.0	0.30	ug/L		11/02/23 14:21	11/08/23 18:12	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-690063/1-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 690063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		11/02/23 14:21	11/08/23 18:12	1
Pyrene	ND		5.0	0.35	ug/L		11/02/23 14:21	11/08/23 18:12	1
n-Octadecane	ND		10	0.30	ug/L		11/02/23 14:21	11/08/23 18:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*58*		*52 - 151*	*11/02/23 14:21*	*11/08/23 18:12*	*1*
2-Fluorobiphenyl	*83*		*44 - 120*	*11/02/23 14:21*	*11/08/23 18:12*	*1*
2-Fluorophenol (Surr)	*46*		*17 - 120*	*11/02/23 14:21*	*11/08/23 18:12*	*1*
Nitrobenzene-d5 (Surr)	*68*		*15 - 314*	*11/02/23 14:21*	*11/08/23 18:12*	*1*
p-Terphenyl-d14 (Surr)	*91*		*22 - 125*	*11/02/23 14:21*	*11/08/23 18:12*	*1*
Phenol-d5 (Surr)	*34*		*8 - 424*	*11/02/23 14:21*	*11/08/23 18:12*	*1*

Lab Sample ID: LCS 480-690063/2-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 690063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	34.5		ug/L		69	44 - 142
1,2-Dichlorobenzene	50.0	31.5		ug/L		63	32 - 129
1,3-Dichlorobenzene	50.0	29.3		ug/L		59	1 - 172
1,4-Dichlorobenzene	50.0	29.9		ug/L		60	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	40.6		ug/L		81	36 - 166
2,4,6-Trichlorophenol	50.0	46.0		ug/L		92	37 - 144
2,4-Dichlorophenol	50.0	44.7		ug/L		89	39 - 135
2,4-Dimethylphenol	50.0	38.0		ug/L		76	32 - 120
2,4-Dinitrophenol	100	75.0		ug/L		75	1 - 191
2,4-Dinitrotoluene	50.0	42.2		ug/L		84	39 - 139
2,6-Dinitrotoluene	50.0	41.4		ug/L		83	50 - 158
2-Chloronaphthalene	50.0	42.7		ug/L		85	60 - 120
2-Chlorophenol	50.0	39.8		ug/L		80	23 - 134
2-Nitrophenol	50.0	36.2		ug/L		72	29 - 182
3,3'-Dichlorobenzidine	100	93.8		ug/L		94	1 - 262
4,6-Dinitro-2-methylphenol	100	83.2		ug/L		83	1 - 181
4-Bromophenyl phenyl ether	50.0	47.9		ug/L		96	53 - 127
4-Chloro-3-methylphenol	50.0	45.8		ug/L		92	22 - 147
4-Chlorophenyl phenyl ether	50.0	48.1		ug/L		96	25 - 158
4-Nitrophenol	100	50.9		ug/L		51	1 - 132
Acenaphthene	50.0	46.4		ug/L		93	47 - 145
Acenaphthylene	50.0	44.7		ug/L		89	33 - 145
Anthracene	50.0	48.7		ug/L		97	27 - 133
Benzidine	100	23.4	J	ug/L		23	1 - 120
Benzo[a]anthracene	50.0	49.8		ug/L		100	33 - 143
Benzo[a]pyrene	50.0	52.6		ug/L		105	17 - 163
Benzo[b]fluoranthene	50.0	51.8		ug/L		104	24 - 159
Benzo[g,h,i]perylene	50.0	50.1		ug/L		100	1 - 219
Benzo[k]fluoranthene	50.0	46.7		ug/L		93	11 - 162
Bis(2-chloroethoxy)methane	50.0	44.8		ug/L		90	33 - 184
Bis(2-chloroethyl)ether	50.0	41.2		ug/L		82	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-690063/2-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 690063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	50.4		ug/L		101	8 - 158
Butyl benzyl phthalate	50.0	48.7		ug/L		97	1 - 152
Chrysene	50.0	50.7		ug/L		101	17 - 168
Di-n-butyl phthalate	50.0	49.6		ug/L		99	1 - 120
Di-n-octyl phthalate	50.0	49.9		ug/L		100	4 - 146
Dibenz(a,h)anthracene	50.0	49.7		ug/L		99	1 - 227
Diethyl phthalate	50.0	48.9		ug/L		98	1 - 120
Dimethyl phthalate	50.0	48.7		ug/L		97	1 - 120
Fluoranthene	50.0	50.6		ug/L		101	26 - 137
Fluorene	50.0	47.6		ug/L		95	59 - 121
Hexachlorobenzene	50.0	48.1		ug/L		96	1 - 152
Hexachlorocyclopentadiene	50.0	25.5		ug/L		51	5 - 120
Hexachloroethane	50.0	26.1		ug/L		52	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	53.4		ug/L		107	1 - 171
Isophorone	50.0	46.2		ug/L		92	21 - 196
N-Nitrosodi-n-propylamine	50.0	44.0		ug/L		88	1 - 230
N-Nitrosodiphenylamine	50.0	48.9		ug/L		98	54 - 125
Naphthalene	50.0	38.4		ug/L		77	21 - 133
Nitrobenzene	50.0	38.4		ug/L		77	35 - 180
Pentachlorophenol	100	88.8		ug/L		89	14 - 176
Phenanthrene	50.0	48.6		ug/L		97	54 - 120
Phenol	50.0	20.5		ug/L		41	5 - 120
Pyrene	50.0	49.6		ug/L		99	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*90*		*52 - 151*
2-Fluorobiphenyl	*94*		*44 - 120*
2-Fluorophenol (Surr)	*52*		*17 - 120*
Nitrobenzene-d5 (Surr)	*76*		*15 - 314*
p-Terphenyl-d14 (Surr)	*100*		*22 - 125*
Phenol-d5 (Surr)	*39*		*8 - 424*

Lab Sample ID: LCSD 480-690063/3-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 690063

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	33.6		ug/L		67	44 - 142	3	34
1,2-Dichlorobenzene	50.0	30.6		ug/L		61	32 - 129	3	38
1,3-Dichlorobenzene	50.0	28.2		ug/L		56	1 - 172	4	37
1,4-Dichlorobenzene	50.0	29.3		ug/L		59	20 - 124	2	40
2,2'-Oxybis(1-chloropropane)	50.0	39.4		ug/L		79	36 - 166	3	36
2,4,6-Trichlorophenol	50.0	46.9		ug/L		94	37 - 144	2	20
2,4-Dichlorophenol	50.0	45.2		ug/L		90	39 - 135	1	23
2,4-Dimethylphenol	50.0	38.4		ug/L		77	32 - 120	1	18
2,4-Dinitrophenol	100	82.1		ug/L		82	1 - 191	9	29
2,4-Dinitrotoluene	50.0	45.8		ug/L		92	39 - 139	8	20
2,6-Dinitrotoluene	50.0	43.9		ug/L		88	50 - 158	6	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-690063/3-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 690063

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	42.3		ug/L		85	60 - 120	1	30
2-Chlorophenol			50.0	39.4		ug/L		79	23 - 134	1	26
2-Nitrophenol			50.0	38.8		ug/L		78	29 - 182	7	28
3,3'-Dichlorobenzidine			100	93.2		ug/L		93	1 - 262	1	31
4,6-Dinitro-2-methylphenol			100	89.6		ug/L		90	1 - 181	7	30
4-Bromophenyl phenyl ether			50.0	48.0		ug/L		96	53 - 127	0	16
4-Chloro-3-methylphenol			50.0	46.8		ug/L		94	22 - 147	2	16
4-Chlorophenyl phenyl ether			50.0	47.4		ug/L		95	25 - 158	1	15
4-Nitrophenol			100	52.4		ug/L		52	1 - 132	3	24
Acenaphthene			50.0	46.9		ug/L		94	47 - 145	1	25
Acenaphthylene			50.0	45.1		ug/L		90	33 - 145	1	22
Anthracene			50.0	48.5		ug/L		97	27 - 133	0	15
Benzidine			100	42.5	J *1	ug/L		43	1 - 120	58	50
Benzo[a]anthracene			50.0	49.5		ug/L		99	33 - 143	1	15
Benzo[a]pyrene			50.0	52.8		ug/L		106	17 - 163	0	15
Benzo[b]fluoranthene			50.0	51.5		ug/L		103	24 - 159	1	17
Benzo[g,h,i]perylene			50.0	49.4		ug/L		99	1 - 219	1	19
Benzo[k]fluoranthene			50.0	46.9		ug/L		94	11 - 162	0	19
Bis(2-chloroethoxy)methane			50.0	44.2		ug/L		88	33 - 184	1	23
Bis(2-chloroethyl)ether			50.0	39.6		ug/L		79	12 - 158	4	33
Bis(2-ethylhexyl) phthalate			50.0	50.2		ug/L		100	8 - 158	0	15
Butyl benzyl phthalate			50.0	48.4		ug/L		97	1 - 152	1	15
Chrysene			50.0	50.1		ug/L		100	17 - 168	1	15
Di-n-butyl phthalate			50.0	49.9		ug/L		100	1 - 120	1	15
Di-n-octyl phthalate			50.0	49.8		ug/L		100	4 - 146	0	15
Dibenz(a,h)anthracene			50.0	49.5		ug/L		99	1 - 227	0	18
Diethyl phthalate			50.0	49.5		ug/L		99	1 - 120	1	15
Dimethyl phthalate			50.0	49.5		ug/L		99	1 - 120	2	15
Fluoranthene			50.0	49.7		ug/L		99	26 - 137	2	15
Fluorene			50.0	48.4		ug/L		97	59 - 121	2	18
Hexachlorobenzene			50.0	47.8		ug/L		96	1 - 152	1	15
Hexachlorocyclopentadiene			50.0	26.0		ug/L		52	5 - 120	2	50
Hexachloroethane			50.0	25.3		ug/L		51	40 - 120	3	43
Indeno[1,2,3-cd]pyrene			50.0	53.4		ug/L		107	1 - 171	0	17
Isophorone			50.0	46.3		ug/L		93	21 - 196	0	21
N-Nitrosodi-n-propylamine			50.0	43.7		ug/L		87	1 - 230	1	23
N-Nitrosodiphenylamine			50.0	48.6		ug/L		97	54 - 125	1	15
Naphthalene			50.0	37.3		ug/L		75	21 - 133	3	31
Nitrobenzene			50.0	39.5		ug/L		79	35 - 180	3	27
Pentachlorophenol			100	89.2		ug/L		89	14 - 176	0	21
Phenanthrene			50.0	48.8		ug/L		98	54 - 120	0	16
Phenol			50.0	20.5		ug/L		41	5 - 120	0	36
Pyrene			50.0	48.6		ug/L		97	52 - 120	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*52 - 151*
2-Fluorobiphenyl	*93*		*44 - 120*
2-Fluorophenol (Surr)	*51*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-690063/3-A
Matrix: Water
Analysis Batch: 690910

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 690063

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*78*		*15 - 314*
p-Terphenyl-d14 (Surr)	*98*		*22 - 125*
Phenol-d5 (Surr)	*39*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-690287/1-A
Matrix: Water
Analysis Batch: 690751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 690287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.00160	J	0.010	0.0015	mg/L		11/06/23 08:53	11/06/23 15:33	1

Lab Sample ID: LCS 480-690287/2-A
Matrix: Water
Analysis Batch: 690751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 690287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.197		mg/L		98	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-690768/1-A
Matrix: Water
Analysis Batch: 690841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 690768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		11/07/23 11:05	11/07/23 15:58	1

Lab Sample ID: LCS 480-690768/2-A
Matrix: Water
Analysis Batch: 690841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 690768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00680		mg/L		102	85 - 115

Lab Sample ID: LCSD 480-690768/3-A
Matrix: Water
Analysis Batch: 690841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 690768

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00669	0.00694		mg/L		104	85 - 115	2	20

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-690621/47
Matrix: Water
Analysis Batch: 690621

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00510	J	0.010	0.0041	mg/L			11/06/23 11:49	1

Lab Sample ID: MB 480-690621/75
Matrix: Water
Analysis Batch: 690621

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00500	J	0.010	0.0041	mg/L			11/06/23 13:04	1

Lab Sample ID: HLCS 480-690621/22
Matrix: Water
Analysis Batch: 690621

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.388		mg/L		97	90 - 110

Lab Sample ID: LCS 480-690621/48
Matrix: Water
Analysis Batch: 690621

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.237		mg/L		95	90 - 110

Lab Sample ID: LCS 480-690621/76
Matrix: Water
Analysis Batch: 690621

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.243		mg/L		97	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-690110/23
Matrix: Water
Analysis Batch: 690110

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		101	99 - 101

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

GC/MS VOA

Analysis Batch: 690037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-5	TRIP BLANK	Total/NA	WQ	624.1	
480-214394-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-690037/8	Method Blank	Total/NA	Water	624.1	
LCS 480-690037/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 690063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-690063/1-A	Method Blank	Total/NA	Water	625	
LCS 480-690063/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-690063/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 690910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	625.1	690063
MB 480-690063/1-A	Method Blank	Total/NA	Water	625.1	690063
LCS 480-690063/2-A	Lab Control Sample	Total/NA	Water	625.1	690063
LCSD 480-690063/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	690063

Metals

Prep Batch: 690287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-690287/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-690287/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 690751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-690287/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	690287
LCS 480-690287/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	690287

Prep Batch: 690768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-690768/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-690768/2-A	Lab Control Sample	Total/NA	Water	245.1	
LCSD 480-690768/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	

Analysis Batch: 690841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	245.1	690768
MB 480-690768/1-A	Method Blank	Total/NA	Water	245.1	690768
LCS 480-690768/2-A	Lab Control Sample	Total/NA	Water	245.1	690768
LCSD 480-690768/3-A	Lab Control Sample Dup	Total/NA	Water	245.1	690768

Analysis Batch: 691188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	690287

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

General Chemistry

Analysis Batch: 690110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-690110/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 690621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-214394-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-690621/47	Method Blank	Total/NA	Water	335.4	
MB 480-690621/75	Method Blank	Total/NA	Water	335.4	
HLCS 480-690621/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-690621/48	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-690621/76	Lab Control Sample	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-214394-5
Date Collected: 11/01/23 00:00
Matrix: WQ
Date Received: 11/01/23 12:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	690037	AXK	EET BUF	11/02/23 17:01

Client Sample ID: 001 LAB COMP
Lab Sample ID: 480-214394-6
Date Collected: 11/01/23 12:11
Matrix: Wastewater
Date Received: 11/01/23 12:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	690037	AXK	EET BUF	11/02/23 17:25
Total/NA	Prep	625			690063	LSC	EET BUF	11/02/23 14:21
Total/NA	Analysis	625.1		1	690910	EMD	EET BUF	11/08/23 21:26
Total/NA	Prep	200.7			690287	ESB	EET BUF	11/06/23 08:53
Total/NA	Analysis	200.7 Rev 4.4		1	691188	LMH	EET BUF	11/08/23 17:58
Total/NA	Prep	245.1			690768	NVK	EET BUF	11/07/23 11:05
Total/NA	Analysis	245.1		1	690841	NVK	EET BUF	11/07/23 16:13
Total/NA	Analysis	335.4		1	690621	CLT	EET BUF	11/06/23 13:16
Total/NA	Analysis	SM 4500 H+ B		1	690110	KB	EET BUF	11/02/23 21:53

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Job ID: 480-214394-1
Project/Site: Iroquois Gas/Westwood Pharm.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-214394-5	TRIP BLANK	WQ	11/01/23 00:00	11/01/23 12:33
480-214394-6	001 LAB COMP	Wastewater	11/01/23 12:11	11/01/23 12:33

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

Chain of Custody Record

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Client Information
Client Contact: Jason Gutkowski
Company: ARCADIS US Inc
Address: One Lincoln Center 110 West Fayette St, Suite 300
City: Syracuse
State, Zip: NY, 13202
Phone:
Email: jason.gutkowski@arcadis.com
Project Name: Iroquois Gas/Westwood Pharm. Monthly
Site: New York

Sampler: Jason Gutkowski
Phone: 315 436 3605
Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin:
COC No: 480-181785-34075.1
Page: Page 1 of 1
Job #:
PWSID:
Due Date Requested:
TAT Requested (days): Standard Turn
Compliance Project: Δ Yes Δ No
PO #: Needed
WO #: 30003542-00001
Project #: 48011056
SSOW#:

Analysis Requested

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B		
001-1	11/1/23	0611	G	Water			X	X	X	X	X		Lab To Composite Samples
001-2		0811		Water			X	X	X	X	X		
001-3		1011					X	X	X	X	X		
001-4		1211					X	X	X	X	X		
TripBlank	—	—						X					Short Hold Time

480-214394 Chain of Custody

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

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

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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Dan Mudd	11/1/23 1228	Arcadis	Received by: Shawn Mudd	11/1/23 1233	TA
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: 6.6 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-214394-1

Login Number: 214394
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.	False	Samples were composited in the lab
Sampling Company provided.	True	ARCADIS
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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

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JOB DESCRIPTION

Monthly Testing
Monthly Testing

JOB NUMBER

480-215328-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-215328-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-215328-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/1/2023 3:59 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.0º C.

GC/MS VOA
Method 624.1: The continuing calibration verification (CCV) associated with batch 480-694022 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (480-215328-5) and 001 LAB COMP (480-215328-6).

Method 624.1: The following Volatile sample was composited by the laboratory on 12/01/2023 as requested by the client: 001 LAB COMP (480-215328-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-215328-6).

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

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-215328-5

No Detections.

Client Sample ID: 001 LAB COMP — Lab Sample ID: 480-215328-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.4	J B	9.5	0.29	ug/L	1		625.1	Total/NA
Di-n-butyl phthalate	1.1	J B	4.8	0.38	ug/L	1		625.1	Total/NA
Cyanide, Total	0.13	B	0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	18.6	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Client Sample ID: TRIP BLANK

Date Collected: 12/01/23 00:00
Date Received: 12/01/23 15:59

Lab Sample ID: 480-215328-5

Matrix: WQ

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/23 21:45	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/23 21:45	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/23 21:45	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/23 21:45	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/23 21:45	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/23 21:45	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/23 21:45	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/23 21:45	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/23 21:45	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/23 21:45	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/23 21:45	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/23 21:45	1
Acrolein	ND		100	17	ug/L			12/01/23 21:45	1
Acrylonitrile	ND		50	1.9	ug/L			12/01/23 21:45	1
Benzene	ND		5.0	0.60	ug/L			12/01/23 21:45	1
Bromoform	ND		5.0	0.47	ug/L			12/01/23 21:45	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/23 21:45	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/23 21:45	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/23 21:45	1
Dibromochloromethane	ND		5.0	0.41	ug/L			12/01/23 21:45	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/23 21:45	1
Chloroform	ND		5.0	0.54	ug/L			12/01/23 21:45	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/23 21:45	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/23 21:45	1
Bromodichloromethane	ND		5.0	0.54	ug/L			12/01/23 21:45	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			12/01/23 21:45	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/23 21:45	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/23 21:45	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/23 21:45	1
Toluene	ND		5.0	0.45	ug/L			12/01/23 21:45	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/23 21:45	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/23 21:45	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			12/01/23 21:45	1
Vinyl chloride	ND		5.0	0.75	ug/L			12/01/23 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*68 - 130*		*12/01/23 21:45*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*12/01/23 21:45*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*12/01/23 21:45*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*12/01/23 21:45*	*1*

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Client Sample ID: 001 LAB COMP
Date Collected: 12/01/23 00:00
Date Received: 12/01/23 15:59

Lab Sample ID: 480-215328-6
Matrix: Wastewater

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/23 22:11	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/23 22:11	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/23 22:11	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/23 22:11	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/23 22:11	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/23 22:11	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/23 22:11	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/23 22:11	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/23 22:11	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/23 22:11	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/23 22:11	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/23 22:11	1
Acrolein	ND		100	17	ug/L			12/01/23 22:11	1
Acrylonitrile	ND		50	1.9	ug/L			12/01/23 22:11	1
Benzene	ND		5.0	0.60	ug/L			12/01/23 22:11	1
Bromoform	ND		5.0	0.47	ug/L			12/01/23 22:11	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/23 22:11	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/23 22:11	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/23 22:11	1
Dibromochloromethane	ND		5.0	0.41	ug/L			12/01/23 22:11	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/23 22:11	1
Chloroform	ND		5.0	0.54	ug/L			12/01/23 22:11	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/23 22:11	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/23 22:11	1
Bromodichloromethane	ND		5.0	0.54	ug/L			12/01/23 22:11	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			12/01/23 22:11	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/23 22:11	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/23 22:11	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/23 22:11	1
Toluene	ND		5.0	0.45	ug/L			12/01/23 22:11	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/23 22:11	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/23 22:11	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			12/01/23 22:11	1
Vinyl chloride	ND		5.0	0.75	ug/L			12/01/23 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*		*12/01/23 22:11*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*12/01/23 22:11*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*12/01/23 22:11*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*12/01/23 22:11*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		12/04/23 10:06	12/05/23 19:54	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		12/04/23 10:06	12/05/23 19:54	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		12/04/23 10:06	12/05/23 19:54	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		12/04/23 10:06	12/05/23 19:54	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		12/04/23 10:06	12/05/23 19:54	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		12/04/23 10:06	12/05/23 19:54	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Client Sample ID: 001 LAB COMP
Date Collected: 12/01/23 00:00
Date Received: 12/01/23 15:59

Lab Sample ID: 480-215328-6
Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		12/04/23 10:06	12/05/23 19:54	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		12/04/23 10:06	12/05/23 19:54	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		12/04/23 10:06	12/05/23 19:54	1
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		12/04/23 10:06	12/05/23 19:54	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		12/04/23 10:06	12/05/23 19:54	1
2-Chlorophenol	ND		4.8	0.16	ug/L		12/04/23 10:06	12/05/23 19:54	1
2-Nitrophenol	ND		4.8	0.17	ug/L		12/04/23 10:06	12/05/23 19:54	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		12/04/23 10:06	12/05/23 19:54	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		12/04/23 10:06	12/05/23 19:54	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		12/04/23 10:06	12/05/23 19:54	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		12/04/23 10:06	12/05/23 19:54	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		12/04/23 10:06	12/05/23 19:54	1
4-Nitrophenol	ND		14	0.46	ug/L		12/04/23 10:06	12/05/23 19:54	1
Acenaphthene	ND		4.8	0.19	ug/L		12/04/23 10:06	12/05/23 19:54	1
Acenaphthylene	ND		4.8	0.21	ug/L		12/04/23 10:06	12/05/23 19:54	1
Anthracene	ND		4.8	0.33	ug/L		12/04/23 10:06	12/05/23 19:54	1
Benzidine	ND		76	13	ug/L		12/04/23 10:06	12/05/23 19:54	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		12/04/23 10:06	12/05/23 19:54	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		12/04/23 10:06	12/05/23 19:54	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		12/04/23 10:06	12/05/23 19:54	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		12/04/23 10:06	12/05/23 19:54	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		12/04/23 10:06	12/05/23 19:54	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		12/04/23 10:06	12/05/23 19:54	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		12/04/23 10:06	12/05/23 19:54	1
Bis(2-ethylhexyl) phthalate	**1.4**	**J B**	9.5	0.29	ug/L		12/04/23 10:06	12/05/23 19:54	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		12/04/23 10:06	12/05/23 19:54	1
Chrysene	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1
Decane	ND		9.5	0.38	ug/L		12/04/23 10:06	12/05/23 19:54	1
Di-n-butyl phthalate	**1.1**	**J B**	4.8	0.38	ug/L		12/04/23 10:06	12/05/23 19:54	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		12/04/23 10:06	12/05/23 19:54	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		12/04/23 10:06	12/05/23 19:54	1
Diethyl phthalate	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		12/04/23 10:06	12/05/23 19:54	1
Fluoranthene	ND		4.8	0.38	ug/L		12/04/23 10:06	12/05/23 19:54	1
Fluorene	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		12/04/23 10:06	12/05/23 19:54	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		12/04/23 10:06	12/05/23 19:54	1
Hexachloroethane	ND		4.8	0.14	ug/L		12/04/23 10:06	12/05/23 19:54	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		12/04/23 10:06	12/05/23 19:54	1
Isophorone	ND		4.8	0.18	ug/L		12/04/23 10:06	12/05/23 19:54	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		12/04/23 10:06	12/05/23 19:54	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		12/04/23 10:06	12/05/23 19:54	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		12/04/23 10:06	12/05/23 19:54	1
Naphthalene	ND		4.8	0.20	ug/L		12/04/23 10:06	12/05/23 19:54	1
Nitrobenzene	ND		4.8	0.19	ug/L		12/04/23 10:06	12/05/23 19:54	1
Pentachlorophenol	ND		9.5	0.75	ug/L		12/04/23 10:06	12/05/23 19:54	1
Phenanthrene	ND		4.8	0.29	ug/L		12/04/23 10:06	12/05/23 19:54	1

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Client Sample ID: 001 LAB COMP

Date Collected: 12/01/23 00:00
Date Received: 12/01/23 15:59

Lab Sample ID: 480-215328-6

Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.8	0.083	ug/L		12/04/23 10:06	12/05/23 19:54	1
Pyrene	ND		4.8	0.33	ug/L		12/04/23 10:06	12/05/23 19:54	1
n-Octadecane	ND		9.5	0.29	ug/L		12/04/23 10:06	12/05/23 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*52 - 151*	*12/04/23 10:06*	*12/05/23 19:54*	*1*
2-Fluorobiphenyl	*93*		*44 - 120*	*12/04/23 10:06*	*12/05/23 19:54*	*1*
2-Fluorophenol (Surr)	*56*		*17 - 120*	*12/04/23 10:06*	*12/05/23 19:54*	*1*
Nitrobenzene-d5 (Surr)	*88*		*15 - 314*	*12/04/23 10:06*	*12/05/23 19:54*	*1*
p-Terphenyl-d14 (Surr)	*101*		*22 - 125*	*12/04/23 10:06*	*12/05/23 19:54*	*1*
Phenol-d5 (Surr)	*37*		*8 - 424*	*12/04/23 10:06*	*12/05/23 19:54*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		12/05/23 08:49	12/06/23 02:30	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		12/04/23 11:34	12/04/23 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.13**	**B**	0.010	0.0041	mg/L			12/05/23 09:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.5**	**HF**	0.1	0.1	SU			12/04/23 20:49	1
Temperature (SM 4500 H+ B)	**18.6**	**HF**	0.001	0.001	Degrees C			12/04/23 20:49	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-215328-6	001 LAB COMP	105	101	99	103

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-694022/6	Lab Control Sample	102	101	103	105
MB 480-694022/8	Method Blank	105	99	102	99

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-215328-5	TRIP BLANK	107	99	103	110

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-215328-6	001 LAB COMP	66	93	56	88	101	37

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-215328-1
Project/Site: Monthly Testing

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
LCS 480-694147/2-A	Lab Control Sample	94	90	54	89	94	39		
MB 480-694147/1-A	Method Blank	73	87	54	85	95	37		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-694022/8
Matrix: Water
Analysis Batch: 694022

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			12/01/23 17:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			12/01/23 17:43	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			12/01/23 17:43	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			12/01/23 17:43	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			12/01/23 17:43	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			12/01/23 17:43	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			12/01/23 17:43	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			12/01/23 17:43	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			12/01/23 17:43	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			12/01/23 17:43	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			12/01/23 17:43	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			12/01/23 17:43	1
Acrolein	ND		100	17	ug/L			12/01/23 17:43	1
Acrylonitrile	ND		50	1.9	ug/L			12/01/23 17:43	1
Benzene	ND		5.0	0.60	ug/L			12/01/23 17:43	1
Bromoform	ND		5.0	0.47	ug/L			12/01/23 17:43	1
Bromomethane	ND		5.0	1.2	ug/L			12/01/23 17:43	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			12/01/23 17:43	1
Chlorobenzene	ND		5.0	0.48	ug/L			12/01/23 17:43	1
Dibromochloromethane	ND		5.0	0.41	ug/L			12/01/23 17:43	1
Chloroethane	ND		5.0	0.87	ug/L			12/01/23 17:43	1
Chloroform	ND		5.0	0.54	ug/L			12/01/23 17:43	1
Chloromethane	ND		5.0	0.64	ug/L			12/01/23 17:43	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			12/01/23 17:43	1
Bromodichloromethane	ND		5.0	0.54	ug/L			12/01/23 17:43	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			12/01/23 17:43	1
Ethylbenzene	ND		5.0	0.46	ug/L			12/01/23 17:43	1
Methylene Chloride	ND		5.0	0.81	ug/L			12/01/23 17:43	1
Tetrachloroethene	ND		5.0	0.34	ug/L			12/01/23 17:43	1
Toluene	ND		5.0	0.45	ug/L			12/01/23 17:43	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			12/01/23 17:43	1
Trichloroethene	ND		5.0	0.60	ug/L			12/01/23 17:43	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			12/01/23 17:43	1
Vinyl chloride	ND		5.0	0.75	ug/L			12/01/23 17:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*		*12/01/23 17:43*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*12/01/23 17:43*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*12/01/23 17:43*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*12/01/23 17:43*	*1*

Lab Sample ID: LCS 480-694022/6
Matrix: Water
Analysis Batch: 694022

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	25.7		ug/L		128	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	19.5		ug/L		97	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-694022/6
Matrix: Water
Analysis Batch: 694022

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	19.6		ug/L		98	52 - 150
1,1-Dichloroethane	20.0	21.1		ug/L		106	59 - 155
1,1-Dichloroethene	20.0	21.5		ug/L		108	1 - 234
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	18 - 190
1,2-Dichloroethane	20.0	20.8		ug/L		104	49 - 155
1,2-Dichloropropane	20.0	19.7		ug/L		98	1 - 210
1,3-Dichlorobenzene	20.0	19.9		ug/L		99	59 - 156
1,4-Dichlorobenzene	20.0	19.8		ug/L		99	18 - 190
2-Chloroethyl vinyl ether	20.0	17.6	J	ug/L		88	1 - 305
Benzene	20.0	20.5		ug/L		103	37 - 151
Bromoform	20.0	21.2		ug/L		106	45 - 169
Bromomethane	20.0	23.0		ug/L		115	1 - 242
Carbon tetrachloride	20.0	26.9		ug/L		134	70 - 140
Chlorobenzene	20.0	20.3		ug/L		102	37 - 160
Dibromochloromethane	20.0	21.4		ug/L		107	53 - 149
Chloroethane	20.0	20.7		ug/L		104	14 - 230
Chloroform	20.0	21.2		ug/L		106	51 - 138
Chloromethane	20.0	19.7		ug/L		99	1 - 273
cis-1,3-Dichloropropene	20.0	19.8		ug/L		99	1 - 227
Bromodichloromethane	20.0	20.8		ug/L		104	35 - 155
Ethylbenzene	20.0	21.1		ug/L		106	37 - 162
Methylene Chloride	20.0	20.4		ug/L		102	1 - 221
Tetrachloroethene	20.0	22.0		ug/L		110	64 - 148
Toluene	20.0	21.1		ug/L		105	47 - 150
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	17 - 183
Trichloroethene	20.0	21.0		ug/L		105	71 - 157
Trichlorofluoromethane	20.0	33.6		ug/L		168	17 - 181
Vinyl chloride	20.0	24.5		ug/L		122	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*68 - 130*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*
Toluene-d8 (Surr)	*103*		*77 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-694147/1-A
Matrix: Water
Analysis Batch: 694266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 694147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		12/04/23 10:06	12/05/23 16:02	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		12/04/23 10:06	12/05/23 16:02	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		12/04/23 10:06	12/05/23 16:02	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		12/04/23 10:06	12/05/23 16:02	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		12/04/23 10:06	12/05/23 16:02	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		12/04/23 10:06	12/05/23 16:02	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-694147/1-A
Matrix: Water
Analysis Batch: 694266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 694147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		12/04/23 10:06	12/05/23 16:02	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		12/04/23 10:06	12/05/23 16:02	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		12/04/23 10:06	12/05/23 16:02	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		12/04/23 10:06	12/05/23 16:02	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		12/04/23 10:06	12/05/23 16:02	1
2-Chlorophenol	ND		5.0	0.17	ug/L		12/04/23 10:06	12/05/23 16:02	1
2-Nitrophenol	ND		5.0	0.18	ug/L		12/04/23 10:06	12/05/23 16:02	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/04/23 10:06	12/05/23 16:02	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		12/04/23 10:06	12/05/23 16:02	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		12/04/23 10:06	12/05/23 16:02	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		12/04/23 10:06	12/05/23 16:02	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		12/04/23 10:06	12/05/23 16:02	1
4-Nitrophenol	ND		15	0.49	ug/L		12/04/23 10:06	12/05/23 16:02	1
Acenaphthene	ND		5.0	0.20	ug/L		12/04/23 10:06	12/05/23 16:02	1
Acenaphthylene	ND		5.0	0.22	ug/L		12/04/23 10:06	12/05/23 16:02	1
Anthracene	ND		5.0	0.35	ug/L		12/04/23 10:06	12/05/23 16:02	1
Benzidine	ND		80	14	ug/L		12/04/23 10:06	12/05/23 16:02	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		12/04/23 10:06	12/05/23 16:02	1
Benzo[a]pyrene	0.375	J	5.0	0.33	ug/L		12/04/23 10:06	12/05/23 16:02	1
Benzo[b]fluoranthene	0.316	J	5.0	0.30	ug/L		12/04/23 10:06	12/05/23 16:02	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		12/04/23 10:06	12/05/23 16:02	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		12/04/23 10:06	12/05/23 16:02	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		12/04/23 10:06	12/05/23 16:02	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		12/04/23 10:06	12/05/23 16:02	1
Bis(2-ethylhexyl) phthalate	1.51	J	10	0.30	ug/L		12/04/23 10:06	12/05/23 16:02	1
Butyl benzyl phthalate	1.67	J	5.0	0.28	ug/L		12/04/23 10:06	12/05/23 16:02	1
Chrysene	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1
Decane	ND		10	0.40	ug/L		12/04/23 10:06	12/05/23 16:02	1
Di-n-butyl phthalate	1.20	J	5.0	0.40	ug/L		12/04/23 10:06	12/05/23 16:02	1
Di-n-octyl phthalate	3.15	J	5.0	0.30	ug/L		12/04/23 10:06	12/05/23 16:02	1
Dibenz(a,h)anthracene	0.387	J	5.0	0.38	ug/L		12/04/23 10:06	12/05/23 16:02	1
Diethyl phthalate	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		12/04/23 10:06	12/05/23 16:02	1
Fluoranthene	ND		5.0	0.40	ug/L		12/04/23 10:06	12/05/23 16:02	1
Fluorene	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		12/04/23 10:06	12/05/23 16:02	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		12/04/23 10:06	12/05/23 16:02	1
Hexachloroethane	ND		5.0	0.15	ug/L		12/04/23 10:06	12/05/23 16:02	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		12/04/23 10:06	12/05/23 16:02	1
Isophorone	ND		5.0	0.19	ug/L		12/04/23 10:06	12/05/23 16:02	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		12/04/23 10:06	12/05/23 16:02	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		12/04/23 10:06	12/05/23 16:02	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		12/04/23 10:06	12/05/23 16:02	1
Naphthalene	ND		5.0	0.22	ug/L		12/04/23 10:06	12/05/23 16:02	1
Nitrobenzene	ND		5.0	0.20	ug/L		12/04/23 10:06	12/05/23 16:02	1
Pentachlorophenol	ND		10	0.79	ug/L		12/04/23 10:06	12/05/23 16:02	1
Phenanthrene	ND		5.0	0.30	ug/L		12/04/23 10:06	12/05/23 16:02	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-694147/1-A
Matrix: Water
Analysis Batch: 694266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 694147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		12/04/23 10:06	12/05/23 16:02	1
Pyrene	ND		5.0	0.35	ug/L		12/04/23 10:06	12/05/23 16:02	1
n-Octadecane	ND		10	0.30	ug/L		12/04/23 10:06	12/05/23 16:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*52 - 151*	*12/04/23 10:06*	*12/05/23 16:02*	*1*
2-Fluorobiphenyl	*87*		*44 - 120*	*12/04/23 10:06*	*12/05/23 16:02*	*1*
2-Fluorophenol (Surr)	*54*		*17 - 120*	*12/04/23 10:06*	*12/05/23 16:02*	*1*
Nitrobenzene-d5 (Surr)	*85*		*15 - 314*	*12/04/23 10:06*	*12/05/23 16:02*	*1*
p-Terphenyl-d14 (Surr)	*95*		*22 - 125*	*12/04/23 10:06*	*12/05/23 16:02*	*1*
Phenol-d5 (Surr)	*37*		*8 - 424*	*12/04/23 10:06*	*12/05/23 16:02*	*1*

Lab Sample ID: LCS 480-694147/2-A
Matrix: Water
Analysis Batch: 694266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 694147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	34.8		ug/L		70	44 - 142
1,2-Dichlorobenzene	50.0	31.9		ug/L		64	32 - 129
1,3-Dichlorobenzene	50.0	30.5		ug/L		61	1 - 172
1,4-Dichlorobenzene	50.0	30.1		ug/L		60	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	45.7		ug/L		91	36 - 166
2,4,6-Trichlorophenol	50.0	45.3		ug/L		91	37 - 144
2,4-Dichlorophenol	50.0	43.1		ug/L		86	39 - 135
2,4-Dimethylphenol	50.0	36.7		ug/L		73	32 - 120
2,4-Dinitrophenol	100	87.1		ug/L		87	1 - 191
2,4-Dinitrotoluene	50.0	49.0		ug/L		98	39 - 139
2,6-Dinitrotoluene	50.0	49.0		ug/L		98	50 - 158
2-Chloronaphthalene	50.0	42.4		ug/L		85	60 - 120
2-Chlorophenol	50.0	39.1		ug/L		78	23 - 134
2-Nitrophenol	50.0	44.0		ug/L		88	29 - 182
3,3'-Dichlorobenzidine	100	95.6		ug/L		96	1 - 262
4,6-Dinitro-2-methylphenol	100	97.1		ug/L		97	1 - 181
4-Bromophenyl phenyl ether	50.0	46.0		ug/L		92	53 - 127
4-Chloro-3-methylphenol	50.0	46.9		ug/L		94	22 - 147
4-Chlorophenyl phenyl ether	50.0	44.4		ug/L		89	25 - 158
4-Nitrophenol	100	54.3		ug/L		54	1 - 132
Acenaphthene	50.0	44.7		ug/L		89	47 - 145
Acenaphthylene	50.0	44.2		ug/L		88	33 - 145
Anthracene	50.0	47.3		ug/L		95	27 - 133
Benzidine	100	32.3	J	ug/L		32	1 - 120
Benzo[a]anthracene	50.0	50.7		ug/L		101	33 - 143
Benzo[a]pyrene	50.0	52.1		ug/L		104	17 - 163
Benzo[b]fluoranthene	50.0	47.9		ug/L		96	24 - 159
Benzo[g,h,i]perylene	50.0	45.6		ug/L		91	1 - 219
Benzo[k]fluoranthene	50.0	47.8		ug/L		96	11 - 162
Bis(2-chloroethoxy)methane	50.0	44.2		ug/L		88	33 - 184
Bis(2-chloroethyl)ether	50.0	42.4		ug/L		85	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-694147/2-A
Matrix: Water
Analysis Batch: 694266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 694147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	53.8		ug/L		108	8 - 158
Butyl benzyl phthalate	50.0	51.4		ug/L		103	1 - 152
Chrysene	50.0	48.2		ug/L		96	17 - 168
Di-n-butyl phthalate	50.0	49.9		ug/L		100	1 - 120
Di-n-octyl phthalate	50.0	55.2		ug/L		110	4 - 146
Dibenz(a,h)anthracene	50.0	46.5		ug/L		93	1 - 227
Diethyl phthalate	50.0	47.2		ug/L		94	1 - 120
Dimethyl phthalate	50.0	47.3		ug/L		95	1 - 120
Fluoranthene	50.0	49.9		ug/L		100	26 - 137
Fluorene	50.0	44.7		ug/L		89	59 - 121
Hexachlorobenzene	50.0	44.1		ug/L		88	1 - 152
Hexachlorocyclopentadiene	50.0	29.7		ug/L		59	5 - 120
Hexachloroethane	50.0	29.9		ug/L		60	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	50.6		ug/L		101	1 - 171
Isophorone	50.0	46.7		ug/L		93	21 - 196
N-Nitrosodi-n-propylamine	50.0	47.0		ug/L		94	1 - 230
N-Nitrosodiphenylamine	50.0	46.8		ug/L		94	54 - 125
Naphthalene	50.0	38.8		ug/L		78	21 - 133
Nitrobenzene	50.0	42.3		ug/L		85	35 - 180
Pentachlorophenol	100	76.4		ug/L		76	14 - 176
Phenanthrene	50.0	45.8		ug/L		92	54 - 120
Phenol	50.0	19.7		ug/L		39	5 - 120
Pyrene	50.0	47.4		ug/L		95	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*94*		*52 - 151*
2-Fluorobiphenyl	*90*		*44 - 120*
2-Fluorophenol (Surr)	*54*		*17 - 120*
Nitrobenzene-d5 (Surr)	*89*		*15 - 314*
p-Terphenyl-d14 (Surr)	*94*		*22 - 125*
Phenol-d5 (Surr)	*39*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-694191/1-A
Matrix: Water
Analysis Batch: 694442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 694191

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		12/05/23 08:49	12/06/23 01:54	1

Lab Sample ID: LCS 480-694191/2-A
Matrix: Water
Analysis Batch: 694442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 694191

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.202		mg/L		101	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-694135/1-A
Matrix: Water
Analysis Batch: 694215

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 694135

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		12/04/23 11:34	12/04/23 14:23	1

Lab Sample ID: LCS 480-694135/2-A
Matrix: Water
Analysis Batch: 694215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 694135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00622		mg/L		93	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-694329/47
Matrix: Water
Analysis Batch: 694329

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00440	J	0.010	0.0041	mg/L			12/05/23 09:10	1

Lab Sample ID: HLCS 480-694329/22
Matrix: Water
Analysis Batch: 694329

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.402		mg/L		101	90 - 110

Lab Sample ID: LCS 480-694329/23
Matrix: Water
Analysis Batch: 694329

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.251		mg/L		100	90 - 110

Lab Sample ID: LCS 480-694329/48
Matrix: Water
Analysis Batch: 694329

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.255		mg/L		102	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-694240/1
Matrix: Water
Analysis Batch: 694240

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

GC/MS VOA

Analysis Batch: 694022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-5	TRIP BLANK	Total/NA	WQ	624.1	
480-215328-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-694022/8	Method Blank	Total/NA	Water	624.1	
LCS 480-694022/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 694147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-694147/1-A	Method Blank	Total/NA	Water	625	
LCS 480-694147/2-A	Lab Control Sample	Total/NA	Water	625	

Analysis Batch: 694266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	625.1	694147
MB 480-694147/1-A	Method Blank	Total/NA	Water	625.1	694147
LCS 480-694147/2-A	Lab Control Sample	Total/NA	Water	625.1	694147

Metals

Prep Batch: 694135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-694135/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-694135/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 694191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-694191/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-694191/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 694215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	245.1	694135
MB 480-694135/1-A	Method Blank	Total/NA	Water	245.1	694135
LCS 480-694135/2-A	Lab Control Sample	Total/NA	Water	245.1	694135

Analysis Batch: 694442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	694191
MB 480-694191/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	694191
LCS 480-694191/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	694191

General Chemistry

Analysis Batch: 694240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-694240/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

General Chemistry

Analysis Batch: 694329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-215328-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-694329/47	Method Blank	Total/NA	Water	335.4	
HLCS 480-694329/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-694329/23	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-694329/48	Lab Control Sample	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-215328-5

Date Collected: 12/01/23 00:00

Matrix: WQ

Date Received: 12/01/23 15:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	694022	AXK	EET BUF	12/01/23 21:45

Client Sample ID: 001 LAB COMP

Lab Sample ID: 480-215328-6

Date Collected: 12/01/23 00:00

Matrix: Wastewater

Date Received: 12/01/23 15:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	694022	AXK	EET BUF	12/01/23 22:11
Total/NA	Prep	625			694147	JMP	EET BUF	12/04/23 10:06
Total/NA	Analysis	625.1		1	694266	JMM	EET BUF	12/05/23 19:54
Total/NA	Prep	200.7			694191	EMO	EET BUF	12/05/23 08:49
Total/NA	Analysis	200.7 Rev 4.4		1	694442	BMB	EET BUF	12/06/23 02:30
Total/NA	Prep	245.1			694135	NVK	EET BUF	12/04/23 11:34
Total/NA	Analysis	245.1		1	694215	NVK	EET BUF	12/04/23 14:58
Total/NA	Analysis	335.4		1	694329	CLT	EET BUF	12/05/23 09:33
Total/NA	Analysis	SM 4500 H+ B		1	694240	KB	EET BUF	12/04/23 20:49

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-215328-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-215328-5	TRIP BLANK	WQ	12/01/23 00:00	12/01/23 15:59
480-215328-6	001 LAB COMP	Wastewater	12/01/23 00:00	12/01/23 15:59

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: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-181786-34075.1
Client Contact: Jason Gutkowski	Phone: 3154363605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D		E		
001-1	12/1/23	0609	G	Water			X	X	X	X	X	5	Lab TO
001-2		0809		Water			X	X	X	X	X	3	Composite
001-3		1009					X	X	X	X	X	3	Samples
001-4		1209					X	X	X	X	X	3	
Trip Blank		—						X				1	
													Short Hold Time

480-215328 Chain of Custody

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	Date/Time	Company	Received by	Date/Time	Company
Dan Gutkowski	12/1/23 / 1227	Arcadis	[illegible]	12/1/23 1324	FA
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: 8.0# ICE

Ver: 06/08/2021

12/8/2023

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-215328-1

Login Number: 215328
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	ARCADIS
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	

Attachment E

Flowmeter Certificate of Calibration

Certificate of Calibration

PULSAFEEDER®



Install Date:
12/5/2023

Company Name: Grainger
Address:ACCOUNTS PAYABLE
DEPARTMENT
MW-H11
PALATINE, IL 60038

Part Number	Item Description	Serial Number
MTR304-G	N L MTR,1.0” NPT, 50GPM, 1.0GPC	23001489-NL



This is to affirm that the following electronic contacting Multi-Jet water meter was tested in accordance with American Water Works Association Specifications C708 and achieved accuracy results +/- 1 ½%. The meter calibration is good for 1 year from the date of install.

PULSAFEEDER

27101 Airport Road
Punta Gorda, FL 33982
Phone: 941-575-3800
www.pulsatron.com

ARCADIS

Ms. Traserra Adams
Industrial Waste Section
Buffalo Sewer Authority Treatment Plant
90 West Ferry Street
Buffalo, NY 14213-1799

Arcadis of New York, Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse, NY 13202
United States
Phone: 315 446 9120
Fax: 315 449 0017
www.arcadis.com

Date: March 29, 2024
Our Ref: 30185775
Subject: **Discharge Monitoring Report – First Quarter 2024**
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY 14213
BSA Discharge Permit # 21-07-BU174

Dear Ms. Adams,

On behalf of Bristol-Myers Squibb Company, Arcadis of New York, Inc. (Arcadis) is pleased to submit this first quarter 2024 Discharge Monitoring Report (DMR) for the above-referenced site, which covers January 1 to March 31, 2024. The monthly discharge sampling and DMR preparation were completed in accordance with the Buffalo Sewer Authority (BSA) Sampling Measurement and Analytical Guidelines Sheet. A total of 91,790 gallons of water were discharged during the reporting period (i.e., flow meter totalizer readings from 12/26/2023 to 3/26/2024). Laboratory analytical results indicate that the remedial system operated within BSA permit requirements during the first quarter of 2024.

The sampling protocol and calculated discharges are based on the following: (1) total flows are a daily average taken over approximately 7 days; and (2) monthly composite samples are collected over an 8-hour period, where grab samples are collected every 2 hours. A total of four grab samples are collected throughout the 8-hour period. The discharge sample point location, following carbon treatment, is labeled as "C001 Sample Location" on the Process Flow Diagram (**Attachment A**). The Sample Collection and Log Sheets for the January, February, and March monthly sampling events are provided in **Attachment B**.

The monthly grab samples were submitted to Eurofins TestAmerica in Amherst, New York, where samples are composited and analyzed for pH via Method 4500 H+B, Total Mercury via United States Environmental Protection Agency (EPA) Method 245.1, Total Zinc via EPA Method 200.7, Total Cyanide via EPA Method 335.4, Volatile Organic Compounds via EPA Method 624.1, and Semi-Volatile Organic Compounds via EPA Method 625.1.

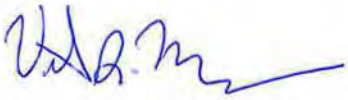
Laboratory analytical results and average daily flows are provided in the Quarterly Analytical Data Table (**Attachment C**). No exceedances of Daily Maximum or Maximum Allowable Instantaneous Discharge Limitations were observed during the reporting period. BSA Permit Specific Conditions require reporting of any compounds analyzed by EPA Methods 624 and 625 that are detected at a concentration above a threshold of 0.01 milligrams per liter (mg/L). In January, February, and March 2024, there were no detections above the reporting threshold. The laboratory analytical data packages are provided in **Attachment D**.

Ms. Traserra Adams
Buffalo Sewer Authority Treatment Plant
March 29, 2024

If you have any questions or would like to discuss further, please feel free to contact the undersigned.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation.

Signed on behalf of Bristol-Myers Squibb Company and submitted by:



Vincent S. Maresco
Arcadis of New York, Inc.
Project Manager

Email: Vin.Maresco@arcadis.com
Direct Line: 315 671 9256

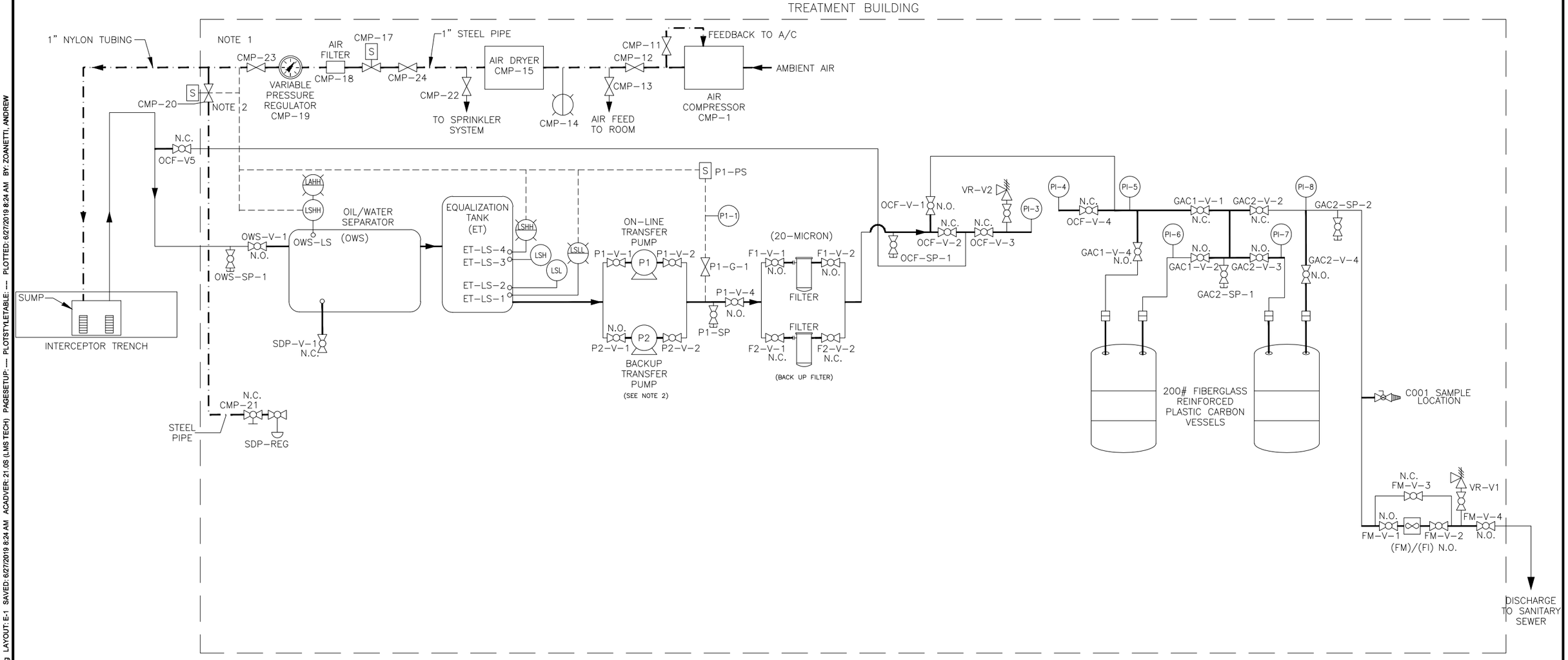
CC. Richard Mator, BMS
John Alonzo, de maximis, inc.
Michael J. Hecker, Hodgson Russ LLP
Katie Hoelscher, NFG

Attachments:

- A Process Flow Diagram
- B Sample Collection and Log Sheets for Monthly Sampling Events
- C Quarterly Analytical Data Table
- D Laboratory Analytical Data Packages

Attachment A

Process Flow Diagram



NOTES:

1. SOLENOID VALVE IS ACTIVATED TO THE OFF-POSITION UNDER ANY OF THE FOLLOWING CONDITIONS:
   a) LSHH AT THE OIL-WATER SEPARATOR;
   b) LSHH AT THE EQUILIZATION TANK IS ACTIVATED;
   c) P1-PS HIGH PUMP DISCHARGE PRESSURE SWISWITCH IS ACTIVATED.

2. USE OF TRANSFER PUMPS IS ALTERED ON A QUARTERLY BASIS.

CITY: SYRACUSE, NY DIV/GROUP: DB: PM: TM: LYR:ON=*;OFF=*REF*
C:\Users\AZoianetti\Documents\Bristol-Myers Squibb\BMS Buffalo, NY\ATTACHMENT A.dwg LAYOUT: E-1 SAVED: 6/27/2019 8:24 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 6/27/2019 8:24 AM BY: ZOANETTI, ANDREW
XREFS:
TITLE

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REUSED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name

Professional Engineer's No.

State	Date Signed	Project Mgr.
Designed by	Drawn by	Checked by

ARCADIS Design & Consultancy for natural and built assets
ARCADIS OF NEW YORK, INC.

NO ALTERATIONS PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

IROQUOIS GAS/WESTWOOD PHARMACEUTICALS TERRESTRIAL SITE NO. 915141A
120 DART STREET AND 40 BRADLEY STREET, BUFFALO, NY

PROCESS FLOW DIAGRAM

ARCADIS Project No.
B0087370.0000.00001

Date
SEPTEMBER 2017

ARCADIS
ARCADIS OF NEW YORK, INC.
110 W. FAYETTE ST., STE 300
SYRACUSE, NY 13202
TEL. 315.446.9120

PFD

Attachment B

Sample Collection and Log Sheets for Monthly Sampling Events

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm **Permit #:** 12-05-BU174

Sample Location: 001 **Sample Type:** Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40ml. clear vials every two hours.

Sample Date	1/4/~~23~~ 24 (U)	→	→	→	JTG
Sample Time	0717	0917	1117	1317	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.39	7.24	7.39	7.41	JTG
Weather	28°F Cloudy	26°F sun/clouds	26°F sun/clouds	26°F sun/clouds	JTG
Comments	None	None	None	None	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski
Sample Technician

1/4/~~23~~ 24 (U)
Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm **Permit #:** 12-05-BU174

Sample Location: 001 **Sample Type:** Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40mL clear vials every two hours.

Sample Date	2/1/24	→	→	→	JTG
Sample Time	0605	0805	1005	1205	JTG
Sample Observations	Clear	Clear	Clear	Clear	JTG
pH Measurement	7.27	7.39	7.32	7.21	JTG
Weather	35°F Rain	35°F overcast	36°F overcast	37°F overcast	JTG
Comments	Clear	Clear	Clear	Clear	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski — Sample Technician

2/1/24 — Date

SAMPLE COLLECTION and LOG SHEET

Project Name: Iroqois Gas/Westwood Pharm **Permit #:** 12-05-BU174

Sample Location: 001 **Sample Type:** Monthly

Parameters: pH, Total Mercury, Total Cyanide, EPA Test Procedure 625

Sampling Equipment: N/A - Manual

Sample Vol/Freq: One 1L-amber unpreserved glass bottle and two 40ml. clear vials every two hours.

Sample Date	3/5/24				JTG
Sample Time	0558	0758	0958	1158	JTG
Sample Observations	Clear	Clear	Clear	clear	JTG
pH Measurement	7.42	7.31	7.41	7.47	JTG
Weather	50°F Clear	53°F Sunny	62°F Sunny	64°F Sunny	JTG
Comments	None	None	None	None	JTG

*sample collection and handling comply with the guidelines established by the Environmental Protection Agency in 40 CFR Part 136 and as ammended.

**pH will be analyzed at the lab once grab samples are composited.

Jason Gutkowski 3/5/24

Sample Technician Date

Attachment C

Quarterly Analytical Data Table

Quarterly Analytical Data Table
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY
BSA Discharge Permit No. 18-07-BU174

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	12/26/2023	1/4/2024	1/11/2024	1/18/2024	1/24/2024	2/1/2024	2/7/2024
Totalizer	gal	NA	1,491,209	1,501,147	1,507,149	1,515,471	1,521,531	1,531,025	1,538,098
Total Mercury	lbs	0.00001**	NS	ND	NS	NS	NS	ND	NS
Total Zinc	lbs	3.0**	NS	ND	NS	NS	NS	1.68E-05 J B	NS
Total Cyanide	lbs	7.93**	NS	1.47E-03	NS	NS	NS	1.88E-04	NS
Total VOCs	mg/L	NA	NS	ND *+	NS	NS	NS	ND	NS
Total SVOCs	mg/L	NA	NS	ND *1	NS	NS	NS	1.75E-03 J	NS
pH	SU	5.0-12.0	NS	7.2 HF	NS	NS	NS	7.4 HF	NS
Total Daily Flow	gal	14,400	-	1,104	857	1,189	1,010	1,187	1,179

Sampling Parameter	Units	Daily Maximum Limit per BSA Permit	2/13/2024	2/23/2024	2/29/2024	3/5/2024	3/12/2024	3/19/2024	3/26/2024
Totalizer	gal	NA	1,544,918	1,553,904	1,558,735	1,562,776	1,568,766	1,575,817	1,582,999
Total Mercury	lbs	0.00001**	NS	NS	NS	ND	NS	NS	NS
Total Zinc	lbs	3.0**	NS	NS	NS	1.95E-05 J	NS	NS	NS
Total Cyanide	lbs	7.93**	NS	NS	NS	7.40E-04	NS	NS	NS
Total VOCs	mg/L	NA	NS	NS	NS	ND	NS	NS	NS
Total SVOCs	mg/L	NA	NS	NS	NS	ND	NS	NS	NS
pH	SU	5.0-12.0	NS	NS	NS	7.7 HF	NS	NS	NS
Total Daily Flow	gal	14,400	1,137	899	805	808	856	1,007	1,026

Notes:

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B = Compound was found in the blank and the sample.
HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at clients request. Analytical performed as required and in compliance by BSA permit.
*1 = LCS/LCSD RPD exceeds control limits.
*+ = LCS and/or LCSD is outside acceptance limits, high biased.
NA = Not Applicable
ND = Not Detected at the reporting limit
NS = Not Sampled
gal = Gallons
lbs = Pounds
mg/L = Milligrams per liter
SU = Standard Units
** = Maximum Allowable Instantaneous Discharge limits are also included in the permit. All analytical data for this quarter in in compliance with the Maximum Allowable Instantaneous Discharge limits. Analytical results are not presented in this table, they can be found in the attached analytical reports.

The permittee must report any compound whose concentration is greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by this test procedure, which may cause or contribute to a violation of water quality incorporated into the permit.

Start of quarter values

Attachment D

Laboratory Analytical Data Packages

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 1/16/2024 2:21:39 PM

JOB DESCRIPTION

Monthly Testing
Monthly Testing

JOB NUMBER

480-216167-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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



Generated
1/16/2024 2:21:39 PM

Authorized for release by
Wyatt Watson, Project Management Assistant I
Wyatt.Watson@et.eurofinsus.com
Designee for
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Job Narrative
480-216167-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/4/2024 1:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8º C.

GC/MS VOA
Method 624.1: The continuing calibration verification (CCV) associated with batch 480-697061 recovered above the upper control limit for 1,1,1-Trichloroethane, Carbon tetrachloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (480-216167-5) and 001 LAB COMP (480-216167-6).

Method 624.1: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-697061 recovered outside control limits for the following analytes: Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (480-216167-5) and 001 LAB COMP (480-216167-6).

Method 624.1: The following Volatile sample was composited by the laboratory on 01/04/2024 as requested by the client: 001 LAB COMP (480-216167-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

GC/MS Semi VOA
Method 625.1: The continuing calibration verification (CCV) associated with batch 480-697311 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: 001 LAB COMP (480-216167-6).

Method 625.1: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-697224 and analytical batch 480-697311 recovered outside control limits for the following analytes: Benzidine.

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-216167-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-697224.

Job ID: 480-216167-1 (Continued) Eurofins Buffalo

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-216167-5

No Detections.

Client Sample ID: 001 LAB COMP — Lab Sample ID: 480-216167-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.16		0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	16.8	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Client Sample ID: TRIP BLANK

Date Collected: 01/04/24 00:00
Date Received: 01/04/24 13:25

Lab Sample ID: 480-216167-5

Matrix: WQ

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			01/04/24 16:34	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			01/04/24 16:34	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			01/04/24 16:34	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			01/04/24 16:34	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			01/04/24 16:34	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			01/04/24 16:34	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			01/04/24 16:34	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			01/04/24 16:34	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			01/04/24 16:34	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			01/04/24 16:34	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			01/04/24 16:34	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			01/04/24 16:34	1
Acrolein	ND		100	17	ug/L			01/04/24 16:34	1
Acrylonitrile	ND		50	1.9	ug/L			01/04/24 16:34	1
Benzene	ND		5.0	0.60	ug/L			01/04/24 16:34	1
Bromoform	ND		5.0	0.47	ug/L			01/04/24 16:34	1
Bromomethane	ND		5.0	1.2	ug/L			01/04/24 16:34	1
Carbon tetrachloride	ND	*+	5.0	0.51	ug/L			01/04/24 16:34	1
Chlorobenzene	ND		5.0	0.48	ug/L			01/04/24 16:34	1
Dibromochloromethane	ND		5.0	0.41	ug/L			01/04/24 16:34	1
Chloroethane	ND		5.0	0.87	ug/L			01/04/24 16:34	1
Chloroform	ND		5.0	0.54	ug/L			01/04/24 16:34	1
Chloromethane	ND		5.0	0.64	ug/L			01/04/24 16:34	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			01/04/24 16:34	1
Bromodichloromethane	ND		5.0	0.54	ug/L			01/04/24 16:34	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			01/04/24 16:34	1
Ethylbenzene	ND		5.0	0.46	ug/L			01/04/24 16:34	1
Methylene Chloride	ND		5.0	0.81	ug/L			01/04/24 16:34	1
Tetrachloroethene	ND		5.0	0.34	ug/L			01/04/24 16:34	1
Toluene	ND		5.0	0.45	ug/L			01/04/24 16:34	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			01/04/24 16:34	1
Trichloroethene	ND		5.0	0.60	ug/L			01/04/24 16:34	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			01/04/24 16:34	1
Vinyl chloride	ND		5.0	0.75	ug/L			01/04/24 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*01/04/24 16:34*	*1*
4-Bromofluorobenzene (Surr)	*96*		*76 - 123*		*01/04/24 16:34*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*01/04/24 16:34*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*01/04/24 16:34*	*1*

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Client Sample ID: 001 LAB COMP

Date Collected: 01/04/24 00:00
Date Received: 01/04/24 13:25

Lab Sample ID: 480-216167-6

Matrix: Wastewater

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			01/04/24 16:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			01/04/24 16:58	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			01/04/24 16:58	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			01/04/24 16:58	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			01/04/24 16:58	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			01/04/24 16:58	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			01/04/24 16:58	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			01/04/24 16:58	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			01/04/24 16:58	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			01/04/24 16:58	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			01/04/24 16:58	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			01/04/24 16:58	1
Acrolein	ND		100	17	ug/L			01/04/24 16:58	1
Acrylonitrile	ND		50	1.9	ug/L			01/04/24 16:58	1
Benzene	ND		5.0	0.60	ug/L			01/04/24 16:58	1
Bromoform	ND		5.0	0.47	ug/L			01/04/24 16:58	1
Bromomethane	ND		5.0	1.2	ug/L			01/04/24 16:58	1
Carbon tetrachloride	ND	*+	5.0	0.51	ug/L			01/04/24 16:58	1
Chlorobenzene	ND		5.0	0.48	ug/L			01/04/24 16:58	1
Dibromochloromethane	ND		5.0	0.41	ug/L			01/04/24 16:58	1
Chloroethane	ND		5.0	0.87	ug/L			01/04/24 16:58	1
Chloroform	ND		5.0	0.54	ug/L			01/04/24 16:58	1
Chloromethane	ND		5.0	0.64	ug/L			01/04/24 16:58	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			01/04/24 16:58	1
Bromodichloromethane	ND		5.0	0.54	ug/L			01/04/24 16:58	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			01/04/24 16:58	1
Ethylbenzene	ND		5.0	0.46	ug/L			01/04/24 16:58	1
Methylene Chloride	ND		5.0	0.81	ug/L			01/04/24 16:58	1
Tetrachloroethene	ND		5.0	0.34	ug/L			01/04/24 16:58	1
Toluene	ND		5.0	0.45	ug/L			01/04/24 16:58	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			01/04/24 16:58	1
Trichloroethene	ND		5.0	0.60	ug/L			01/04/24 16:58	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			01/04/24 16:58	1
Vinyl chloride	ND		5.0	0.75	ug/L			01/04/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*68 - 130*		*01/04/24 16:58*	*1*
4-Bromofluorobenzene (Surr)	*96*		*76 - 123*		*01/04/24 16:58*	*1*
Toluene-d8 (Surr)	*101*		*77 - 120*		*01/04/24 16:58*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*01/04/24 16:58*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.6	0.20	ug/L		01/05/24 14:02	01/08/24 14:17	1
1,2-Dichlorobenzene	ND		9.6	0.25	ug/L		01/05/24 14:02	01/08/24 14:17	1
1,2-Diphenylhydrazine	ND		9.6	0.19	ug/L		01/05/24 14:02	01/08/24 14:17	1
1,3-Dichlorobenzene	ND		9.6	0.17	ug/L		01/05/24 14:02	01/08/24 14:17	1
1,4-Dichlorobenzene	ND		9.6	0.20	ug/L		01/05/24 14:02	01/08/24 14:17	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		01/05/24 14:02	01/08/24 14:17	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Client Sample ID: 001 LAB COMP
Date Collected: 01/04/24 00:00
Date Received: 01/04/24 13:25

Lab Sample ID: 480-216167-6
Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.19	ug/L		01/05/24 14:02	01/08/24 14:17	1
2,4-Dimethylphenol	ND		4.8	0.34	ug/L		01/05/24 14:02	01/08/24 14:17	1
2,4-Dinitrophenol	ND		9.6	1.2	ug/L		01/05/24 14:02	01/08/24 14:17	1
2,4-Dinitrotoluene	ND		9.6	0.39	ug/L		01/05/24 14:02	01/08/24 14:17	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		01/05/24 14:02	01/08/24 14:17	1
2-Chlorophenol	ND		4.8	0.16	ug/L		01/05/24 14:02	01/08/24 14:17	1
2-Nitrophenol	ND		4.8	0.17	ug/L		01/05/24 14:02	01/08/24 14:17	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		01/05/24 14:02	01/08/24 14:17	1
4,6-Dinitro-2-methylphenol	ND		9.6	0.43	ug/L		01/05/24 14:02	01/08/24 14:17	1
4-Bromophenyl phenyl ether	ND		4.8	0.34	ug/L		01/05/24 14:02	01/08/24 14:17	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		01/05/24 14:02	01/08/24 14:17	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		01/05/24 14:02	01/08/24 14:17	1
4-Nitrophenol	ND		14	0.47	ug/L		01/05/24 14:02	01/08/24 14:17	1
Acenaphthene	ND		4.8	0.19	ug/L		01/05/24 14:02	01/08/24 14:17	1
Acenaphthylene	ND		4.8	0.21	ug/L		01/05/24 14:02	01/08/24 14:17	1
Anthracene	ND		4.8	0.34	ug/L		01/05/24 14:02	01/08/24 14:17	1
Benzidine	ND	*1	77	13	ug/L		01/05/24 14:02	01/08/24 14:17	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		01/05/24 14:02	01/08/24 14:17	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		01/05/24 14:02	01/08/24 14:17	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		01/05/24 14:02	01/08/24 14:17	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		01/05/24 14:02	01/08/24 14:17	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		01/05/24 14:02	01/08/24 14:17	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		01/05/24 14:02	01/08/24 14:17	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		01/05/24 14:02	01/08/24 14:17	1
Bis(2-ethylhexyl) phthalate	ND		9.6	0.29	ug/L		01/05/24 14:02	01/08/24 14:17	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		01/05/24 14:02	01/08/24 14:17	1
Chrysene	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1
Decane	ND		9.6	0.38	ug/L		01/05/24 14:02	01/08/24 14:17	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		01/05/24 14:02	01/08/24 14:17	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		01/05/24 14:02	01/08/24 14:17	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		01/05/24 14:02	01/08/24 14:17	1
Diethyl phthalate	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		01/05/24 14:02	01/08/24 14:17	1
Fluoranthene	ND		4.8	0.38	ug/L		01/05/24 14:02	01/08/24 14:17	1
Fluorene	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		01/05/24 14:02	01/08/24 14:17	1
Hexachlorocyclopentadiene	ND		9.6	0.51	ug/L		01/05/24 14:02	01/08/24 14:17	1
Hexachloroethane	ND		4.8	0.14	ug/L		01/05/24 14:02	01/08/24 14:17	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		01/05/24 14:02	01/08/24 14:17	1
Isophorone	ND		4.8	0.18	ug/L		01/05/24 14:02	01/08/24 14:17	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		01/05/24 14:02	01/08/24 14:17	1
N-Nitrosodimethylamine	ND		9.6	0.14	ug/L		01/05/24 14:02	01/08/24 14:17	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		01/05/24 14:02	01/08/24 14:17	1
Naphthalene	ND		4.8	0.21	ug/L		01/05/24 14:02	01/08/24 14:17	1
Nitrobenzene	ND		4.8	0.19	ug/L		01/05/24 14:02	01/08/24 14:17	1
Pentachlorophenol	ND		9.6	0.76	ug/L		01/05/24 14:02	01/08/24 14:17	1
Phenanthrene	ND		4.8	0.29	ug/L		01/05/24 14:02	01/08/24 14:17	1

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Client Sample ID: 001 LAB COMP

Date Collected: 01/04/24 00:00
Date Received: 01/04/24 13:25

Lab Sample ID: 480-216167-6

Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.8	0.084	ug/L		01/05/24 14:02	01/08/24 14:17	1
Pyrene	ND		4.8	0.34	ug/L		01/05/24 14:02	01/08/24 14:17	1
n-Octadecane	ND		9.6	0.29	ug/L		01/05/24 14:02	01/08/24 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*111*		*52 - 151*	*01/05/24 14:02*	*01/08/24 14:17*	*1*
2-Fluorobiphenyl	*100*		*44 - 120*	*01/05/24 14:02*	*01/08/24 14:17*	*1*
2-Fluorophenol (Surr)	*56*		*17 - 120*	*01/05/24 14:02*	*01/08/24 14:17*	*1*
Nitrobenzene-d5 (Surr)	*91*		*15 - 314*	*01/05/24 14:02*	*01/08/24 14:17*	*1*
p-Terphenyl-d14 (Surr)	*81*		*22 - 125*	*01/05/24 14:02*	*01/08/24 14:17*	*1*
Phenol-d5 (Surr)	*33*		*8 - 424*	*01/05/24 14:02*	*01/08/24 14:17*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		01/08/24 08:30	01/09/24 18:22	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/05/24 12:08	01/05/24 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.16**		0.010	0.0041	mg/L			01/10/24 08:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.2**	**HF**	0.1	0.1	SU			01/09/24 16:14	1
Temperature (SM 4500 H+ B)	**16.8**	**HF**	0.001	0.001	Degrees C			01/09/24 16:14	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	BFB	TOL	DBFM				
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)				
480-216167-6	001 LAB COMP	109	96	101	106				

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	BFB	TOL	DBFM				
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)				
LCS 480-697061/6	Lab Control Sample	105	99	101	106				
MB 480-697061/8	Method Blank	107	98	103	110				

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	BFB	TOL	DBFM				
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)				
480-216167-5	TRIP BLANK	103	96	100	102				

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)		
480-216167-6	001 LAB COMP	111	100	56	91	81	33		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-216167-1
Project/Site: Monthly Testing

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TBP (52-151)	FBP (44-120)	2FP (17-120)	NBZ (15-314)	TPHd14 (22-125)	PHL (8-424)		
LCS 480-697224/2-A	Lab Control Sample	130	96	54	89	79	36		
LCSD 480-697224/3-A	Lab Control Sample Dup	136	100	58	92	82	36		
MB 480-697224/1-A	Method Blank	99	96	58	92	99	35		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-697061/8
Matrix: Water
Analysis Batch: 697061

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			01/04/24 12:55	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			01/04/24 12:55	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			01/04/24 12:55	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			01/04/24 12:55	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			01/04/24 12:55	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			01/04/24 12:55	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			01/04/24 12:55	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			01/04/24 12:55	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			01/04/24 12:55	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			01/04/24 12:55	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			01/04/24 12:55	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			01/04/24 12:55	1
Acrolein	ND		100	17	ug/L			01/04/24 12:55	1
Acrylonitrile	ND		50	1.9	ug/L			01/04/24 12:55	1
Benzene	ND		5.0	0.60	ug/L			01/04/24 12:55	1
Bromoform	ND		5.0	0.47	ug/L			01/04/24 12:55	1
Bromomethane	ND		5.0	1.2	ug/L			01/04/24 12:55	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			01/04/24 12:55	1
Chlorobenzene	ND		5.0	0.48	ug/L			01/04/24 12:55	1
Dibromochloromethane	ND		5.0	0.41	ug/L			01/04/24 12:55	1
Chloroethane	ND		5.0	0.87	ug/L			01/04/24 12:55	1
Chloroform	ND		5.0	0.54	ug/L			01/04/24 12:55	1
Chloromethane	ND		5.0	0.64	ug/L			01/04/24 12:55	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			01/04/24 12:55	1
Bromodichloromethane	ND		5.0	0.54	ug/L			01/04/24 12:55	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			01/04/24 12:55	1
Ethylbenzene	ND		5.0	0.46	ug/L			01/04/24 12:55	1
Methylene Chloride	ND		5.0	0.81	ug/L			01/04/24 12:55	1
Tetrachloroethene	ND		5.0	0.34	ug/L			01/04/24 12:55	1
Toluene	ND		5.0	0.45	ug/L			01/04/24 12:55	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			01/04/24 12:55	1
Trichloroethene	ND		5.0	0.60	ug/L			01/04/24 12:55	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			01/04/24 12:55	1
Vinyl chloride	ND		5.0	0.75	ug/L			01/04/24 12:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*68 - 130*		*01/04/24 12:55*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*01/04/24 12:55*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*01/04/24 12:55*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*01/04/24 12:55*	*1*

Lab Sample ID: LCS 480-697061/6
Matrix: Water
Analysis Batch: 697061

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	27.5		ug/L		138	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	19.2		ug/L		96	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-697061/6
Matrix: Water
Analysis Batch: 697061

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	19.7		ug/L		98	52 - 150
1,1-Dichloroethane	20.0	21.9		ug/L		109	59 - 155
1,1-Dichloroethene	20.0	23.0		ug/L		115	1 - 234
1,2-Dichlorobenzene	20.0	20.5		ug/L		102	18 - 190
1,2-Dichloroethane	20.0	21.4		ug/L		107	49 - 155
1,2-Dichloropropane	20.0	20.1		ug/L		100	1 - 210
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	59 - 156
1,4-Dichlorobenzene	20.0	19.9		ug/L		100	18 - 190
2-Chloroethyl vinyl ether	20.0	17.4	J	ug/L		87	1 - 305
Benzene	20.0	21.2		ug/L		106	37 - 151
Bromoform	20.0	21.8		ug/L		109	45 - 169
Bromomethane	20.0	26.3		ug/L		132	1 - 242
Carbon tetrachloride	20.0	28.5	*+	ug/L		143	70 - 140
Chlorobenzene	20.0	20.4		ug/L		102	37 - 160
Dibromochloromethane	20.0	21.5		ug/L		108	53 - 149
Chloroethane	20.0	22.6		ug/L		113	14 - 230
Chloroform	20.0	22.1		ug/L		111	51 - 138
Chloromethane	20.0	20.8		ug/L		104	1 - 273
cis-1,3-Dichloropropene	20.0	20.3		ug/L		101	1 - 227
Bromodichloromethane	20.0	21.5		ug/L		108	35 - 155
Ethylbenzene	20.0	21.1		ug/L		106	37 - 162
Methylene Chloride	20.0	21.6		ug/L		108	1 - 221
Tetrachloroethene	20.0	22.1		ug/L		111	64 - 148
Toluene	20.0	20.8		ug/L		104	47 - 150
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	17 - 183
Trichloroethene	20.0	22.1		ug/L		110	71 - 157
Trichlorofluoromethane	20.0	34.9		ug/L		174	17 - 181
Vinyl chloride	20.0	27.9		ug/L		140	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*101*		*77 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-697224/1-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		01/05/24 14:02	01/08/24 13:02	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		01/05/24 14:02	01/08/24 13:02	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		01/05/24 14:02	01/08/24 13:02	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		01/05/24 14:02	01/08/24 13:02	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		01/05/24 14:02	01/08/24 13:02	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		01/05/24 14:02	01/08/24 13:02	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-697224/1-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		01/05/24 14:02	01/08/24 13:02	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		01/05/24 14:02	01/08/24 13:02	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		01/05/24 14:02	01/08/24 13:02	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		01/05/24 14:02	01/08/24 13:02	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		01/05/24 14:02	01/08/24 13:02	1
2-Chlorophenol	ND		5.0	0.17	ug/L		01/05/24 14:02	01/08/24 13:02	1
2-Nitrophenol	ND		5.0	0.18	ug/L		01/05/24 14:02	01/08/24 13:02	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		01/05/24 14:02	01/08/24 13:02	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		01/05/24 14:02	01/08/24 13:02	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		01/05/24 14:02	01/08/24 13:02	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		01/05/24 14:02	01/08/24 13:02	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		01/05/24 14:02	01/08/24 13:02	1
4-Nitrophenol	ND		15	0.49	ug/L		01/05/24 14:02	01/08/24 13:02	1
Acenaphthene	ND		5.0	0.20	ug/L		01/05/24 14:02	01/08/24 13:02	1
Acenaphthylene	ND		5.0	0.22	ug/L		01/05/24 14:02	01/08/24 13:02	1
Anthracene	ND		5.0	0.35	ug/L		01/05/24 14:02	01/08/24 13:02	1
Benzidine	ND		80	14	ug/L		01/05/24 14:02	01/08/24 13:02	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		01/05/24 14:02	01/08/24 13:02	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		01/05/24 14:02	01/08/24 13:02	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		01/05/24 14:02	01/08/24 13:02	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		01/05/24 14:02	01/08/24 13:02	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		01/05/24 14:02	01/08/24 13:02	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		01/05/24 14:02	01/08/24 13:02	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		01/05/24 14:02	01/08/24 13:02	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		01/05/24 14:02	01/08/24 13:02	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		01/05/24 14:02	01/08/24 13:02	1
Chrysene	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1
Decane	ND		10	0.40	ug/L		01/05/24 14:02	01/08/24 13:02	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		01/05/24 14:02	01/08/24 13:02	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		01/05/24 14:02	01/08/24 13:02	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		01/05/24 14:02	01/08/24 13:02	1
Diethyl phthalate	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		01/05/24 14:02	01/08/24 13:02	1
Fluoranthene	ND		5.0	0.40	ug/L		01/05/24 14:02	01/08/24 13:02	1
Fluorene	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		01/05/24 14:02	01/08/24 13:02	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		01/05/24 14:02	01/08/24 13:02	1
Hexachloroethane	ND		5.0	0.15	ug/L		01/05/24 14:02	01/08/24 13:02	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		01/05/24 14:02	01/08/24 13:02	1
Isophorone	ND		5.0	0.19	ug/L		01/05/24 14:02	01/08/24 13:02	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		01/05/24 14:02	01/08/24 13:02	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		01/05/24 14:02	01/08/24 13:02	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		01/05/24 14:02	01/08/24 13:02	1
Naphthalene	ND		5.0	0.22	ug/L		01/05/24 14:02	01/08/24 13:02	1
Nitrobenzene	ND		5.0	0.20	ug/L		01/05/24 14:02	01/08/24 13:02	1
Pentachlorophenol	ND		10	0.79	ug/L		01/05/24 14:02	01/08/24 13:02	1
Phenanthrene	ND		5.0	0.30	ug/L		01/05/24 14:02	01/08/24 13:02	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-697224/1-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		01/05/24 14:02	01/08/24 13:02	1
Pyrene	ND		5.0	0.35	ug/L		01/05/24 14:02	01/08/24 13:02	1
n-Octadecane	ND		10	0.30	ug/L		01/05/24 14:02	01/08/24 13:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*52 - 151*	*01/05/24 14:02*	*01/08/24 13:02*	*1*
2-Fluorobiphenyl	*96*		*44 - 120*	*01/05/24 14:02*	*01/08/24 13:02*	*1*
2-Fluorophenol (Surr)	*58*		*17 - 120*	*01/05/24 14:02*	*01/08/24 13:02*	*1*
Nitrobenzene-d5 (Surr)	*92*		*15 - 314*	*01/05/24 14:02*	*01/08/24 13:02*	*1*
p-Terphenyl-d14 (Surr)	*99*		*22 - 125*	*01/05/24 14:02*	*01/08/24 13:02*	*1*
Phenol-d5 (Surr)	*35*		*8 - 424*	*01/05/24 14:02*	*01/08/24 13:02*	*1*

Lab Sample ID: LCS 480-697224/2-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	37.9		ug/L		76	44 - 142
1,2-Dichlorobenzene	50.0	30.9		ug/L		62	32 - 129
1,3-Dichlorobenzene	50.0	31.1		ug/L		62	1 - 172
1,4-Dichlorobenzene	50.0	31.5		ug/L		63	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	30.5		ug/L		61	36 - 166
2,4,6-Trichlorophenol	50.0	48.0		ug/L		96	37 - 144
2,4-Dichlorophenol	50.0	41.4		ug/L		83	39 - 135
2,4-Dimethylphenol	50.0	43.1		ug/L		86	32 - 120
2,4-Dinitrophenol	100	82.5		ug/L		83	1 - 191
2,4-Dinitrotoluene	50.0	44.4		ug/L		89	39 - 139
2,6-Dinitrotoluene	50.0	45.0		ug/L		90	50 - 158
2-Chloronaphthalene	50.0	45.3		ug/L		91	60 - 120
2-Chlorophenol	50.0	35.1		ug/L		70	23 - 134
2-Nitrophenol	50.0	43.7		ug/L		87	29 - 182
3,3'-Dichlorobenzidine	100	101		ug/L		101	1 - 262
4,6-Dinitro-2-methylphenol	100	102		ug/L		102	1 - 181
4-Bromophenyl phenyl ether	50.0	47.4		ug/L		95	53 - 127
4-Chloro-3-methylphenol	50.0	41.0		ug/L		82	22 - 147
4-Chlorophenyl phenyl ether	50.0	45.7		ug/L		91	25 - 158
4-Nitrophenol	100	58.4		ug/L		58	1 - 132
Acenaphthene	50.0	45.2		ug/L		90	47 - 145
Acenaphthylene	50.0	44.8		ug/L		90	33 - 145
Anthracene	50.0	47.0		ug/L		94	27 - 133
Benzidine	100	20.7	J	ug/L		21	1 - 120
Benzo[a]anthracene	50.0	47.5		ug/L		95	33 - 143
Benzo[a]pyrene	50.0	51.0		ug/L		102	17 - 163
Benzo[b]fluoranthene	50.0	46.7		ug/L		93	24 - 159
Benzo[g,h,i]perylene	50.0	48.2		ug/L		96	1 - 219
Benzo[k]fluoranthene	50.0	42.1		ug/L		84	11 - 162
Bis(2-chloroethoxy)methane	50.0	38.2		ug/L		76	33 - 184
Bis(2-chloroethyl)ether	50.0	36.5		ug/L		73	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-697224/2-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	44.4		ug/L		89	8 - 158
Butyl benzyl phthalate	50.0	41.2		ug/L		82	1 - 152
Chrysene	50.0	47.6		ug/L		95	17 - 168
Di-n-butyl phthalate	50.0	46.3		ug/L		93	1 - 120
Di-n-octyl phthalate	50.0	49.5		ug/L		99	4 - 146
Dibenz(a,h)anthracene	50.0	52.5		ug/L		105	1 - 227
Diethyl phthalate	50.0	43.7		ug/L		87	1 - 120
Dimethyl phthalate	50.0	44.6		ug/L		89	1 - 120
Fluoranthene	50.0	52.2		ug/L		104	26 - 137
Fluorene	50.0	43.4		ug/L		87	59 - 121
Hexachlorobenzene	50.0	54.2		ug/L		108	1 - 152
Hexachlorocyclopentadiene	50.0	49.3		ug/L		99	5 - 120
Hexachloroethane	50.0	27.8		ug/L		56	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	55.5		ug/L		111	1 - 171
Isophorone	50.0	41.0		ug/L		82	21 - 196
N-Nitrosodi-n-propylamine	50.0	34.1		ug/L		68	1 - 230
N-Nitrosodiphenylamine	50.0	45.9		ug/L		92	54 - 125
Naphthalene	50.0	39.3		ug/L		79	21 - 133
Nitrobenzene	50.0	41.5		ug/L		83	35 - 180
Pentachlorophenol	100	113		ug/L		113	14 - 176
Phenanthrene	50.0	45.8		ug/L		92	54 - 120
Phenol	50.0	17.4		ug/L		35	5 - 120
Pyrene	50.0	37.0		ug/L		74	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*130*		*52 - 151*
2-Fluorobiphenyl	*96*		*44 - 120*
2-Fluorophenol (Surr)	*54*		*17 - 120*
Nitrobenzene-d5 (Surr)	*89*		*15 - 314*
p-Terphenyl-d14 (Surr)	*79*		*22 - 125*
Phenol-d5 (Surr)	*36*		*8 - 424*

Lab Sample ID: LCSD 480-697224/3-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 697224

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	39.5		ug/L		79	44 - 142	4	34
1,2-Dichlorobenzene	50.0	32.7		ug/L		65	32 - 129	6	38
1,3-Dichlorobenzene	50.0	33.6		ug/L		67	1 - 172	8	37
1,4-Dichlorobenzene	50.0	33.2		ug/L		66	20 - 124	5	40
2,2'-Oxybis(1-chloropropane)	50.0	31.6		ug/L		63	36 - 166	3	36
2,4,6-Trichlorophenol	50.0	49.6		ug/L		99	37 - 144	3	20
2,4-Dichlorophenol	50.0	42.6		ug/L		85	39 - 135	3	23
2,4-Dimethylphenol	50.0	45.1		ug/L		90	32 - 120	5	18
2,4-Dinitrophenol	100	88.6		ug/L		89	1 - 191	7	29
2,4-Dinitrotoluene	50.0	46.3		ug/L		93	39 - 139	4	20
2,6-Dinitrotoluene	50.0	46.8		ug/L		94	50 - 158	4	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-697224/3-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 697224

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	45.3		ug/L		91	60 - 120	0	30
2-Chlorophenol			50.0	37.1		ug/L		74	23 - 134	6	26
2-Nitrophenol			50.0	45.4		ug/L		91	29 - 182	4	28
3,3'-Dichlorobenzidine			100	107		ug/L		107	1 - 262	6	31
4,6-Dinitro-2-methylphenol			100	105		ug/L		105	1 - 181	3	30
4-Bromophenyl phenyl ether			50.0	50.9		ug/L		102	53 - 127	7	16
4-Chloro-3-methylphenol			50.0	42.6		ug/L		85	22 - 147	4	16
4-Chlorophenyl phenyl ether			50.0	45.2		ug/L		90	25 - 158	1	15
4-Nitrophenol			100	61.4		ug/L		61	1 - 132	5	24
Acenaphthene			50.0	46.2		ug/L		92	47 - 145	2	25
Acenaphthylene			50.0	45.8		ug/L		92	33 - 145	2	22
Anthracene			50.0	48.7		ug/L		97	27 - 133	4	15
Benzidine			100	ND	*1	ug/L		12	1 - 120	52	50
Benzo[a]anthracene			50.0	48.7		ug/L		97	33 - 143	2	15
Benzo[a]pyrene			50.0	51.6		ug/L		103	17 - 163	1	15
Benzo[b]fluoranthene			50.0	45.2		ug/L		90	24 - 159	3	17
Benzo[g,h,i]perylene			50.0	50.0		ug/L		100	1 - 219	4	19
Benzo[k]fluoranthene			50.0	44.8		ug/L		90	11 - 162	6	19
Bis(2-chloroethoxy)methane			50.0	38.8		ug/L		78	33 - 184	2	23
Bis(2-chloroethyl)ether			50.0	37.9		ug/L		76	12 - 158	4	33
Bis(2-ethylhexyl) phthalate			50.0	45.1		ug/L		90	8 - 158	2	15
Butyl benzyl phthalate			50.0	41.9		ug/L		84	1 - 152	2	15
Chrysene			50.0	48.2		ug/L		96	17 - 168	1	15
Di-n-butyl phthalate			50.0	46.5		ug/L		93	1 - 120	1	15
Di-n-octyl phthalate			50.0	50.6		ug/L		101	4 - 146	2	15
Dibenz(a,h)anthracene			50.0	54.0		ug/L		108	1 - 227	3	18
Diethyl phthalate			50.0	45.2		ug/L		90	1 - 120	3	15
Dimethyl phthalate			50.0	46.2		ug/L		92	1 - 120	3	15
Fluoranthene			50.0	51.1		ug/L		102	26 - 137	2	15
Fluorene			50.0	44.4		ug/L		89	59 - 121	2	18
Hexachlorobenzene			50.0	55.2		ug/L		110	1 - 152	2	15
Hexachlorocyclopentadiene			50.0	52.2		ug/L		104	5 - 120	6	50
Hexachloroethane			50.0	29.9		ug/L		60	40 - 120	7	43
Indeno[1,2,3-cd]pyrene			50.0	57.5		ug/L		115	1 - 171	3	17
Isophorone			50.0	42.8		ug/L		86	21 - 196	4	21
N-Nitrosodi-n-propylamine			50.0	35.1		ug/L		70	1 - 230	3	23
N-Nitrosodiphenylamine			50.0	47.9		ug/L		96	54 - 125	4	15
Naphthalene			50.0	39.6		ug/L		79	21 - 133	1	31
Nitrobenzene			50.0	41.6		ug/L		83	35 - 180	0	27
Pentachlorophenol			100	113		ug/L		113	14 - 176	0	21
Phenanthrene			50.0	46.5		ug/L		93	54 - 120	2	16
Phenol			50.0	17.9		ug/L		36	5 - 120	3	36
Pyrene			50.0	38.9		ug/L		78	52 - 120	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*136*		*52 - 151*
2-Fluorobiphenyl	*100*		*44 - 120*
2-Fluorophenol (Surr)	*58*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-697224/3-A
Matrix: Water
Analysis Batch: 697311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 697224

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*92*		*15 - 314*
p-Terphenyl-d14 (Surr)	*82*		*22 - 125*
Phenol-d5 (Surr)	*36*		*8 - 424*

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-697203/1-A
Matrix: Water
Analysis Batch: 697268

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/05/24 12:08	01/05/24 16:17	1

Lab Sample ID: LCS 480-697203/2-A
Matrix: Water
Analysis Batch: 697268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00678		mg/L		101	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-697627/21
Matrix: Water
Analysis Batch: 697627

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			01/10/24 08:00	1

Lab Sample ID: HLCS 480-697627/22
Matrix: Water
Analysis Batch: 697627

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.402		mg/L		101	90 - 110

Lab Sample ID: LCS 480-697627/23
Matrix: Water
Analysis Batch: 697627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.251		mg/L		100	90 - 110

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-697550/1
Matrix: Water
Analysis Batch: 697550

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101	99 - 101		

Lab Sample ID: 480-216167-6 DU
Matrix: Wastewater
Analysis Batch: 697550

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.2	HF		7.2		SU				0.6	5
Temperature	16.8	HF		16.9		Degrees C				0.4	10

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

GC/MS VOA

Analysis Batch: 697061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-5	TRIP BLANK	Total/NA	WQ	624.1	
480-216167-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-697061/8	Method Blank	Total/NA	Water	624.1	
LCS 480-697061/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 697224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-697224/1-A	Method Blank	Total/NA	Water	625	
LCS 480-697224/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-697224/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 697311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	625.1	697224
MB 480-697224/1-A	Method Blank	Total/NA	Water	625.1	697224
LCS 480-697224/2-A	Lab Control Sample	Total/NA	Water	625.1	697224
LCSD 480-697224/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	697224

Metals

Prep Batch: 697203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-697203/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-697203/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 697237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	200.7	

Analysis Batch: 697268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	245.1	697203
MB 480-697203/1-A	Method Blank	Total/NA	Water	245.1	697203
LCS 480-697203/2-A	Lab Control Sample	Total/NA	Water	245.1	697203

Analysis Batch: 697607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	697237

General Chemistry

Analysis Batch: 697550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-697550/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-216167-6 DU	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	

General Chemistry

Analysis Batch: 697627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216167-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-697627/21	Method Blank	Total/NA	Water	335.4	
HLCS 480-697627/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-697627/23	Lab Control Sample	Total/NA	Water	335.4	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-216167-5
Matrix: WQ
Date Collected: 01/04/24 00:00
Date Received: 01/04/24 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	697061	AXK	EET BUF	01/04/24 16:34

Client Sample ID: 001 LAB COMP

Lab Sample ID: 480-216167-6
Matrix: Wastewater
Date Collected: 01/04/24 00:00
Date Received: 01/04/24 13:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	697061	AXK	EET BUF	01/04/24 16:58
Total/NA	Prep	625			697224	LSC	EET BUF	01/05/24 14:02
Total/NA	Analysis	625.1		1	697311	EMD	EET BUF	01/08/24 14:17
Total/NA	Prep	200.7			697237	ESB	EET BUF	01/08/24 08:30
Total/NA	Analysis	200.7 Rev 4.4		1	697607	BMB	EET BUF	01/09/24 18:22
Total/NA	Prep	245.1			697203	NVK	EET BUF	01/05/24 12:08
Total/NA	Analysis	245.1		1	697268	NVK	EET BUF	01/05/24 17:01
Total/NA	Analysis	335.4		1	697627	CLT	EET BUF	01/10/24 08:19
Total/NA	Analysis	SM 4500 H+ B		1	697550	KB	EET BUF	01/09/24 16:14

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216167-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-216167-5	TRIP BLANK	WQ	01/04/24 00:00	01/04/24 13:25
480-216167-6	001 LAB COMP	Wastewater	01/04/24 00:00	01/04/24 13:25

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

Chain of Custody Record

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Client Information	Sampler: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-181787-34075.1
Client Contact: Jason Gutkowski	Phone: 3154363605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125855			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B		
001-1	1/4/24	0717	G	Water			X	X	X	X	X		Lab To Composite Samples
001-2		0917		Water			X	X	X	X	X		
001-3		1117					X	X	X	X	X		
001-4		1317					X	X	X	X	X		
TripBlank		—						X					Short Hold Time

480-216167 Chain of Custody

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

Sample Disposal (A fee may be assessed if samples are retained longer ...)
☐ 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:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Dan Gutt	1/4/24 1329	Arcadis	Lynn	1-4-24 13:25	TAN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 2.8 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-216167-1

Login Number: 216167
List Number: 1
Creator: Yeager, Brian A

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.	False	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

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JOB DESCRIPTION

Monthly Testing
Monthly Testing

JOB NUMBER

480-216764-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

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.

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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Job Narrative
480-216764-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/1/2024 12:55 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method 624.1: The continuing calibration verification (CCV) associated with batch 480-699741 recovered above the upper control limit for 1,1,1-Trichloroethane, Carbon tetrachloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (480-216764-5) and 001 LAB COMP (480-216764-6).

Method 624.1: The following Volatile sample was composited by the laboratory on 02/02/2024 as requested by the client: 001 LAB COMP (480-216764-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-216764-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-699873.

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-216764-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.99	J	5.0	0.54	ug/L	1		624.1	Total/NA
Methylene Chloride	1.2	J	5.0	0.81	ug/L	1		624.1	Total/NA

Client Sample ID: 001 LAB COMP — Lab Sample ID: 480-216764-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	0.48	J	4.8	0.38	ug/L	1		625.1	Total/NA
Hexachloroethane	0.17	J	4.8	0.14	ug/L	1		625.1	Total/NA
Naphthalene	1.1	J	4.8	0.20	ug/L	1		625.1	Total/NA
Zinc	0.0017	J B	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Cyanide, Total	0.019		0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	18.5	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Client Sample ID: TRIP BLANK

Date Collected: 02/01/24 00:00
Date Received: 02/01/24 12:55

Lab Sample ID: 480-216764-5

Matrix: WQ

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			02/02/24 15:11	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			02/02/24 15:11	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			02/02/24 15:11	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			02/02/24 15:11	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			02/02/24 15:11	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			02/02/24 15:11	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			02/02/24 15:11	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			02/02/24 15:11	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			02/02/24 15:11	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			02/02/24 15:11	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			02/02/24 15:11	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			02/02/24 15:11	1
Acrolein	ND		100	17	ug/L			02/02/24 15:11	1
Acrylonitrile	ND		50	1.9	ug/L			02/02/24 15:11	1
Benzene	ND		5.0	0.60	ug/L			02/02/24 15:11	1
Bromoform	ND		5.0	0.47	ug/L			02/02/24 15:11	1
Bromomethane	ND		5.0	1.2	ug/L			02/02/24 15:11	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			02/02/24 15:11	1
Chlorobenzene	ND		5.0	0.48	ug/L			02/02/24 15:11	1
Dibromochloromethane	ND		5.0	0.41	ug/L			02/02/24 15:11	1
Chloroethane	ND		5.0	0.87	ug/L			02/02/24 15:11	1
Chloroform	**0.99**	**J**	5.0	0.54	ug/L			02/02/24 15:11	1
Chloromethane	ND		5.0	0.64	ug/L			02/02/24 15:11	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			02/02/24 15:11	1
Bromodichloromethane	ND		5.0	0.54	ug/L			02/02/24 15:11	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			02/02/24 15:11	1
Ethylbenzene	ND		5.0	0.46	ug/L			02/02/24 15:11	1
Methylene Chloride	**1.2**	**J**	5.0	0.81	ug/L			02/02/24 15:11	1
Tetrachloroethene	ND		5.0	0.34	ug/L			02/02/24 15:11	1
Toluene	ND		5.0	0.45	ug/L			02/02/24 15:11	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			02/02/24 15:11	1
Trichloroethene	ND		5.0	0.60	ug/L			02/02/24 15:11	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			02/02/24 15:11	1
Vinyl chloride	ND		5.0	0.75	ug/L			02/02/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*		*02/02/24 15:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*02/02/24 15:11*	*1*
Toluene-d8 (Surr)	*98*		*77 - 120*		*02/02/24 15:11*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*02/02/24 15:11*	*1*

Client Sample ID: 001 LAB COMP

Date Collected: 02/01/24 00:00
Date Received: 02/01/24 12:55

Lab Sample ID: 480-216764-6

Matrix: Wastewater

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			02/02/24 15:35	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			02/02/24 15:35	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			02/02/24 15:35	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			02/02/24 15:35	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			02/02/24 15:35	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			02/02/24 15:35	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			02/02/24 15:35	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			02/02/24 15:35	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			02/02/24 15:35	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			02/02/24 15:35	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			02/02/24 15:35	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			02/02/24 15:35	1
Acrolein	ND		100	17	ug/L			02/02/24 15:35	1
Acrylonitrile	ND		50	1.9	ug/L			02/02/24 15:35	1
Benzene	ND		5.0	0.60	ug/L			02/02/24 15:35	1
Bromoform	ND		5.0	0.47	ug/L			02/02/24 15:35	1
Bromomethane	ND		5.0	1.2	ug/L			02/02/24 15:35	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			02/02/24 15:35	1
Chlorobenzene	ND		5.0	0.48	ug/L			02/02/24 15:35	1
Dibromochloromethane	ND		5.0	0.41	ug/L			02/02/24 15:35	1
Chloroethane	ND		5.0	0.87	ug/L			02/02/24 15:35	1
Chloroform	ND		5.0	0.54	ug/L			02/02/24 15:35	1
Chloromethane	ND		5.0	0.64	ug/L			02/02/24 15:35	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			02/02/24 15:35	1
Bromodichloromethane	ND		5.0	0.54	ug/L			02/02/24 15:35	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			02/02/24 15:35	1
Ethylbenzene	ND		5.0	0.46	ug/L			02/02/24 15:35	1
Methylene Chloride	ND		5.0	0.81	ug/L			02/02/24 15:35	1
Tetrachloroethene	ND		5.0	0.34	ug/L			02/02/24 15:35	1
Toluene	ND		5.0	0.45	ug/L			02/02/24 15:35	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			02/02/24 15:35	1
Trichloroethene	ND		5.0	0.60	ug/L			02/02/24 15:35	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			02/02/24 15:35	1
Vinyl chloride	ND		5.0	0.75	ug/L			02/02/24 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*68 - 130*		*02/02/24 15:35*	*1*
4-Bromofluorobenzene (Surr)	*96*		*76 - 123*		*02/02/24 15:35*	*1*
Toluene-d8 (Surr)	*97*		*77 - 120*		*02/02/24 15:35*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*02/02/24 15:35*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		02/05/24 13:51	02/06/24 13:20	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		02/05/24 13:51	02/06/24 13:20	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		02/05/24 13:51	02/06/24 13:20	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		02/05/24 13:51	02/06/24 13:20	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		02/05/24 13:51	02/06/24 13:20	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		02/05/24 13:51	02/06/24 13:20	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1

Client Sample ID: 001 LAB COMP

Date Collected: 02/01/24 00:00
Date Received: 02/01/24 12:55

Lab Sample ID: 480-216764-6

Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		02/05/24 13:51	02/06/24 13:20	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		02/05/24 13:51	02/06/24 13:20	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		02/05/24 13:51	02/06/24 13:20	1
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		02/05/24 13:51	02/06/24 13:20	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		02/05/24 13:51	02/06/24 13:20	1
2-Chlorophenol	ND		4.8	0.16	ug/L		02/05/24 13:51	02/06/24 13:20	1
2-Nitrophenol	ND		4.8	0.17	ug/L		02/05/24 13:51	02/06/24 13:20	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		02/05/24 13:51	02/06/24 13:20	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		02/05/24 13:51	02/06/24 13:20	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		02/05/24 13:51	02/06/24 13:20	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		02/05/24 13:51	02/06/24 13:20	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		02/05/24 13:51	02/06/24 13:20	1
4-Nitrophenol	ND		14	0.46	ug/L		02/05/24 13:51	02/06/24 13:20	1
Acenaphthene	ND		4.8	0.19	ug/L		02/05/24 13:51	02/06/24 13:20	1
Acenaphthylene	ND		4.8	0.21	ug/L		02/05/24 13:51	02/06/24 13:20	1
Anthracene	ND		4.8	0.33	ug/L		02/05/24 13:51	02/06/24 13:20	1
Benzidine	ND		76	13	ug/L		02/05/24 13:51	02/06/24 13:20	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		02/05/24 13:51	02/06/24 13:20	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		02/05/24 13:51	02/06/24 13:20	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		02/05/24 13:51	02/06/24 13:20	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		02/05/24 13:51	02/06/24 13:20	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		02/05/24 13:51	02/06/24 13:20	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		02/05/24 13:51	02/06/24 13:20	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		02/05/24 13:51	02/06/24 13:20	1
Bis(2-ethylhexyl) phthalate	ND		9.5	0.29	ug/L		02/05/24 13:51	02/06/24 13:20	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		02/05/24 13:51	02/06/24 13:20	1
Chrysene	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1
Decane	ND		9.5	0.38	ug/L		02/05/24 13:51	02/06/24 13:20	1
Di-n-butyl phthalate	**0.48**	**J**	4.8	0.38	ug/L		02/05/24 13:51	02/06/24 13:20	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		02/05/24 13:51	02/06/24 13:20	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		02/05/24 13:51	02/06/24 13:20	1
Diethyl phthalate	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		02/05/24 13:51	02/06/24 13:20	1
Fluoranthene	ND		4.8	0.38	ug/L		02/05/24 13:51	02/06/24 13:20	1
Fluorene	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		02/05/24 13:51	02/06/24 13:20	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		02/05/24 13:51	02/06/24 13:20	1
Hexachloroethane	**0.17**	**J**	4.8	0.14	ug/L		02/05/24 13:51	02/06/24 13:20	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		02/05/24 13:51	02/06/24 13:20	1
Isophorone	ND		4.8	0.18	ug/L		02/05/24 13:51	02/06/24 13:20	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		02/05/24 13:51	02/06/24 13:20	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		02/05/24 13:51	02/06/24 13:20	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		02/05/24 13:51	02/06/24 13:20	1
Naphthalene	**1.1**	**J**	4.8	0.20	ug/L		02/05/24 13:51	02/06/24 13:20	1
Nitrobenzene	ND		4.8	0.19	ug/L		02/05/24 13:51	02/06/24 13:20	1
Pentachlorophenol	ND		9.5	0.75	ug/L		02/05/24 13:51	02/06/24 13:20	1
Phenanthrene	ND		4.8	0.29	ug/L		02/05/24 13:51	02/06/24 13:20	1

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Client Sample ID: 001 LAB COMP

Date Collected: 02/01/24 00:00
Date Received: 02/01/24 12:55

Lab Sample ID: 480-216764-6

Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.8	0.083	ug/L		02/05/24 13:51	02/06/24 13:20	1
Pyrene	ND		4.8	0.33	ug/L		02/05/24 13:51	02/06/24 13:20	1
n-Octadecane	ND		9.5	0.29	ug/L		02/05/24 13:51	02/06/24 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*52 - 151*	*02/05/24 13:51*	*02/06/24 13:20*	*1*
2-Fluorobiphenyl	*90*		*44 - 120*	*02/05/24 13:51*	*02/06/24 13:20*	*1*
2-Fluorophenol (Surr)	*50*		*17 - 120*	*02/05/24 13:51*	*02/06/24 13:20*	*1*
Nitrobenzene-d5 (Surr)	*86*		*15 - 314*	*02/05/24 13:51*	*02/06/24 13:20*	*1*
p-Terphenyl-d14 (Surr)	*85*		*22 - 125*	*02/05/24 13:51*	*02/06/24 13:20*	*1*
Phenol-d5 (Surr)	*35*		*8 - 424*	*02/05/24 13:51*	*02/06/24 13:20*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**0.0017**	**J B**	0.010	0.0015	mg/L		02/05/24 08:34	02/05/24 16:37	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/05/24 10:57	02/05/24 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.019**		0.010	0.0041	mg/L			02/02/24 17:12	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.4**	**HF**	0.1	0.1	SU			02/08/24 18:09	1
Temperature (SM 4500 H+ B)	**18.5**	**HF**	0.001	0.001	Degrees C			02/08/24 18:09	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-216764-6	001 LAB COMP	106	96	97	106

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-699741/6	Lab Control Sample	106	102	100	103
MB 480-699741/8	Method Blank	107	98	99	104

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-216764-5	TRIP BLANK	104	98	98	102

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-216764-6	001 LAB COMP	74	90	50	86	85	35

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-216764-1
Project/Site: Monthly Testing

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TBP (52-151)	FBP (44-120)	2FP (17-120)	NBZ (15-314)	TPHd14 (22-125)	PHL (8-424)		
LCS 480-699873/2-A	Lab Control Sample	101	90	51	83	100	38		
LCSD 480-699873/3-A	Lab Control Sample Dup	95	89	50	83	97	38		
MB 480-699873/1-A	Method Blank	67	83	47	77	92	34		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-699741/8
Matrix: Water
Analysis Batch: 699741

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			02/02/24 14:47	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			02/02/24 14:47	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			02/02/24 14:47	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			02/02/24 14:47	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			02/02/24 14:47	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			02/02/24 14:47	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			02/02/24 14:47	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			02/02/24 14:47	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			02/02/24 14:47	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			02/02/24 14:47	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			02/02/24 14:47	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			02/02/24 14:47	1
Acrolein	ND		100	17	ug/L			02/02/24 14:47	1
Acrylonitrile	ND		50	1.9	ug/L			02/02/24 14:47	1
Benzene	ND		5.0	0.60	ug/L			02/02/24 14:47	1
Bromoform	ND		5.0	0.47	ug/L			02/02/24 14:47	1
Bromomethane	ND		5.0	1.2	ug/L			02/02/24 14:47	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			02/02/24 14:47	1
Chlorobenzene	ND		5.0	0.48	ug/L			02/02/24 14:47	1
Dibromochloromethane	ND		5.0	0.41	ug/L			02/02/24 14:47	1
Chloroethane	ND		5.0	0.87	ug/L			02/02/24 14:47	1
Chloroform	ND		5.0	0.54	ug/L			02/02/24 14:47	1
Chloromethane	ND		5.0	0.64	ug/L			02/02/24 14:47	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			02/02/24 14:47	1
Bromodichloromethane	ND		5.0	0.54	ug/L			02/02/24 14:47	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			02/02/24 14:47	1
Ethylbenzene	ND		5.0	0.46	ug/L			02/02/24 14:47	1
Methylene Chloride	ND		5.0	0.81	ug/L			02/02/24 14:47	1
Tetrachloroethene	ND		5.0	0.34	ug/L			02/02/24 14:47	1
Toluene	ND		5.0	0.45	ug/L			02/02/24 14:47	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			02/02/24 14:47	1
Trichloroethene	ND		5.0	0.60	ug/L			02/02/24 14:47	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			02/02/24 14:47	1
Vinyl chloride	ND		5.0	0.75	ug/L			02/02/24 14:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*68 - 130*		*02/02/24 14:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*02/02/24 14:47*	*1*
Toluene-d8 (Surr)	*99*		*77 - 120*		*02/02/24 14:47*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*02/02/24 14:47*	*1*

Lab Sample ID: LCS 480-699741/6
Matrix: Water
Analysis Batch: 699741

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	25.8		ug/L		129	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	19.6		ug/L		98	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-699741/6
Matrix: Water
Analysis Batch: 699741

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	20.0		ug/L		100	52 - 150
1,1-Dichloroethane	20.0	20.2		ug/L		101	59 - 155
1,1-Dichloroethene	20.0	20.0		ug/L		100	1 - 234
1,2-Dichlorobenzene	20.0	19.8		ug/L		99	18 - 190
1,2-Dichloroethane	20.0	21.3		ug/L		106	49 - 155
1,2-Dichloropropane	20.0	20.2		ug/L		101	1 - 210
1,3-Dichlorobenzene	20.0	20.3		ug/L		102	59 - 156
1,4-Dichlorobenzene	20.0	20.2		ug/L		101	18 - 190
2-Chloroethyl vinyl ether	20.0	20.6	J	ug/L		103	1 - 305
Benzene	20.0	20.2		ug/L		101	37 - 151
Bromoform	20.0	22.1		ug/L		110	45 - 169
Bromomethane	20.0	21.3		ug/L		107	1 - 242
Carbon tetrachloride	20.0	26.5		ug/L		133	70 - 140
Chlorobenzene	20.0	20.3		ug/L		102	37 - 160
Dibromochloromethane	20.0	21.5		ug/L		107	53 - 149
Chloroethane	20.0	20.9		ug/L		104	14 - 230
Chloroform	20.0	20.8		ug/L		104	51 - 138
Chloromethane	20.0	19.3		ug/L		96	1 - 273
cis-1,3-Dichloropropene	20.0	21.2		ug/L		106	1 - 227
Bromodichloromethane	20.0	21.5		ug/L		107	35 - 155
Ethylbenzene	20.0	20.6		ug/L		103	37 - 162
Methylene Chloride	20.0	19.5		ug/L		98	1 - 221
Tetrachloroethene	20.0	21.4		ug/L		107	64 - 148
Toluene	20.0	20.3		ug/L		102	47 - 150
trans-1,3-Dichloropropene	20.0	21.1		ug/L		106	17 - 183
Trichloroethene	20.0	21.0		ug/L		105	71 - 157
Trichlorofluoromethane	20.0	34.9		ug/L		175	17 - 181
Vinyl chloride	20.0	26.1		ug/L		130	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*68 - 130*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*
Toluene-d8 (Surr)	*100*		*77 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-699873/1-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		02/05/24 13:51	02/06/24 12:05	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		02/05/24 13:51	02/06/24 12:05	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		02/05/24 13:51	02/06/24 12:05	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		02/05/24 13:51	02/06/24 12:05	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		02/05/24 13:51	02/06/24 12:05	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		02/05/24 13:51	02/06/24 12:05	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-699873/1-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		02/05/24 13:51	02/06/24 12:05	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		02/05/24 13:51	02/06/24 12:05	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		02/05/24 13:51	02/06/24 12:05	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		02/05/24 13:51	02/06/24 12:05	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		02/05/24 13:51	02/06/24 12:05	1
2-Chlorophenol	ND		5.0	0.17	ug/L		02/05/24 13:51	02/06/24 12:05	1
2-Nitrophenol	ND		5.0	0.18	ug/L		02/05/24 13:51	02/06/24 12:05	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		02/05/24 13:51	02/06/24 12:05	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		02/05/24 13:51	02/06/24 12:05	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		02/05/24 13:51	02/06/24 12:05	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		02/05/24 13:51	02/06/24 12:05	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		02/05/24 13:51	02/06/24 12:05	1
4-Nitrophenol	ND		15	0.49	ug/L		02/05/24 13:51	02/06/24 12:05	1
Acenaphthene	ND		5.0	0.20	ug/L		02/05/24 13:51	02/06/24 12:05	1
Acenaphthylene	ND		5.0	0.22	ug/L		02/05/24 13:51	02/06/24 12:05	1
Anthracene	ND		5.0	0.35	ug/L		02/05/24 13:51	02/06/24 12:05	1
Benzidine	ND		80	14	ug/L		02/05/24 13:51	02/06/24 12:05	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		02/05/24 13:51	02/06/24 12:05	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		02/05/24 13:51	02/06/24 12:05	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		02/05/24 13:51	02/06/24 12:05	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		02/05/24 13:51	02/06/24 12:05	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		02/05/24 13:51	02/06/24 12:05	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		02/05/24 13:51	02/06/24 12:05	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		02/05/24 13:51	02/06/24 12:05	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		02/05/24 13:51	02/06/24 12:05	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		02/05/24 13:51	02/06/24 12:05	1
Chrysene	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1
Decane	ND		10	0.40	ug/L		02/05/24 13:51	02/06/24 12:05	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		02/05/24 13:51	02/06/24 12:05	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		02/05/24 13:51	02/06/24 12:05	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		02/05/24 13:51	02/06/24 12:05	1
Diethyl phthalate	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		02/05/24 13:51	02/06/24 12:05	1
Fluoranthene	ND		5.0	0.40	ug/L		02/05/24 13:51	02/06/24 12:05	1
Fluorene	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		02/05/24 13:51	02/06/24 12:05	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		02/05/24 13:51	02/06/24 12:05	1
Hexachloroethane	ND		5.0	0.15	ug/L		02/05/24 13:51	02/06/24 12:05	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		02/05/24 13:51	02/06/24 12:05	1
Isophorone	ND		5.0	0.19	ug/L		02/05/24 13:51	02/06/24 12:05	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		02/05/24 13:51	02/06/24 12:05	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		02/05/24 13:51	02/06/24 12:05	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		02/05/24 13:51	02/06/24 12:05	1
Naphthalene	ND		5.0	0.22	ug/L		02/05/24 13:51	02/06/24 12:05	1
Nitrobenzene	ND		5.0	0.20	ug/L		02/05/24 13:51	02/06/24 12:05	1
Pentachlorophenol	ND		10	0.79	ug/L		02/05/24 13:51	02/06/24 12:05	1
Phenanthrene	ND		5.0	0.30	ug/L		02/05/24 13:51	02/06/24 12:05	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-699873/1-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		02/05/24 13:51	02/06/24 12:05	1
Pyrene	ND		5.0	0.35	ug/L		02/05/24 13:51	02/06/24 12:05	1
n-Octadecane	ND		10	0.30	ug/L		02/05/24 13:51	02/06/24 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*52 - 151*	*02/05/24 13:51*	*02/06/24 12:05*	*1*
2-Fluorobiphenyl	*83*		*44 - 120*	*02/05/24 13:51*	*02/06/24 12:05*	*1*
2-Fluorophenol (Surr)	*47*		*17 - 120*	*02/05/24 13:51*	*02/06/24 12:05*	*1*
Nitrobenzene-d5 (Surr)	*77*		*15 - 314*	*02/05/24 13:51*	*02/06/24 12:05*	*1*
p-Terphenyl-d14 (Surr)	*92*		*22 - 125*	*02/05/24 13:51*	*02/06/24 12:05*	*1*
Phenol-d5 (Surr)	*34*		*8 - 424*	*02/05/24 13:51*	*02/06/24 12:05*	*1*

Lab Sample ID: LCS 480-699873/2-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	33.0		ug/L		66	44 - 142
1,2-Dichlorobenzene	50.0	30.5		ug/L		61	32 - 129
1,3-Dichlorobenzene	50.0	29.0		ug/L		58	1 - 172
1,4-Dichlorobenzene	50.0	29.6		ug/L		59	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	38.6		ug/L		77	36 - 166
2,4,6-Trichlorophenol	50.0	43.7		ug/L		87	37 - 144
2,4-Dichlorophenol	50.0	42.6		ug/L		85	39 - 135
2,4-Dimethylphenol	50.0	37.1		ug/L		74	32 - 120
2,4-Dinitrophenol	100	117		ug/L		117	1 - 191
2,4-Dinitrotoluene	50.0	48.0		ug/L		96	39 - 139
2,6-Dinitrotoluene	50.0	45.6		ug/L		91	50 - 158
2-Chloronaphthalene	50.0	39.8		ug/L		80	60 - 120
2-Chlorophenol	50.0	37.4		ug/L		75	23 - 134
2-Nitrophenol	50.0	42.9		ug/L		86	29 - 182
3,3'-Dichlorobenzidine	100	95.4		ug/L		95	1 - 262
4,6-Dinitro-2-methylphenol	100	104		ug/L		104	1 - 181
4-Bromophenyl phenyl ether	50.0	42.8		ug/L		86	53 - 127
4-Chloro-3-methylphenol	50.0	43.7		ug/L		87	22 - 147
4-Chlorophenyl phenyl ether	50.0	43.7		ug/L		87	25 - 158
4-Nitrophenol	100	49.1		ug/L		49	1 - 132
Acenaphthene	50.0	43.5		ug/L		87	47 - 145
Acenaphthylene	50.0	40.7		ug/L		81	33 - 145
Anthracene	50.0	45.8		ug/L		92	27 - 133
Benzidine	100	50.0	J	ug/L		50	1 - 120
Benzo[a]anthracene	50.0	47.0		ug/L		94	33 - 143
Benzo[a]pyrene	50.0	50.8		ug/L		102	17 - 163
Benzo[b]fluoranthene	50.0	47.1		ug/L		94	24 - 159
Benzo[g,h,i]perylene	50.0	43.3		ug/L		87	1 - 219
Benzo[k]fluoranthene	50.0	49.6		ug/L		99	11 - 162
Bis(2-chloroethoxy)methane	50.0	39.8		ug/L		80	33 - 184
Bis(2-chloroethyl)ether	50.0	39.4		ug/L		79	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-699873/2-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	44.4		ug/L		89	8 - 158
Butyl benzyl phthalate	50.0	45.0		ug/L		90	1 - 152
Chrysene	50.0	47.9		ug/L		96	17 - 168
Di-n-butyl phthalate	50.0	44.9		ug/L		90	1 - 120
Di-n-octyl phthalate	50.0	43.0		ug/L		86	4 - 146
Dibenz(a,h)anthracene	50.0	46.3		ug/L		93	1 - 227
Diethyl phthalate	50.0	45.1		ug/L		90	1 - 120
Dimethyl phthalate	50.0	45.3		ug/L		91	1 - 120
Fluoranthene	50.0	46.5		ug/L		93	26 - 137
Fluorene	50.0	44.0		ug/L		88	59 - 121
Hexachlorobenzene	50.0	44.4		ug/L		89	1 - 152
Hexachlorocyclopentadiene	50.0	30.4		ug/L		61	5 - 120
Hexachloroethane	50.0	26.9		ug/L		54	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	50.1		ug/L		100	1 - 171
Isophorone	50.0	41.8		ug/L		84	21 - 196
N-Nitrosodi-n-propylamine	50.0	42.5		ug/L		85	1 - 230
N-Nitrosodiphenylamine	50.0	44.8		ug/L		90	54 - 125
Naphthalene	50.0	37.3		ug/L		75	21 - 133
Nitrobenzene	50.0	38.1		ug/L		76	35 - 180
Pentachlorophenol	100	98.6		ug/L		99	14 - 176
Phenanthrene	50.0	45.8		ug/L		92	54 - 120
Phenol	50.0	19.7		ug/L		39	5 - 120
Pyrene	50.0	48.1		ug/L		96	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*101*		*52 - 151*
2-Fluorobiphenyl	*90*		*44 - 120*
2-Fluorophenol (Surr)	*51*		*17 - 120*
Nitrobenzene-d5 (Surr)	*83*		*15 - 314*
p-Terphenyl-d14 (Surr)	*100*		*22 - 125*
Phenol-d5 (Surr)	*38*		*8 - 424*

Lab Sample ID: LCSD 480-699873/3-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 699873

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	33.2		ug/L		66	44 - 142	0	34
1,2-Dichlorobenzene	50.0	30.4		ug/L		61	32 - 129	1	38
1,3-Dichlorobenzene	50.0	28.3		ug/L		57	1 - 172	2	37
1,4-Dichlorobenzene	50.0	29.1		ug/L		58	20 - 124	1	40
2,2'-Oxybis(1-chloropropane)	50.0	38.3		ug/L		77	36 - 166	1	36
2,4,6-Trichlorophenol	50.0	43.8		ug/L		88	37 - 144	0	20
2,4-Dichlorophenol	50.0	41.5		ug/L		83	39 - 135	3	23
2,4-Dimethylphenol	50.0	36.4		ug/L		73	32 - 120	2	18
2,4-Dinitrophenol	100	119		ug/L		119	1 - 191	2	29
2,4-Dinitrotoluene	50.0	48.8		ug/L		98	39 - 139	2	20
2,6-Dinitrotoluene	50.0	46.0		ug/L		92	50 - 158	1	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-699873/3-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 699873

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	39.2		ug/L		78	60 - 120	1	30
2-Chlorophenol			50.0	36.2		ug/L		72	23 - 134	3	26
2-Nitrophenol			50.0	43.1		ug/L		86	29 - 182	0	28
3,3'-Dichlorobenzidine			100	94.1		ug/L		94	1 - 262	1	31
4,6-Dinitro-2-methylphenol			100	106		ug/L		106	1 - 181	2	30
4-Bromophenyl phenyl ether			50.0	41.7		ug/L		83	53 - 127	3	16
4-Chloro-3-methylphenol			50.0	43.4		ug/L		87	22 - 147	1	16
4-Chlorophenyl phenyl ether			50.0	43.9		ug/L		88	25 - 158	1	15
4-Nitrophenol			100	50.4		ug/L		50	1 - 132	3	24
Acenaphthene			50.0	43.4		ug/L		87	47 - 145	0	25
Acenaphthylene			50.0	39.7		ug/L		79	33 - 145	3	22
Anthracene			50.0	44.2		ug/L		88	27 - 133	3	15
Benzidine			100	64.5	J	ug/L		65	1 - 120	25	50
Benzo[a]anthracene			50.0	45.3		ug/L		91	33 - 143	4	15
Benzo[a]pyrene			50.0	49.2		ug/L		98	17 - 163	3	15
Benzo[b]fluoranthene			50.0	45.5		ug/L		91	24 - 159	3	17
Benzo[g,h,i]perylene			50.0	41.9		ug/L		84	1 - 219	3	19
Benzo[k]fluoranthene			50.0	48.3		ug/L		97	11 - 162	3	19
Bis(2-chloroethoxy)methane			50.0	39.4		ug/L		79	33 - 184	1	23
Bis(2-chloroethyl)ether			50.0	38.3		ug/L		77	12 - 158	3	33
Bis(2-ethylhexyl) phthalate			50.0	45.6		ug/L		91	8 - 158	3	15
Butyl benzyl phthalate			50.0	44.9		ug/L		90	1 - 152	0	15
Chrysene			50.0	45.8		ug/L		92	17 - 168	4	15
Di-n-butyl phthalate			50.0	44.4		ug/L		89	1 - 120	1	15
Di-n-octyl phthalate			50.0	43.3		ug/L		87	4 - 146	1	15
Dibenz(a,h)anthracene			50.0	44.4		ug/L		89	1 - 227	4	18
Diethyl phthalate			50.0	46.0		ug/L		92	1 - 120	2	15
Dimethyl phthalate			50.0	45.4		ug/L		91	1 - 120	0	15
Fluoranthene			50.0	45.1		ug/L		90	26 - 137	3	15
Fluorene			50.0	43.7		ug/L		87	59 - 121	1	18
Hexachlorobenzene			50.0	43.9		ug/L		88	1 - 152	1	15
Hexachlorocyclopentadiene			50.0	30.7		ug/L		61	5 - 120	1	50
Hexachloroethane			50.0	26.5		ug/L		53	40 - 120	1	43
Indeno[1,2,3-cd]pyrene			50.0	48.0		ug/L		96	1 - 171	4	17
Isophorone			50.0	42.0		ug/L		84	21 - 196	0	21
N-Nitrosodi-n-propylamine			50.0	41.7		ug/L		83	1 - 230	2	23
N-Nitrosodiphenylamine			50.0	43.5		ug/L		87	54 - 125	3	15
Naphthalene			50.0	36.4		ug/L		73	21 - 133	2	31
Nitrobenzene			50.0	37.2		ug/L		74	35 - 180	2	27
Pentachlorophenol			100	95.7		ug/L		96	14 - 176	3	21
Phenanthrene			50.0	44.6		ug/L		89	54 - 120	3	16
Phenol			50.0	19.5		ug/L		39	5 - 120	1	36
Pyrene			50.0	46.4		ug/L		93	52 - 120	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*95*		*52 - 151*
2-Fluorobiphenyl	*89*		*44 - 120*
2-Fluorophenol (Surr)	*50*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-699873/3-A
Matrix: Water
Analysis Batch: 699919

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 699873

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*83*		*15 - 314*
p-Terphenyl-d14 (Surr)	*97*		*22 - 125*
Phenol-d5 (Surr)	*38*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-699764/1-A
Matrix: Water
Analysis Batch: 699959

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.00338	J	0.010	0.0015	mg/L		02/05/24 08:34	02/05/24 15:50	1

Lab Sample ID: LCS 480-699764/2-A
Matrix: Water
Analysis Batch: 699959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.500	0.511		mg/L		102	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-699857/1-A
Matrix: Water
Analysis Batch: 699893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699857

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000567	J	0.00020	0.000043	mg/L		02/05/24 10:57	02/05/24 14:45	1

Lab Sample ID: LCS 480-699857/2-A
Matrix: Water
Analysis Batch: 699893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00645		mg/L		96	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-699784/21
Matrix: Water
Analysis Batch: 699784

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			02/02/24 16:40	1

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: HLCS 480-699784/22
Matrix: Water
Analysis Batch: 699784

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

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.397		mg/L		99	90 - 110		

Lab Sample ID: LCS 480-699784/23
Matrix: Water
Analysis Batch: 699784

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.242		mg/L		97	90 - 110		

Lab Sample ID: 480-216764-6 MS
Matrix: Wastewater
Analysis Batch: 699784

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	0.019		0.100	0.111		mg/L		92	90 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-700293/23
Matrix: Water
Analysis Batch: 700293

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.1		SU		101	99 - 101		

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

GC/MS VOA

Analysis Batch: 699741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-5	TRIP BLANK	Total/NA	WQ	624.1	
480-216764-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-699741/8	Method Blank	Total/NA	Water	624.1	
LCS 480-699741/6	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 699873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-699873/1-A	Method Blank	Total/NA	Water	625	
LCS 480-699873/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-699873/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 699919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	625.1	699873
MB 480-699873/1-A	Method Blank	Total/NA	Water	625.1	699873
LCS 480-699873/2-A	Lab Control Sample	Total/NA	Water	625.1	699873
LCSD 480-699873/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	699873

Metals

Prep Batch: 699764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-699764/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-699764/2-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 699857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-699857/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-699857/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 699893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	245.1	699857
MB 480-699857/1-A	Method Blank	Total/NA	Water	245.1	699857
LCS 480-699857/2-A	Lab Control Sample	Total/NA	Water	245.1	699857

Analysis Batch: 699959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	699764
MB 480-699764/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	699764
LCS 480-699764/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	699764

General Chemistry

Analysis Batch: 699784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	335.4	

General Chemistry (Continued)

Analysis Batch: 699784 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-699784/21	Method Blank	Total/NA	Water	335.4	
HLCS 480-699784/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-699784/23	Lab Control Sample	Total/NA	Water	335.4	
480-216764-6 MS	001 LAB COMP	Total/NA	Wastewater	335.4	

Analysis Batch: 700293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-216764-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-700293/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-216764-5

Date Collected: 02/01/24 00:00

Matrix: WQ

Date Received: 02/01/24 12:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	699741	AXK	EET BUF	02/02/24 15:11

Client Sample ID: 001 LAB COMP

Lab Sample ID: 480-216764-6

Date Collected: 02/01/24 00:00

Matrix: Wastewater

Date Received: 02/01/24 12:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	699741	AXK	EET BUF	02/02/24 15:35
Total/NA	Prep	625			699873	LSC	EET BUF	02/05/24 13:51
Total/NA	Analysis	625.1		1	699919	JMM	EET BUF	02/06/24 13:20
Total/NA	Prep	200.7			699764	EMO	EET BUF	02/05/24 08:34
Total/NA	Analysis	200.7 Rev 4.4		1	699959	NZG	EET BUF	02/05/24 16:37
Total/NA	Prep	245.1			699857	NVK	EET BUF	02/05/24 10:57
Total/NA	Analysis	245.1		1	699893	NVK	EET BUF	02/05/24 15:02
Total/NA	Analysis	335.4		1	699784	GW	EET BUF	02/02/24 17:12
Total/NA	Analysis	SM 4500 H+ B		1	700293	KB	EET BUF	02/08/24 18:09

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Monthly Testing

Job ID: 480-216764-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-216764-5	TRIP BLANK	WQ	02/01/24 00:00	02/01/24 12:55
480-216764-6	001 LAB COMP	Wastewater	02/01/24 00:00	02/01/24 12:55

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: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-181788-34075.1
Client Contact: Jason Gutkowski	Phone: 315 436 3605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days):			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125855			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Analysis Requested

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B		
001-1	2/1/24	0605	G	Water			X	X	X	X	X		Lab To
001-2		0905		Water			X	X	X	X	X		Composite
001-3		1005					X	X	X	X	X		Samples
001-4		1205					X	X	X	X	X		
TripBlank		—						X					
													Short Hold Time

480-216764 Chain of Custody

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

Sample Disposal (A fee may be assessed if sa
☐ 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:	Date/Time:	Company	Received by:	Date/Time:	Company
Dan Gutta	2/1/24 1205	Arcadis	Will Aroyo	2/1/24 1255	Arcadis
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2/1/24 1255	Company TAL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-216764-1

Login Number: 216764
List Number: 1
Creator: Yeager, Brian A

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	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
Arcadis U.S., Inc.
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 3/11/2024 11:32:40 AM

JOB DESCRIPTION

Monthly Testing
Monthly Testing

JOB NUMBER

480-217488-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

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.

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.

Metals

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.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Job Narrative
480-217488-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/5/2024 12:28 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.3º C.

GC/MS VOA
Method 624.1: The following Volatile sample was composited by the laboratory on 03/05/2024 as requested by the client: 001 LAB COMP (480-217488-6).
Regulatory defined guidance for in-laboratory compositing of samples, is currently not available. Laboratory sample compositing was performed using established project specifications and/or laboratory standard operating procedures.

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

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

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

General Chemistry
Method SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 001 LAB COMP (480-217488-6).

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

Organic Prep
Method 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-702801.

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

Detection Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-217488-5

No Detections.

Client Sample ID: 001 LAB COMP — Lab Sample ID: 480-217488-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0029	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Cyanide, Total	0.11		0.010	0.0041	mg/L	1		335.4	Total/NA
pH	7.7	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Temperature	18.9	HF	0.001	0.001	Degrees C	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Client Sample ID: TRIP BLANK

Date Collected: 03/05/24 00:00
Date Received: 03/05/24 12:28

Lab Sample ID: 480-217488-5

Matrix: WQ

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			03/05/24 18:44	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			03/05/24 18:44	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			03/05/24 18:44	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			03/05/24 18:44	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			03/05/24 18:44	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			03/05/24 18:44	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			03/05/24 18:44	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			03/05/24 18:44	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			03/05/24 18:44	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			03/05/24 18:44	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			03/05/24 18:44	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			03/05/24 18:44	1
Acrolein	ND		100	17	ug/L			03/05/24 18:44	1
Acrylonitrile	ND		50	1.9	ug/L			03/05/24 18:44	1
Benzene	ND		5.0	0.60	ug/L			03/05/24 18:44	1
Bromoform	ND		5.0	0.47	ug/L			03/05/24 18:44	1
Bromomethane	ND		5.0	1.2	ug/L			03/05/24 18:44	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			03/05/24 18:44	1
Chlorobenzene	ND		5.0	0.48	ug/L			03/05/24 18:44	1
Dibromochloromethane	ND		5.0	0.41	ug/L			03/05/24 18:44	1
Chloroethane	ND		5.0	0.87	ug/L			03/05/24 18:44	1
Chloroform	ND		5.0	0.54	ug/L			03/05/24 18:44	1
Chloromethane	ND		5.0	0.64	ug/L			03/05/24 18:44	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			03/05/24 18:44	1
Bromodichloromethane	ND		5.0	0.54	ug/L			03/05/24 18:44	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			03/05/24 18:44	1
Ethylbenzene	ND		5.0	0.46	ug/L			03/05/24 18:44	1
Methylene Chloride	ND		5.0	0.81	ug/L			03/05/24 18:44	1
Tetrachloroethene	ND		5.0	0.34	ug/L			03/05/24 18:44	1
Toluene	ND		5.0	0.45	ug/L			03/05/24 18:44	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			03/05/24 18:44	1
Trichloroethene	ND		5.0	0.60	ug/L			03/05/24 18:44	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			03/05/24 18:44	1
Vinyl chloride	ND		5.0	0.75	ug/L			03/05/24 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*		*03/05/24 18:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*		*03/05/24 18:44*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*03/05/24 18:44*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*03/05/24 18:44*	*1*

Client Sample ID: 001 LAB COMP

Date Collected: 03/05/24 00:00
Date Received: 03/05/24 12:28

Lab Sample ID: 480-217488-6

Matrix: Wastewater

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			03/05/24 19:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			03/05/24 19:08	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			03/05/24 19:08	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			03/05/24 19:08	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			03/05/24 19:08	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			03/05/24 19:08	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			03/05/24 19:08	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			03/05/24 19:08	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			03/05/24 19:08	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			03/05/24 19:08	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			03/05/24 19:08	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			03/05/24 19:08	1
Acrolein	ND		100	17	ug/L			03/05/24 19:08	1
Acrylonitrile	ND		50	1.9	ug/L			03/05/24 19:08	1
Benzene	ND		5.0	0.60	ug/L			03/05/24 19:08	1
Bromoform	ND		5.0	0.47	ug/L			03/05/24 19:08	1
Bromomethane	ND		5.0	1.2	ug/L			03/05/24 19:08	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			03/05/24 19:08	1
Chlorobenzene	ND		5.0	0.48	ug/L			03/05/24 19:08	1
Dibromochloromethane	ND		5.0	0.41	ug/L			03/05/24 19:08	1
Chloroethane	ND		5.0	0.87	ug/L			03/05/24 19:08	1
Chloroform	ND		5.0	0.54	ug/L			03/05/24 19:08	1
Chloromethane	ND		5.0	0.64	ug/L			03/05/24 19:08	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			03/05/24 19:08	1
Bromodichloromethane	ND		5.0	0.54	ug/L			03/05/24 19:08	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			03/05/24 19:08	1
Ethylbenzene	ND		5.0	0.46	ug/L			03/05/24 19:08	1
Methylene Chloride	ND		5.0	0.81	ug/L			03/05/24 19:08	1
Tetrachloroethene	ND		5.0	0.34	ug/L			03/05/24 19:08	1
Toluene	ND		5.0	0.45	ug/L			03/05/24 19:08	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			03/05/24 19:08	1
Trichloroethene	ND		5.0	0.60	ug/L			03/05/24 19:08	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			03/05/24 19:08	1
Vinyl chloride	ND		5.0	0.75	ug/L			03/05/24 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*03/05/24 19:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*03/05/24 19:08*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*03/05/24 19:08*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*03/05/24 19:08*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		9.5	0.20	ug/L		03/06/24 13:48	03/07/24 20:40	1
1,2-Dichlorobenzene	ND		9.5	0.25	ug/L		03/06/24 13:48	03/07/24 20:40	1
1,2-Diphenylhydrazine	ND		9.5	0.19	ug/L		03/06/24 13:48	03/07/24 20:40	1
1,3-Dichlorobenzene	ND		9.5	0.16	ug/L		03/06/24 13:48	03/07/24 20:40	1
1,4-Dichlorobenzene	ND		9.5	0.20	ug/L		03/06/24 13:48	03/07/24 20:40	1
2,2'-Oxybis(1-chloropropane)	ND		4.8	0.20	ug/L		03/06/24 13:48	03/07/24 20:40	1
2,4,6-Trichlorophenol	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Client Sample ID: 001 LAB COMP
Date Collected: 03/05/24 00:00
Date Received: 03/05/24 12:28

Lab Sample ID: 480-217488-6
Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		4.8	0.18	ug/L		03/06/24 13:48	03/07/24 20:40	1
2,4-Dimethylphenol	ND		4.8	0.33	ug/L		03/06/24 13:48	03/07/24 20:40	1
2,4-Dinitrophenol	ND		9.5	1.2	ug/L		03/06/24 13:48	03/07/24 20:40	1
2,4-Dinitrotoluene	ND		9.5	0.38	ug/L		03/06/24 13:48	03/07/24 20:40	1
2,6-Dinitrotoluene	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1
2-Chloronaphthalene	ND		4.8	0.22	ug/L		03/06/24 13:48	03/07/24 20:40	1
2-Chlorophenol	ND		4.8	0.16	ug/L		03/06/24 13:48	03/07/24 20:40	1
2-Nitrophenol	ND		4.8	0.17	ug/L		03/06/24 13:48	03/07/24 20:40	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		03/06/24 13:48	03/07/24 20:40	1
4,6-Dinitro-2-methylphenol	ND		9.5	0.43	ug/L		03/06/24 13:48	03/07/24 20:40	1
4-Bromophenyl phenyl ether	ND		4.8	0.33	ug/L		03/06/24 13:48	03/07/24 20:40	1
4-Chloro-3-methylphenol	ND		4.8	0.26	ug/L		03/06/24 13:48	03/07/24 20:40	1
4-Chlorophenyl phenyl ether	ND		4.8	0.31	ug/L		03/06/24 13:48	03/07/24 20:40	1
4-Nitrophenol	ND		14	0.46	ug/L		03/06/24 13:48	03/07/24 20:40	1
Acenaphthene	ND		4.8	0.19	ug/L		03/06/24 13:48	03/07/24 20:40	1
Acenaphthylene	ND		4.8	0.21	ug/L		03/06/24 13:48	03/07/24 20:40	1
Anthracene	ND		4.8	0.33	ug/L		03/06/24 13:48	03/07/24 20:40	1
Benzidine	ND		76	13	ug/L		03/06/24 13:48	03/07/24 20:40	1
Benzo[a]anthracene	ND		4.8	0.26	ug/L		03/06/24 13:48	03/07/24 20:40	1
Benzo[a]pyrene	ND		4.8	0.31	ug/L		03/06/24 13:48	03/07/24 20:40	1
Benzo[b]fluoranthene	ND		4.8	0.29	ug/L		03/06/24 13:48	03/07/24 20:40	1
Benzo[g,h,i]perylene	ND		4.8	0.36	ug/L		03/06/24 13:48	03/07/24 20:40	1
Benzo[k]fluoranthene	ND		4.8	0.31	ug/L		03/06/24 13:48	03/07/24 20:40	1
Bis(2-chloroethoxy)methane	ND		4.8	0.18	ug/L		03/06/24 13:48	03/07/24 20:40	1
Bis(2-chloroethyl)ether	ND		4.8	0.22	ug/L		03/06/24 13:48	03/07/24 20:40	1
Bis(2-ethylhexyl) phthalate	ND		9.5	0.29	ug/L		03/06/24 13:48	03/07/24 20:40	1
Butyl benzyl phthalate	ND		4.8	0.26	ug/L		03/06/24 13:48	03/07/24 20:40	1
Chrysene	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1
Decane	ND		9.5	0.38	ug/L		03/06/24 13:48	03/07/24 20:40	1
Di-n-butyl phthalate	ND		4.8	0.38	ug/L		03/06/24 13:48	03/07/24 20:40	1
Di-n-octyl phthalate	ND		4.8	0.29	ug/L		03/06/24 13:48	03/07/24 20:40	1
Dibenz(a,h)anthracene	ND		4.8	0.36	ug/L		03/06/24 13:48	03/07/24 20:40	1
Diethyl phthalate	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1
Dimethyl phthalate	ND		4.8	0.22	ug/L		03/06/24 13:48	03/07/24 20:40	1
Fluoranthene	ND		4.8	0.38	ug/L		03/06/24 13:48	03/07/24 20:40	1
Fluorene	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1
Hexachlorobenzene	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1
Hexachlorobutadiene	ND		4.8	0.24	ug/L		03/06/24 13:48	03/07/24 20:40	1
Hexachlorocyclopentadiene	ND		9.5	0.50	ug/L		03/06/24 13:48	03/07/24 20:40	1
Hexachloroethane	ND		4.8	0.14	ug/L		03/06/24 13:48	03/07/24 20:40	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.36	ug/L		03/06/24 13:48	03/07/24 20:40	1
Isophorone	ND		4.8	0.18	ug/L		03/06/24 13:48	03/07/24 20:40	1
N-Nitrosodi-n-propylamine	ND		4.8	0.21	ug/L		03/06/24 13:48	03/07/24 20:40	1
N-Nitrosodimethylamine	ND		9.5	0.14	ug/L		03/06/24 13:48	03/07/24 20:40	1
N-Nitrosodiphenylamine	ND		4.8	0.20	ug/L		03/06/24 13:48	03/07/24 20:40	1
Naphthalene	ND		4.8	0.20	ug/L		03/06/24 13:48	03/07/24 20:40	1
Nitrobenzene	ND		4.8	0.19	ug/L		03/06/24 13:48	03/07/24 20:40	1
Pentachlorophenol	ND		9.5	0.75	ug/L		03/06/24 13:48	03/07/24 20:40	1
Phenanthrene	ND		4.8	0.29	ug/L		03/06/24 13:48	03/07/24 20:40	1

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Client Sample ID: 001 LAB COMP

Date Collected: 03/05/24 00:00
Date Received: 03/05/24 12:28

Lab Sample ID: 480-217488-6

Matrix: Wastewater

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.8	0.083	ug/L		03/06/24 13:48	03/07/24 20:40	1
Pyrene	ND		4.8	0.33	ug/L		03/06/24 13:48	03/07/24 20:40	1
n-Octadecane	ND		9.5	0.29	ug/L		03/06/24 13:48	03/07/24 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*79*		*52 - 151*	*03/06/24 13:48*	*03/07/24 20:40*	*1*
2-Fluorobiphenyl	*88*		*44 - 120*	*03/06/24 13:48*	*03/07/24 20:40*	*1*
2-Fluorophenol (Surr)	*51*		*17 - 120*	*03/06/24 13:48*	*03/07/24 20:40*	*1*
Nitrobenzene-d5 (Surr)	*78*		*15 - 314*	*03/06/24 13:48*	*03/07/24 20:40*	*1*
p-Terphenyl-d14 (Surr)	*92*		*22 - 125*	*03/06/24 13:48*	*03/07/24 20:40*	*1*
Phenol-d5 (Surr)	*34*		*8 - 424*	*03/06/24 13:48*	*03/07/24 20:40*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**0.0029**	**J**	0.010	0.0015	mg/L		03/06/24 11:47	03/07/24 18:31	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		03/07/24 12:14	03/07/24 15:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	**0.11**		0.010	0.0041	mg/L			03/07/24 10:31	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.7**	**HF**	0.1	0.1	SU			03/08/24 11:58	1
Temperature (SM 4500 H+ B)	**18.9**	**HF**	0.001	0.001	Degrees C			03/08/24 11:58	1

Surrogate Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-217488-6	001 LAB COMP	101	100	102	101

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
LCS 480-702656/7	Lab Control Sample	103	99	99	101
MB 480-702656/9	Method Blank	101	100	101	100

Surrogate Legend

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

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(68-130)	(76-123)	(77-120)	(75-123)
480-217488-5	TRIP BLANK	99	99	102	101

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Wastewater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(52-151)	(44-120)	(17-120)	(15-314)	(22-125)	(8-424)
480-217488-6	001 LAB COMP	79	88	51	78	92	34

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Surrogate Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TBP (52-151)	FBP (44-120)	2FP (17-120)	NBZ (15-314)	TPHd14 (22-125)	PHL (8-424)		
LCS 480-702801/2-A	Lab Control Sample	106	98	55	88	102	41		
LCSD 480-702801/3-A	Lab Control Sample Dup	102	89	53	84	95	39		
MB 480-702801/1-A	Method Blank	75	89	52	85	98	36		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-702656/9
Matrix: Water
Analysis Batch: 702656

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			03/05/24 15:19	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.26	ug/L			03/05/24 15:19	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			03/05/24 15:19	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			03/05/24 15:19	1
1,1-Dichloroethene	ND		5.0	0.85	ug/L			03/05/24 15:19	1
1,2-Dichlorobenzene	ND		5.0	0.44	ug/L			03/05/24 15:19	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			03/05/24 15:19	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			03/05/24 15:19	1
1,2-Dichloropropane	ND		5.0	0.61	ug/L			03/05/24 15:19	1
1,3-Dichlorobenzene	ND		5.0	0.54	ug/L			03/05/24 15:19	1
1,4-Dichlorobenzene	ND		5.0	0.51	ug/L			03/05/24 15:19	1
2-Chloroethyl vinyl ether	ND		25	1.9	ug/L			03/05/24 15:19	1
Acrolein	ND		100	17	ug/L			03/05/24 15:19	1
Acrylonitrile	ND		50	1.9	ug/L			03/05/24 15:19	1
Benzene	ND		5.0	0.60	ug/L			03/05/24 15:19	1
Bromoform	ND		5.0	0.47	ug/L			03/05/24 15:19	1
Bromomethane	ND		5.0	1.2	ug/L			03/05/24 15:19	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			03/05/24 15:19	1
Chlorobenzene	ND		5.0	0.48	ug/L			03/05/24 15:19	1
Dibromochloromethane	ND		5.0	0.41	ug/L			03/05/24 15:19	1
Chloroethane	ND		5.0	0.87	ug/L			03/05/24 15:19	1
Chloroform	ND		5.0	0.54	ug/L			03/05/24 15:19	1
Chloromethane	ND		5.0	0.64	ug/L			03/05/24 15:19	1
cis-1,3-Dichloropropene	ND		5.0	0.33	ug/L			03/05/24 15:19	1
Bromodichloromethane	ND		5.0	0.54	ug/L			03/05/24 15:19	1
Ethyl methacrylate	ND		5.0	0.61	ug/L			03/05/24 15:19	1
Ethylbenzene	ND		5.0	0.46	ug/L			03/05/24 15:19	1
Methylene Chloride	ND		5.0	0.81	ug/L			03/05/24 15:19	1
Tetrachloroethene	ND		5.0	0.34	ug/L			03/05/24 15:19	1
Toluene	ND		5.0	0.45	ug/L			03/05/24 15:19	1
trans-1,3-Dichloropropene	ND		5.0	0.44	ug/L			03/05/24 15:19	1
Trichloroethene	ND		5.0	0.60	ug/L			03/05/24 15:19	1
Trichlorofluoromethane	ND		5.0	0.45	ug/L			03/05/24 15:19	1
Vinyl chloride	ND		5.0	0.75	ug/L			03/05/24 15:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*03/05/24 15:19*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*03/05/24 15:19*	*1*
Toluene-d8 (Surr)	*101*		*77 - 120*		*03/05/24 15:19*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*03/05/24 15:19*	*1*

Lab Sample ID: LCS 480-702656/7
Matrix: Water
Analysis Batch: 702656

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane			20.0	20.5		ug/L		102	52 - 162		
1,1,2,2-Tetrachloroethane			20.0	20.7		ug/L		103	46 - 157		

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-702656/7
Matrix: Water
Analysis Batch: 702656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	20.0	20.8		ug/L		104	52 - 150
1,1-Dichloroethane	20.0	20.9		ug/L		104	59 - 155
1,1-Dichloroethene	20.0	22.1		ug/L		110	1 - 234
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	18 - 190
1,2-Dichloroethane	20.0	20.7		ug/L		103	49 - 155
1,2-Dichloropropane	20.0	21.0		ug/L		105	1 - 210
1,3-Dichlorobenzene	20.0	20.8		ug/L		104	59 - 156
1,4-Dichlorobenzene	20.0	20.9		ug/L		105	18 - 190
2-Chloroethyl vinyl ether	20.0	21.7	J	ug/L		108	1 - 305
Benzene	20.0	21.1		ug/L		105	37 - 151
Bromoform	20.0	20.0		ug/L		100	45 - 169
Bromomethane	20.0	20.0		ug/L		100	1 - 242
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 140
Chlorobenzene	20.0	20.9		ug/L		104	37 - 160
Dibromochloromethane	20.0	20.0		ug/L		100	53 - 149
Chloroethane	20.0	20.2		ug/L		101	14 - 230
Chloroform	20.0	20.5		ug/L		103	51 - 138
Chloromethane	20.0	19.5		ug/L		98	1 - 273
cis-1,3-Dichloropropene	20.0	20.7		ug/L		104	1 - 227
Bromodichloromethane	20.0	20.4		ug/L		102	35 - 155
Ethylbenzene	20.0	20.9		ug/L		105	37 - 162
Methylene Chloride	20.0	20.9		ug/L		105	1 - 221
Tetrachloroethene	20.0	21.1		ug/L		106	64 - 148
Toluene	20.0	20.8		ug/L		104	47 - 150
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	17 - 183
Trichloroethene	20.0	21.2		ug/L		106	71 - 157
Trichlorofluoromethane	20.0	21.1		ug/L		105	17 - 181
Vinyl chloride	20.0	21.4		ug/L		107	1 - 251

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*99*		*77 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-702801/1-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702801

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	0.21	ug/L		03/06/24 13:48	03/07/24 18:59	1
1,2-Dichlorobenzene	ND		10	0.26	ug/L		03/06/24 13:48	03/07/24 18:59	1
1,2-Diphenylhydrazine	ND		10	0.20	ug/L		03/06/24 13:48	03/07/24 18:59	1
1,3-Dichlorobenzene	ND		10	0.17	ug/L		03/06/24 13:48	03/07/24 18:59	1
1,4-Dichlorobenzene	ND		10	0.21	ug/L		03/06/24 13:48	03/07/24 18:59	1
2,2'-Oxybis(1-chloropropane)	ND		5.0	0.21	ug/L		03/06/24 13:48	03/07/24 18:59	1
2,4,6-Trichlorophenol	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-702801/1-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702801

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.19	ug/L		03/06/24 13:48	03/07/24 18:59	1
2,4-Dimethylphenol	ND		5.0	0.35	ug/L		03/06/24 13:48	03/07/24 18:59	1
2,4-Dinitrophenol	ND		10	1.3	ug/L		03/06/24 13:48	03/07/24 18:59	1
2,4-Dinitrotoluene	ND		10	0.40	ug/L		03/06/24 13:48	03/07/24 18:59	1
2,6-Dinitrotoluene	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1
2-Chloronaphthalene	ND		5.0	0.23	ug/L		03/06/24 13:48	03/07/24 18:59	1
2-Chlorophenol	ND		5.0	0.17	ug/L		03/06/24 13:48	03/07/24 18:59	1
2-Nitrophenol	ND		5.0	0.18	ug/L		03/06/24 13:48	03/07/24 18:59	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		03/06/24 13:48	03/07/24 18:59	1
4,6-Dinitro-2-methylphenol	ND		10	0.45	ug/L		03/06/24 13:48	03/07/24 18:59	1
4-Bromophenyl phenyl ether	ND		5.0	0.35	ug/L		03/06/24 13:48	03/07/24 18:59	1
4-Chloro-3-methylphenol	ND		5.0	0.28	ug/L		03/06/24 13:48	03/07/24 18:59	1
4-Chlorophenyl phenyl ether	ND		5.0	0.33	ug/L		03/06/24 13:48	03/07/24 18:59	1
4-Nitrophenol	ND		15	0.49	ug/L		03/06/24 13:48	03/07/24 18:59	1
Acenaphthene	ND		5.0	0.20	ug/L		03/06/24 13:48	03/07/24 18:59	1
Acenaphthylene	ND		5.0	0.22	ug/L		03/06/24 13:48	03/07/24 18:59	1
Anthracene	ND		5.0	0.35	ug/L		03/06/24 13:48	03/07/24 18:59	1
Benzidine	ND		80	14	ug/L		03/06/24 13:48	03/07/24 18:59	1
Benzo[a]anthracene	ND		5.0	0.28	ug/L		03/06/24 13:48	03/07/24 18:59	1
Benzo[a]pyrene	ND		5.0	0.33	ug/L		03/06/24 13:48	03/07/24 18:59	1
Benzo[b]fluoranthene	ND		5.0	0.30	ug/L		03/06/24 13:48	03/07/24 18:59	1
Benzo[g,h,i]perylene	ND		5.0	0.38	ug/L		03/06/24 13:48	03/07/24 18:59	1
Benzo[k]fluoranthene	ND		5.0	0.33	ug/L		03/06/24 13:48	03/07/24 18:59	1
Bis(2-chloroethoxy)methane	ND		5.0	0.19	ug/L		03/06/24 13:48	03/07/24 18:59	1
Bis(2-chloroethyl)ether	ND		5.0	0.23	ug/L		03/06/24 13:48	03/07/24 18:59	1
Bis(2-ethylhexyl) phthalate	ND		10	0.30	ug/L		03/06/24 13:48	03/07/24 18:59	1
Butyl benzyl phthalate	ND		5.0	0.28	ug/L		03/06/24 13:48	03/07/24 18:59	1
Chrysene	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1
Decane	ND		10	0.40	ug/L		03/06/24 13:48	03/07/24 18:59	1
Di-n-butyl phthalate	ND		5.0	0.40	ug/L		03/06/24 13:48	03/07/24 18:59	1
Di-n-octyl phthalate	ND		5.0	0.30	ug/L		03/06/24 13:48	03/07/24 18:59	1
Dibenz(a,h)anthracene	ND		5.0	0.38	ug/L		03/06/24 13:48	03/07/24 18:59	1
Diethyl phthalate	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1
Dimethyl phthalate	ND		5.0	0.23	ug/L		03/06/24 13:48	03/07/24 18:59	1
Fluoranthene	ND		5.0	0.40	ug/L		03/06/24 13:48	03/07/24 18:59	1
Fluorene	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1
Hexachlorobenzene	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1
Hexachlorobutadiene	ND		5.0	0.25	ug/L		03/06/24 13:48	03/07/24 18:59	1
Hexachlorocyclopentadiene	ND		10	0.53	ug/L		03/06/24 13:48	03/07/24 18:59	1
Hexachloroethane	ND		5.0	0.15	ug/L		03/06/24 13:48	03/07/24 18:59	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.38	ug/L		03/06/24 13:48	03/07/24 18:59	1
Isophorone	ND		5.0	0.19	ug/L		03/06/24 13:48	03/07/24 18:59	1
N-Nitrosodi-n-propylamine	ND		5.0	0.22	ug/L		03/06/24 13:48	03/07/24 18:59	1
N-Nitrosodimethylamine	ND		10	0.14	ug/L		03/06/24 13:48	03/07/24 18:59	1
N-Nitrosodiphenylamine	ND		5.0	0.21	ug/L		03/06/24 13:48	03/07/24 18:59	1
Naphthalene	ND		5.0	0.22	ug/L		03/06/24 13:48	03/07/24 18:59	1
Nitrobenzene	ND		5.0	0.20	ug/L		03/06/24 13:48	03/07/24 18:59	1
Pentachlorophenol	ND		10	0.79	ug/L		03/06/24 13:48	03/07/24 18:59	1
Phenanthrene	ND		5.0	0.30	ug/L		03/06/24 13:48	03/07/24 18:59	1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-702801/1-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702801

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		5.0	0.088	ug/L		03/06/24 13:48	03/07/24 18:59	1
Pyrene	ND		5.0	0.35	ug/L		03/06/24 13:48	03/07/24 18:59	1
n-Octadecane	ND		10	0.30	ug/L		03/06/24 13:48	03/07/24 18:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*52 - 151*	*03/06/24 13:48*	*03/07/24 18:59*	*1*
2-Fluorobiphenyl	*89*		*44 - 120*	*03/06/24 13:48*	*03/07/24 18:59*	*1*
2-Fluorophenol (Surr)	*52*		*17 - 120*	*03/06/24 13:48*	*03/07/24 18:59*	*1*
Nitrobenzene-d5 (Surr)	*85*		*15 - 314*	*03/06/24 13:48*	*03/07/24 18:59*	*1*
p-Terphenyl-d14 (Surr)	*98*		*22 - 125*	*03/06/24 13:48*	*03/07/24 18:59*	*1*
Phenol-d5 (Surr)	*36*		*8 - 424*	*03/06/24 13:48*	*03/07/24 18:59*	*1*

Lab Sample ID: LCS 480-702801/2-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702801

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	50.0	34.6		ug/L		69	44 - 142
1,2-Dichlorobenzene	50.0	31.5		ug/L		63	32 - 129
1,3-Dichlorobenzene	50.0	29.2		ug/L		58	1 - 172
1,4-Dichlorobenzene	50.0	30.6		ug/L		61	20 - 124
2,2'-Oxybis(1-chloropropane)	50.0	41.7		ug/L		83	36 - 166
2,4,6-Trichlorophenol	50.0	48.9		ug/L		98	37 - 144
2,4-Dichlorophenol	50.0	44.1		ug/L		88	39 - 135
2,4-Dimethylphenol	50.0	36.3		ug/L		73	32 - 120
2,4-Dinitrophenol	100	125		ug/L		125	1 - 191
2,4-Dinitrotoluene	50.0	51.4		ug/L		103	39 - 139
2,6-Dinitrotoluene	50.0	51.5		ug/L		103	50 - 158
2-Chloronaphthalene	50.0	42.8		ug/L		86	60 - 120
2-Chlorophenol	50.0	39.7		ug/L		79	23 - 134
2-Nitrophenol	50.0	49.2		ug/L		98	29 - 182
3,3'-Dichlorobenzidine	100	102		ug/L		102	1 - 262
4,6-Dinitro-2-methylphenol	100	117		ug/L		117	1 - 181
4-Bromophenyl phenyl ether	50.0	44.3		ug/L		89	53 - 127
4-Chloro-3-methylphenol	50.0	44.4		ug/L		89	22 - 147
4-Chlorophenyl phenyl ether	50.0	46.8		ug/L		94	25 - 158
4-Nitrophenol	100	48.6		ug/L		49	1 - 132
Acenaphthene	50.0	45.7		ug/L		91	47 - 145
Acenaphthylene	50.0	42.9		ug/L		86	33 - 145
Anthracene	50.0	45.7		ug/L		91	27 - 133
Benzidine	100	40.0	J	ug/L		40	1 - 120
Benzo[a]anthracene	50.0	48.0		ug/L		96	33 - 143
Benzo[a]pyrene	50.0	50.7		ug/L		101	17 - 163
Benzo[b]fluoranthene	50.0	49.6		ug/L		99	24 - 159
Benzo[g,h,i]perylene	50.0	47.5		ug/L		95	1 - 219
Benzo[k]fluoranthene	50.0	45.8		ug/L		92	11 - 162
Bis(2-chloroethoxy)methane	50.0	42.9		ug/L		86	33 - 184
Bis(2-chloroethyl)ether	50.0	42.3		ug/L		85	12 - 158

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-702801/2-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702801

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	50.0	46.4		ug/L		93	8 - 158
Butyl benzyl phthalate	50.0	46.2		ug/L		92	1 - 152
Chrysene	50.0	48.7		ug/L		97	17 - 168
Di-n-butyl phthalate	50.0	45.5		ug/L		91	1 - 120
Di-n-octyl phthalate	50.0	47.2		ug/L		94	4 - 146
Dibenz(a,h)anthracene	50.0	47.3		ug/L		95	1 - 227
Diethyl phthalate	50.0	47.7		ug/L		95	1 - 120
Dimethyl phthalate	50.0	48.3		ug/L		97	1 - 120
Fluoranthene	50.0	46.0		ug/L		92	26 - 137
Fluorene	50.0	45.6		ug/L		91	59 - 121
Hexachlorobenzene	50.0	46.6		ug/L		93	1 - 152
Hexachlorocyclopentadiene	50.0	25.8		ug/L		52	5 - 120
Hexachloroethane	50.0	25.9		ug/L		52	40 - 120
Indeno[1,2,3-cd]pyrene	50.0	52.2		ug/L		104	1 - 171
Isophorone	50.0	44.8		ug/L		90	21 - 196
N-Nitrosodi-n-propylamine	50.0	42.8		ug/L		86	1 - 230
N-Nitrosodiphenylamine	50.0	45.4		ug/L		91	54 - 125
Naphthalene	50.0	38.3		ug/L		77	21 - 133
Nitrobenzene	50.0	40.4		ug/L		81	35 - 180
Pentachlorophenol	100	95.3		ug/L		95	14 - 176
Phenanthrene	50.0	46.3		ug/L		93	54 - 120
Phenol	50.0	18.8		ug/L		38	5 - 120
Pyrene	50.0	49.6		ug/L		99	52 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*106*		*52 - 151*
2-Fluorobiphenyl	*98*		*44 - 120*
2-Fluorophenol (Surr)	*55*		*17 - 120*
Nitrobenzene-d5 (Surr)	*88*		*15 - 314*
p-Terphenyl-d14 (Surr)	*102*		*22 - 125*
Phenol-d5 (Surr)	*41*		*8 - 424*

Lab Sample ID: LCSD 480-702801/3-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 702801

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	31.7		ug/L		63	44 - 142	9	34
1,2-Dichlorobenzene	50.0	29.3		ug/L		59	32 - 129	7	38
1,3-Dichlorobenzene	50.0	28.0		ug/L		56	1 - 172	4	37
1,4-Dichlorobenzene	50.0	28.6		ug/L		57	20 - 124	7	40
2,2'-Oxybis(1-chloropropane)	50.0	39.4		ug/L		79	36 - 166	6	36
2,4,6-Trichlorophenol	50.0	44.6		ug/L		89	37 - 144	9	20
2,4-Dichlorophenol	50.0	41.1		ug/L		82	39 - 135	7	23
2,4-Dimethylphenol	50.0	34.0		ug/L		68	32 - 120	6	18
2,4-Dinitrophenol	100	116		ug/L		116	1 - 191	7	29
2,4-Dinitrotoluene	50.0	49.2		ug/L		98	39 - 139	4	20
2,6-Dinitrotoluene	50.0	47.6		ug/L		95	50 - 158	8	17

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-702801/3-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 702801

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloronaphthalene			50.0	38.8		ug/L		78	60 - 120	10	30
2-Chlorophenol			50.0	37.7		ug/L		75	23 - 134	5	26
2-Nitrophenol			50.0	46.4		ug/L		93	29 - 182	6	28
3,3'-Dichlorobenzidine			100	93.7		ug/L		94	1 - 262	9	31
4,6-Dinitro-2-methylphenol			100	109		ug/L		109	1 - 181	7	30
4-Bromophenyl phenyl ether			50.0	41.1		ug/L		82	53 - 127	7	16
4-Chloro-3-methylphenol			50.0	42.0		ug/L		84	22 - 147	5	16
4-Chlorophenyl phenyl ether			50.0	43.9		ug/L		88	25 - 158	6	15
4-Nitrophenol			100	46.8		ug/L		47	1 - 132	4	24
Acenaphthene			50.0	42.6		ug/L		85	47 - 145	7	25
Acenaphthylene			50.0	39.2		ug/L		78	33 - 145	9	22
Anthracene			50.0	43.0		ug/L		86	27 - 133	6	15
Benzidine			100	36.4	J	ug/L		36	1 - 120	10	50
Benzo[a]anthracene			50.0	45.0		ug/L		90	33 - 143	7	15
Benzo[a]pyrene			50.0	47.3		ug/L		95	17 - 163	7	15
Benzo[b]fluoranthene			50.0	46.2		ug/L		92	24 - 159	7	17
Benzo[g,h,i]perylene			50.0	44.8		ug/L		90	1 - 219	6	19
Benzo[k]fluoranthene			50.0	43.3		ug/L		87	11 - 162	6	19
Bis(2-chloroethoxy)methane			50.0	39.7		ug/L		79	33 - 184	8	23
Bis(2-chloroethyl)ether			50.0	40.0		ug/L		80	12 - 158	6	33
Bis(2-ethylhexyl) phthalate			50.0	44.2		ug/L		88	8 - 158	5	15
Butyl benzyl phthalate			50.0	43.7		ug/L		87	1 - 152	6	15
Chrysene			50.0	46.1		ug/L		92	17 - 168	6	15
Di-n-butyl phthalate			50.0	43.7		ug/L		87	1 - 120	4	15
Di-n-octyl phthalate			50.0	44.6		ug/L		89	4 - 146	6	15
Dibenz(a,h)anthracene			50.0	44.6		ug/L		89	1 - 227	6	18
Diethyl phthalate			50.0	44.6		ug/L		89	1 - 120	7	15
Dimethyl phthalate			50.0	44.9		ug/L		90	1 - 120	7	15
Fluoranthene			50.0	43.8		ug/L		88	26 - 137	5	15
Fluorene			50.0	42.7		ug/L		85	59 - 121	7	18
Hexachlorobenzene			50.0	43.8		ug/L		88	1 - 152	6	15
Hexachlorocyclopentadiene			50.0	23.0		ug/L		46	5 - 120	12	50
Hexachloroethane			50.0	24.2		ug/L		48	40 - 120	7	43
Indeno[1,2,3-cd]pyrene			50.0	49.0		ug/L		98	1 - 171	6	17
Isophorone			50.0	41.6		ug/L		83	21 - 196	7	21
N-Nitrosodi-n-propylamine			50.0	40.8		ug/L		82	1 - 230	5	23
N-Nitrosodiphenylamine			50.0	43.0		ug/L		86	54 - 125	5	15
Naphthalene			50.0	35.6		ug/L		71	21 - 133	7	31
Nitrobenzene			50.0	37.8		ug/L		76	35 - 180	7	27
Pentachlorophenol			100	89.7		ug/L		90	14 - 176	6	21
Phenanthrene			50.0	44.1		ug/L		88	54 - 120	5	16
Phenol			50.0	17.6		ug/L		35	5 - 120	7	36
Pyrene			50.0	45.8		ug/L		92	52 - 120	8	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*102*		*52 - 151*
2-Fluorobiphenyl	*89*		*44 - 120*
2-Fluorophenol (Surr)	*53*		*17 - 120*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-702801/3-A
Matrix: Water
Analysis Batch: 702896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 702801

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*84*		*15 - 314*
p-Terphenyl-d14 (Surr)	*95*		*22 - 125*
Phenol-d5 (Surr)	*39*		*8 - 424*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-702784/1-A
Matrix: Water
Analysis Batch: 703070

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		03/06/24 11:47	03/07/24 18:21	1

Lab Sample ID: LCS 480-702784/2-A
Matrix: Water
Analysis Batch: 703070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.500	0.518		mg/L		104	85 - 115

Lab Sample ID: 480-217488-6 MS
Matrix: Wastewater
Analysis Batch: 703070

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 702784

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.0029	J	0.500	0.513		mg/L		102	70 - 130

Lab Sample ID: 480-217488-6 MSD
Matrix: Wastewater
Analysis Batch: 703070

Client Sample ID: 001 LAB COMP
Prep Type: Total/NA
Prep Batch: 702784

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	0.0029	J	0.500	0.513		mg/L		102	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 480-702930/1-A
Matrix: Water
Analysis Batch: 702991

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		03/07/24 12:14	03/07/24 15:36	1

Lab Sample ID: LCS 480-702930/2-A
Matrix: Water
Analysis Batch: 702991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00594		mg/L		89	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 480-702927/21
Matrix: Water
Analysis Batch: 702927

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0041	mg/L			03/07/24 10:14	1

Lab Sample ID: HLCS 480-702927/22
Matrix: Water
Analysis Batch: 702927

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.393		mg/L		98	90 - 110

Lab Sample ID: LCS 480-702927/23
Matrix: Water
Analysis Batch: 702927

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.246		mg/L		98	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-703108/1
Matrix: Water
Analysis Batch: 703108

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

GC/MS VOA

Analysis Batch: 702656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-5	TRIP BLANK	Total/NA	WQ	624.1	
480-217488-6	001 LAB COMP	Total/NA	Wastewater	624.1	
MB 480-702656/9	Method Blank	Total/NA	Water	624.1	
LCS 480-702656/7	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 702801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	625	
MB 480-702801/1-A	Method Blank	Total/NA	Water	625	
LCS 480-702801/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 480-702801/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 702896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	625.1	702801
MB 480-702801/1-A	Method Blank	Total/NA	Water	625.1	702801
LCS 480-702801/2-A	Lab Control Sample	Total/NA	Water	625.1	702801
LCSD 480-702801/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	702801

Metals

Prep Batch: 702784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	200.7	
MB 480-702784/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-702784/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-217488-6 MS	001 LAB COMP	Total/NA	Wastewater	200.7	
480-217488-6 MSD	001 LAB COMP	Total/NA	Wastewater	200.7	

Prep Batch: 702930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	245.1	
MB 480-702930/1-A	Method Blank	Total/NA	Water	245.1	
LCS 480-702930/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 702991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	245.1	702930
MB 480-702930/1-A	Method Blank	Total/NA	Water	245.1	702930
LCS 480-702930/2-A	Lab Control Sample	Total/NA	Water	245.1	702930

Analysis Batch: 703070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	702784
MB 480-702784/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	702784
LCS 480-702784/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	702784
480-217488-6 MS	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	702784
480-217488-6 MSD	001 LAB COMP	Total/NA	Wastewater	200.7 Rev 4.4	702784

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

General Chemistry

Analysis Batch: 702927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	335.4	
MB 480-702927/21	Method Blank	Total/NA	Water	335.4	
HLCS 480-702927/22	Lab Control Sample	Total/NA	Water	335.4	
LCS 480-702927/23	Lab Control Sample	Total/NA	Water	335.4	

Analysis Batch: 703108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217488-6	001 LAB COMP	Total/NA	Wastewater	SM 4500 H+ B	
LCS 480-703108/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-217488-5
Matrix: WQ
Date Collected: 03/05/24 00:00
Date Received: 03/05/24 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	702656	AXK	EET BUF	03/05/24 18:44

Client Sample ID: 001 LAB COMP

Lab Sample ID: 480-217488-6
Matrix: Wastewater
Date Collected: 03/05/24 00:00
Date Received: 03/05/24 12:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	702656	AXK	EET BUF	03/05/24 19:08
Total/NA	Prep	625			702801	LSC	EET BUF	03/06/24 13:48
Total/NA	Analysis	625.1		1	702896	JMM	EET BUF	03/07/24 20:40
Total/NA	Prep	200.7			702784	ESB	EET BUF	03/06/24 11:47
Total/NA	Analysis	200.7 Rev 4.4		1	703070	BMB	EET BUF	03/07/24 18:31
Total/NA	Prep	245.1			702930	NVK	EET BUF	03/07/24 12:14
Total/NA	Analysis	245.1		1	702991	NVK	EET BUF	03/07/24 15:48
Total/NA	Analysis	335.4		1	702927	CLT	EET BUF	03/07/24 10:31
Total/NA	Analysis	SM 4500 H+ B		1	703108	KB	EET BUF	03/08/24 11:58

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

Accreditation/Certification Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Wastewater	1,2-Dichloroethene, Total
624.1		Wastewater	Ethyl methacrylate
624.1		WQ	1,2-Dichloroethene, Total
624.1		WQ	Ethyl methacrylate
625.1	625	Wastewater	1,2-Dichlorobenzene
625.1	625	Wastewater	1,3-Dichlorobenzene
625.1	625	Wastewater	1,4-Dichlorobenzene
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Wastewater	Temperature

Method Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET BUF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
245.1	Mercury (CVAA)	EPA	EET BUF
335.4	Cyanide, Total	EPA	EET BUF
SM 4500 H+ B	pH	SM	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
245.1	Preparation, Mercury	EPA	EET BUF
625	Liquid-Liquid Extraction	EPA	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: Arcadis U.S., Inc.
Project/Site: Monthly Testing

Job ID: 480-217488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-217488-5	TRIP BLANK	WQ	03/05/24 00:00	03/05/24 12:28
480-217488-6	001 LAB COMP	Wastewater	03/05/24 00:00	03/05/24 12:28

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: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-193789-34075.1
Client Contact: Jason Gutkowski	Phone: 315 4363605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Arcadis U.S., Inc.	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Needed 30125855			
Email: jason.gutkowski@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm. Monthly	Project #: 48011056			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

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)	625.1_PREC - Priority Pollutant List SVOCs	624.1_PREC - Priority Pollutant List VOCs	200.7, 245.1	SM4500_H+ - pH	335.4_NP - Cyanide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	B		
001-1	3/5/24	0558	G	Water			X	X	X	X	X	3	Lab To
001-2		0758		Water			X	X	X	X	X	3	Composite
001-3		0958					X	X	X	X	X	3	Samples
001-4		1158					X	X	X	X	X	3	
TripBlank		—						X				1	Short Hold Time

480-217488 Chain of Custody

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:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Sam Gutkowski	3/5/24/ 1228	Arcadis		3-5-24 1228	TAP
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 5.3 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 480-217488-1

Login Number: 217488
List Number: 1
Creator: Yeager, Brian A

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	ARCADIS
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 B

Groundwater Monitoring

Tables

Table 1
Groundwater Elevation Data

Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart Street and 40 Bradley Street, Buffalo, New York

Groundwater Elevation Data					
Well ID	Reference Elevation (ft. amsl)	May 16, 2023		September 14, 2023	
		DTW	GWE	DTW	GWE
B19	592.14	7.70	584.44	10.23	581.91
B6R	590.86	25.55	565.31	18.62	572.24
B7R	591.59	25.03	566.56	17.90	573.69
B8R	592.16	17.49	574.67	18.12	574.04
MWF1	592.28	7.73	584.55	8.29	583.99
MWF2	594.66	9.11	585.55	10.13	584.53
MWF3	591.66	3.77	587.89	5.09	586.57
MWF4	594.00	13.89	580.11	15.07	578.93
MWF5	589.90	12.60	577.30	13.65	576.25
MWS2	591.89	10.66	581.23	10.73	581.16
MWS4	593.05	11.44	581.61	11.78	581.27
P1	590.77	14.89	575.88	14.97	575.80
P2	591.30	17.40	573.90	17.66	573.64
P6R	590.85	16.81	574.04	17.57	573.28
P7R	591.36	24.58	566.78	24.97	566.39
P8R	591.28	17.06	574.22	17.39	573.89
PF3	591.48	14.26	577.22	14.44	577.04
PF4	591.48	19.09	572.39	19.79	571.69
PF6	592.86	7.21	585.65	8.01	584.85
PS1	592.89	10.31	582.58	10.49	582.40
PS2	593.40	12.35	581.05	12.46	580.94
TP1	591.27	17.18	574.09	18.98	572.29
TP2	589.87	15.46	574.41	17.85	572.02
Pumping Sump in Trench	589.26	18.70	570.56	19.03	570.23

Notes:
DTW - depth to water in feet, below top of casing
GWE - groundwater elevation, ft. amsl
ft. amsl - feet above mean sea level

Table 2
Groundwater Analytical Data for Volatile Organic Compounds

Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart Street and 40 Bradley Street, Buffalo, New York

Well ID	Date	Depth to Water (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m-, p- Xylene (µg/L)	o-Xylene (µg/L)
NYSDEC TOGS 1.1.1 Standards			**1**	**5**	**5**	**5**	**5**
B3	12/13/2011	9.75	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.40	ND < 0.20
	6/28/2012	8.46	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.40	ND < 0.20
	12/11/2012	10.01	0.099	2.1	0.7	2.7	1
	8/24/2015	NM	NS	NS	NS	NS	NS
	4/27/2016	7.78	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/21/2016	8.85	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	3/29/2017	6.49	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/20/2017	7.50	ND < 0.090	ND < 0.25	ND < 0.30	ND < 0.28	ND < 0.32
	10/23/2018	6.46	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/18/2018	6.67	ND < 0.82	ND < 1.0	ND < 1.5	ND < 1.3	ND < 1.5
	6/12/2019	6.60	ND < 0.82	ND < 1.0	ND < 1.5	ND < 1.3	ND < 1.5
	11/18/2019	6.55	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	9/2/2020	6.49	ND < 1.6	ND < 2.0	ND < 3.0	ND < 2.6	ND < 3.0
	12/9/2020	6.85	ND < 1.6	ND < 2.0	ND < 3.0	ND <2.6	ND < 3.0
B6	12/13/2011	18.21	0.11	0.067	ND < 0.20	ND	ND < 0.20
	6/28/2012	18.59	0.22	ND < 0.20	ND < 0.20	ND	ND < 0.20
	12/11/2012	18.00	0.043	0.22	0.064	0.29	0.068
	8/24/2015	18.51	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	4/27/2016	18.70	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/20/2016	18.58	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	3/28/2017	25.81	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/19/2017	23.27	0.26 J	ND < 0.25	2.2	0.38 J	0.83 J
B6R	10/24/2018	16.94	**1**	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/17/2018	17.31	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	6/12/2019	16.34	ND < 0.41	ND < 0.51	2	ND < 0.66	ND < 0.76
	11/18/2019	16.97	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	9/3/2020	17.20	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/10/2020	16.68	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	9/2/2021	17.55	0.41 J	ND < 1.0	1.1	ND < 2.0	ND < 1.0
	11/10/2021	17.21	ND < 0.41 F1	ND < 0.51 F1	ND < 0.74 F1	ND < 0.66 F1	ND < 0.76
	11/9/2022	16.93	ND < 1.0	ND < 1.0	ND < 1.0	ND < 2.0	ND < 1.0
	12/8/2022	16.88	ND < 1.0	ND < 1.0	ND < 1.0	ND < 2.0	ND < 1.0
	5/16/2023	25.55	ND < 1.0	ND < 1.0	ND < 1.0	ND < 2.0	ND < 1.0
	9/14/2023	18.62	ND < 1.0	ND < 1.0	ND < 1.0	ND < 2.0	ND < 1.0
B7	12/13/2011	19.52	0.12	ND < 0.20	ND < 0.20	ND	ND < 0.20
	6/28/2012	20.42	**4.7**	0.068	0.079	ND	0.11
	12/11/2012	19.16	**3.9**	0.42	0.13	0.36	0.17
	8/25/2015	19.79	**9.8**	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	4/27/2016	19.90	**6.4**	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/21/2016	18.42	**12**	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	3/28/2017	26.47	**5.1**	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/20/2017	17.96	**56**	1.7	**38**	3.7	**12**
B7R	10/24/2018	18.01	**42**	ND < 1.0	**6.4**	ND < 1.3	1.5 J
	12/17/2018	18.31	**38**	ND < 1.0	**12**	ND < 1.3	2.9
	6/12/2019	16.99	**18**	ND < 0.51	**22**	1.1 J	**6.3**
	11/18/2019	17.79	**19**	0.51 J	**18**	1.2 J	**5.4**
	9/3/2020	18.05	**25**	ND < 0.51	**5.2**	ND < 0.66	2.2
	12/10/2020	17.57	**17**	ND < 0.51	2	ND < 0.66	1.6
	9/2/2021	18.24	**32**	ND < 2.0	ND < 2.0	ND < 4.0	ND < 2.0
	11/11/2021	18.04	**22**	ND < 1.0	1.5 J	ND < 1.3	ND < 1.5

See Notes on Page 4.

Table 2
Groundwater Analytical Data for Volatile Organic Compounds

Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart Street and 40 Bradley Street, Buffalo, New York

Well ID	Date	Depth to Water (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m-, p- Xylene (µg/L)	o-Xylene (µg/L)
NYSDEC TOGS 1.1.1 Standards			**1**	**5**	**5**	**5**	**5**
B7R (cont.)	11/9/2022	17.90	**29**	ND < 2.0	ND < 2.0	ND < 4.0	ND < 4.0
	12/8/2022	17.40	**32**	ND < 1.0	ND < 1.0	ND < 2.0	ND < 1.0
	5/16/2023	25.03	**36**	ND < 1.0	ND <1.0	ND <2.0 F1	0.80 J
	9/14/2023	17.90	**27**	0.68 J	3.5	0.72 J	2.0
B8	12/13/2011	18.11	**100**	1	**50**	**9.3**	**17**
	6/28/2012	18.72	**150**	1.4	**77**	**6.2**	**27**
	12/11/2012	18.03	**51**	1.3	**23**	**5.4**	**13**
	8/25/2015	18.41	**220**	1.7	**60**	**11**	**36**
	4/27/2016	NM	**100**	ND < 2.0	**54**	**6.3 J**	**21**
	12/20/2016	18.46	**450**	ND < 5.1	**45**	ND < 6.6	**32**
	3/29/2017	25.67	**7.5**	ND < 0.51	**20**	3.1	**7.5**
	12/20/2017	18.48	**530**	**250**	**830**	**300**	**210**
B8R	10/23/2018	18.26	**620**	**140**	**530**	**160**	**170**
	12/17/2018	18.25	**500**	**75**	**470**	**110**	**130**
	6/12/2019	17.15	**550**	**130**	**580**	**170**	**170**
	11/18/2019	14.84	NS**	NS**	NS**	NS**	NS**
	9/2/2020	18.19	**380**	**37**	**530**	**110**	**130**
	12/9/2020	17.60	**300**	**26**	**450**	**110**	**130**
	9/2/2021	18.45	**580**	**64**	**950**	**270**	**240**
	11/11/2021	18.20	**170**	**20**	**410**	**87**	**94**
	11/9/2022	18.11	**480**	ND < 20	**240**	**29 J**	**62**
	12/8/2022	17.51	**460**	**16 J**	**320**	**45**	**86**
	5/16/2023	17.49	**45**	ND < 20	**140**	**20 J**	**29**
	9/14/2023	18.12	**430**	ND < 20	**250**	**44**	**53**
MWF2	12/13/2011	9.74	**81**	**7.3**	**420**	**420**	**290**
	6/28/2012	9.45	**36**	4.5	**730**	**570**	**380**
	12/11/2012	8.90	**390**	**19**	**800**	**730**	**470**
	8/25/2015	8.97	**44**	**5.4 J**	**660**	**610**	**420**
	4/27/2016	9.22	**100**	**6.1**	**500**	**430**	**310**
	12/20/2016	9.39	**100**	ND < 20	**3000**	**2200**	**1200**
	3/29/2017	9.29	**37 J**	ND < 20	**420**	**380**	**310**
	12/19/2017	8.88	**14**	3.5 J	**320**	**200**	**190**
	10/24/2018	9.03	**23**	ND < 5.1	**190**	**230**	**180**
	12/18/2018	8.80	**16**	ND < 5.1	**140**	**220**	**190**
	6/12/2019	9.68	**26**	ND < 5.1	**570**	**230**	**310**
	11/18/2019	8.78	NS**	NS**	NS**	NS**	NS**
	9/3/2020	9.12	NS**	NS**	NS**	NS**	NS**
	12/10/2020	8.86	**11**	ND < 5.1	**260**	**200**	**240**
	9/2/2021	9.15	**25**	ND < 10	**490**	**310**	**280**
	11/11/2021	8.46	**44**	ND < 13	**1100**	**690**	**550**
	11/9/2022	9.26	**10 J**	ND < 25	**230**	**220**	**220**
	12/8/2022	9.61	ND < 10	ND < 10	**250**	**200**	**190**
	5/16/2023	9.11	**51**	**5.8 J**	**620**	**570**	**390**
	9/14/2023	10.13	**50**	**5.4 J**	**890**	**510**	**410**
MWF3	12/13/2011	4.92	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.40	ND < 0.20
	6/28/2012	6.00	0.37	ND < 0.20	ND < 0.20	0.13	1.1
	12/11/2012	4.80	0.26	0.35	1.6	2	1.5
	8/24/2015	NM	NS	NS	NS	NS	NS
	4/27/2016	5.16	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/20/2016	5.01	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	3/28/2017	12.19	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/19/2017	5.54	ND < 0.090	ND < 0.25	ND < 0.30	0.28 J	0.76 J
	10/24/2018	5.51	ND < 0.82	ND < 1.0	ND < 1.5	ND < 1.3	ND < 1.5
	12/18/2018	4.55	ND < 0.82	ND < 1.0	ND < 1.5	ND < 1.3	ND < 1.5

See Notes on Page 4.

Table 2
Groundwater Analytical Data for Volatile Organic Compounds

Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart Street and 40 Bradley Street, Buffalo, New York

Well ID	Date	Depth to Water (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m-, p- Xylene (µg/L)	o-Xylene (µg/L)
NYSDEC TOGS 1.1.1 Standards			**1**	**5**	**5**	**5**	**5**
MWF3 (cont.)	6/12/2019	4.32	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	11/18/2019	4.90	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	9/2/2020	5.43	ND < 1.6	ND < 2.0	ND < 3.0	ND < 2.6	ND < 3.0
	12/9/2020	4.62	ND < 1.6	ND < 2.0	ND < 3.0	ND < 2.6	ND < 3.0
	9/2/2021	5.00	ND < 4.0	ND < 4.0	ND < 4.0	ND < 8.0	ND < 4.0
	11/11/2021	4.97	ND < 1.6	ND < 2.0	ND < 3.0	ND < 2.6	ND < 3.0
	11/9/2022	4.80	ND < 4.0	ND < 4.0	ND < 4.0	ND < 8.0	ND < 4.0
	12/8/2022	4.01	ND < 4.0	ND < 4.0	ND < 4.0	ND < 8.0	ND < 4.0
	5/16/2023	3.77	ND < 4.0	ND < 4.0	ND < 4.0	ND < 8.0	ND < 4.0
	9/14/2023	5.09	ND < 4.0	ND < 4.0	ND < 4.0	ND < 8.0	ND < 4.0
MWF4	12/13/2011	16.47	**64**	2.1	**84**	**16**	**54**
	6/28/2012	15.96	**90**	2.9	**120**	**19**	**73**
	12/11/2012	15.45	**100**	4.2	**200**	**38**	**99**
	8/25/2015	15.51	**76**	ND < 2.6	**72**	**11**	**56**
	4/27/2016	15.88	**53**	ND < 2.6	**51**	**11**	**49**
	12/20/2016	15.77	**69**	2.1	**82**	**13**	**59**
	3/29/2017	16.01	**75**	2.4	**91**	**13**	**63**
	12/19/2017	16.14	**83**	3.1	**110**	**14**	**75**
	10/23/2018	14.87	**67**	2.7 J	**120**	**13**	**61**
	12/17/2018	15.52	**81**	3.9 J	**160 F1**	**24**	**89**
	6/12/2019	15.50	**92**	4.7	**240**	**34**	**120**
	11/18/2019	14.92	**53**	2.4 J	**100**	**18**	**70**
	9/3/2020	15.50	NS**	NS**	NS**	NS**	NS**
	12/10/2020	15.23	**64**	2.3 J	**95**	**13**	**69**
	9/2/2021	15.30	**49**	ND < 4.0	**48**	**8.6**	**44**
	11/11/2021	15.24	**43**	ND < 2.0	**54**	**9.5**	**48**
	11/9/2022	15.40	**50**	ND < 4.0	**56**	**8.7**	**43**
	12/8/2022	14.03	**64**	3.4 J	**170**	**22**	**86**
	5/16/2023	13.89	**120**	**7.0**	**370**	**35**	**140**
	9/14/2023	15.07	**54**	2.4 J	**100**	**12**	**57**
MWS2	8/24/2015	NM	NS	NS	NS	NS	NS
	4/27/2016	NM	NS	NS	NS	NS	NS
	12/21/2016	18.95	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	3/28/2017	17.99	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/19/2017	11.98	ND < 0.090	ND < 0.25	ND < 0.30	ND < 0.28	ND < 0.32
	10/24/2018	11.24	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/18/2018	10.79	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
PS1	12/13/2011	11.02	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.40	NM
	6/28/2012	11.57	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.40	NM
	12/11/2012	11.37	0.078	0.1	0.075	ND < 0.40	NM
	8/25/2015	10.03	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	NM
	4/27/2016	11.19	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/22/2016	12.72	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	3/29/2017	11.52	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/20/2017	12.89	ND < 0.090	ND < 0.25	ND < 0.30	ND < 0.28	ND < 0.32
	10/23/2018	11.54	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76
	12/18/2018	10.48	ND < 0.41	ND < 0.51	ND < 0.74	ND < 0.66	ND < 0.76

See Notes on Page 4.

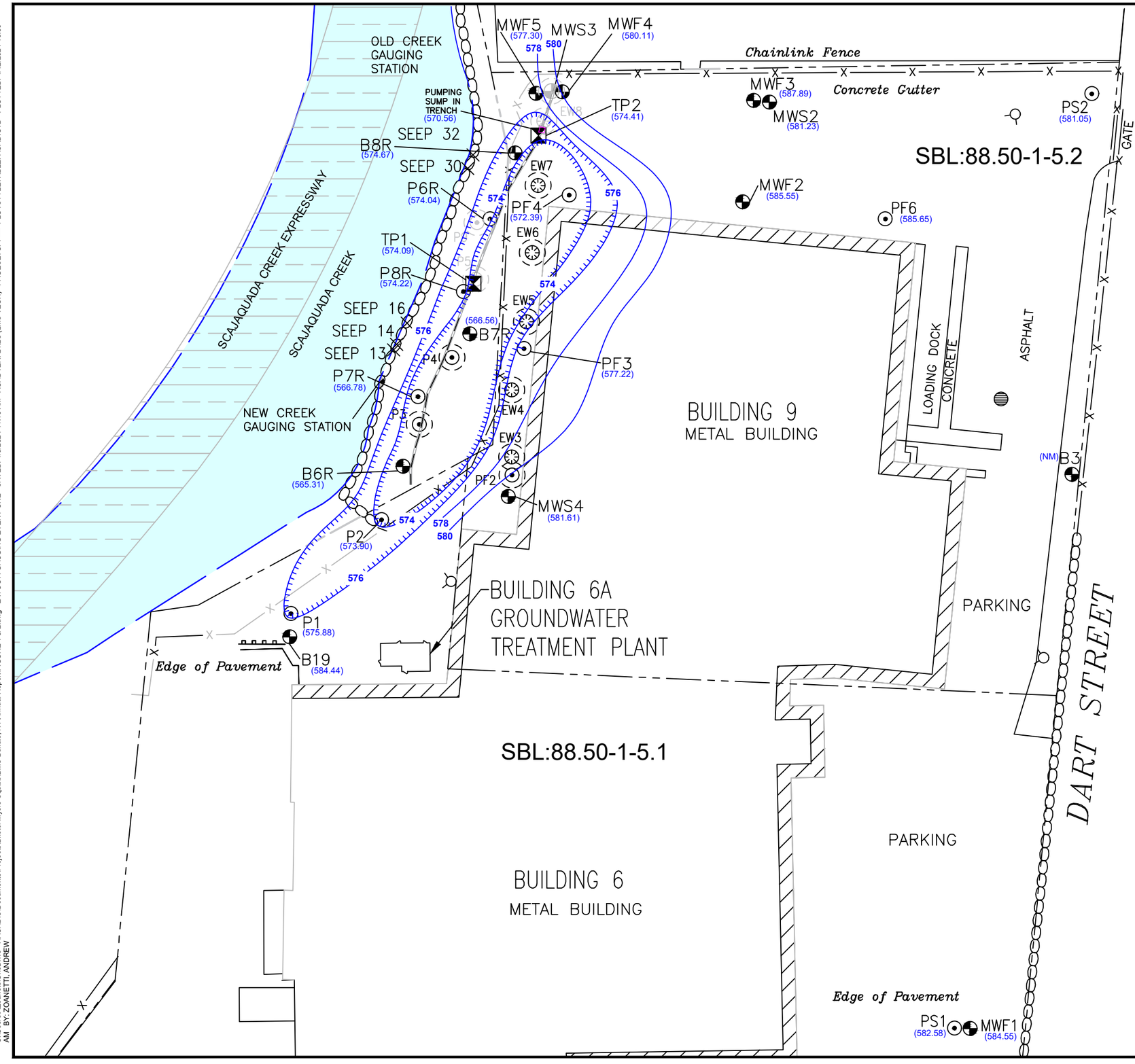
Table 2
Groundwater Analytical Data for Volatile Organic Compounds

Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart Street and 40 Bradley Street, Buffalo, New York

Well ID	Date	Depth to Water (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m-, p- Xylene (µg/L)	o-Xylene (µg/L)
NYSDEC TOGS 1.1.1 Standards			**1**	**5**	**5**	**5**	**5**
P5*	8/25/2015	18.15	**84**	2.7 J	**300**	**10**	NM
	4/27/2016	18.59	**14**	ND < 2.6	**150**	**8.9 J**	**36**
	12/21/2016	18.50	**120**	ND < 10	**950**	**45**	**250**
	3/29/2017	18.82	**5.4**	ND < 1.0	**74**	**5**	**20**
	12/20/2017	NM*	NS*	NS*	NS*	NS*	NS*
P8R	6/12/2019	17.13	**130**	**5.5**	**240**	**22**	**54**
	11/18/2019	17.25	**200**	**5.8**	**380**	**21**	**69**
	9/3/2020	17.86	**160**	**6.7**	**260**	**31**	**64**
	12/10/2020	17.54	**150**	4.2 J	**270**	**16**	**76**
	9/2/2021	18.04	**180**	**9.6 F1**	**130 F1**	**31**	**40**
	11/11/2021	17.75	**210**	**14**	**230**	**47**	**80**
	11/9/2022	17.90	**260**	**5.9 J**	**510**	**38**	**130**
	12/8/2022	17.05	**210**	**11**	**200**	**44**	**64**
	5/16/2023	17.06	**170**	**4.1 J**	**190**	**16**	**52**
	9/14/2023	17.39	**86**	ND < 5.0	**130**	**8.8 J**	**43**

Notes:
Bolded analytical data represents results above NYSDEC TOGS 1.1.1 Standards.
* Well abandoned
**Well not sampled due to non-aqueous phase liquid observed during gauging.
µg/L = micrograms per liter
F1 = MS and/or MSD Recovery is outside acceptable limits.
ft = feet
J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.
ND = non detect (value shown is the method detection limit)
NM = not measured
NS = not sampled
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Services

Figures



LEGEND :

- INTERCEPTOR TRENCH
- PROPERTY BOUNDARY
- FENCE
- SHEET PILE RETAINING WALL
- MONITORING WELL
- ABANDONED MONITORING WELL
- STREAM GAUGE
- SEEP LOCATION
- PIEZOMETER
- ABANDONED PIEZOMETER
- GROUNDWATER EXTRACTION WELL
- ABANDONED GROUNDWATER EXTRACTION WELL
- TRENCH PIEZOMETER
- RECOVERY SUMP
- 580 —— 580 GROUNDWATER CONTOUR
- (584.55) GROUNDWATER ELEVATION (FT)
- (NM) NOT MEASURED

NOTE:

1. BASE MAP FROM A GROUNDWATER & ENVIRONMENTAL SERVICES, INC. FIGURE TITLED "PROPOSED GROUNDWATER COLLECTION TRENCH LOCATION MAP" DATED 4/13/2013.

0 100' 200'

GRAPHIC SCALE

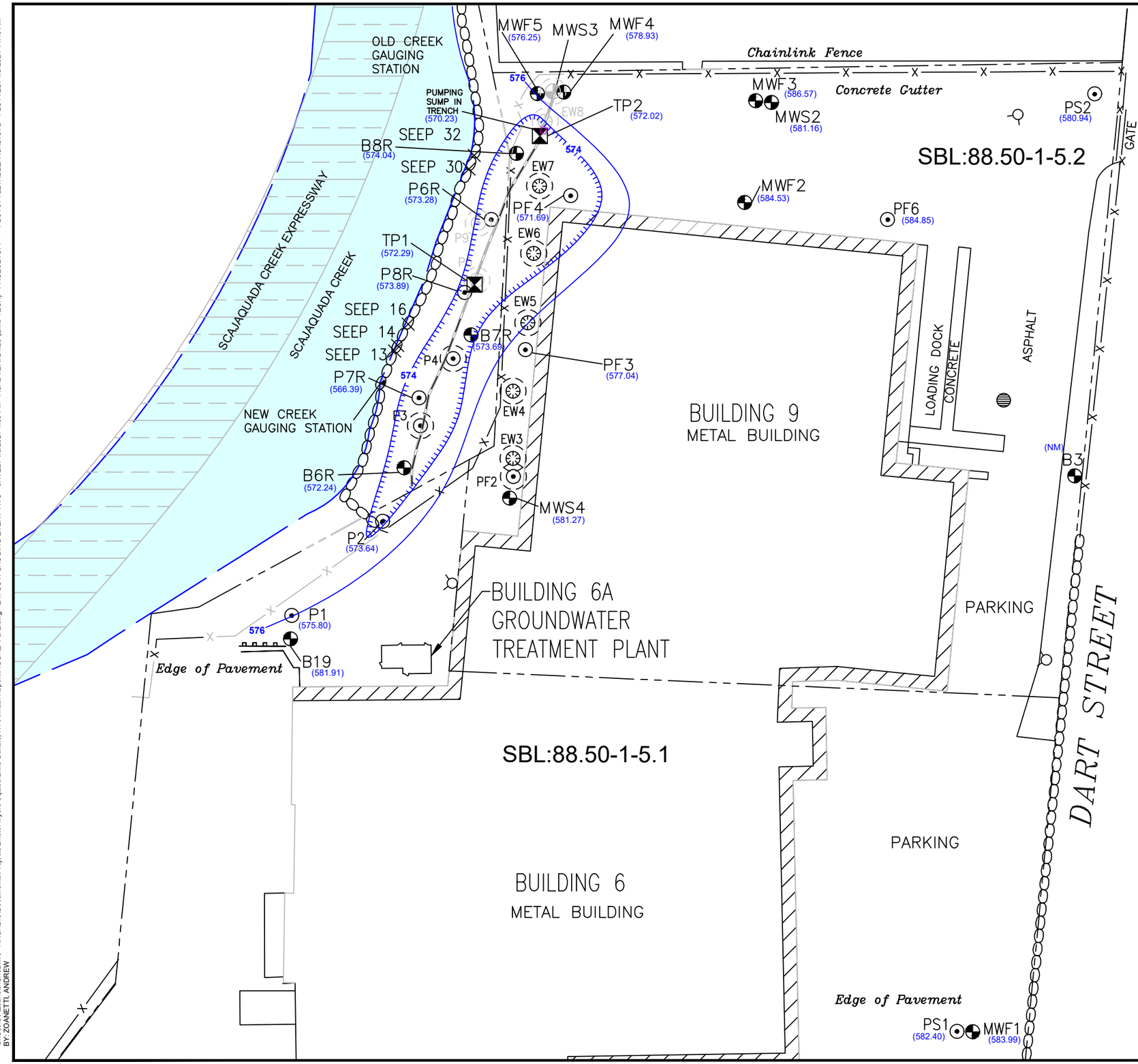
FORMER IROQUOIS GAS/WESTWOOD PHARMACEUTICAL SITE
120 DART ST. AND 40 BRADLEY ST.
BUFFALO, NEW YORK

GROUNDWATER ELEVATION CONTOUR MAP MAY 16, 2023

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB: L.POSENAUER PM/TM: M.BENOIT LYR:(Opt)ON=*;OFF=*REF*
C:\Users\AZoanetti\OneDrive - ARCADIS\Documents\Projects\Bristol-Myers Squibb\BMS Buffalo, NY\Annual Report\FIGURE 1 & 2.dwg LAYOUT: GAUGING EVENT ONE SAVED: 1/5/2024 11:16 AM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACAD.CTB PLOTTED: 1/12/2024 10:30
AM BY: ZOANETTI, ANDREW



LEGEND :

- INTERCEPTOR TRENCH
- PROPERTY BOUNDARY
- FENCE
- SHEET PILE RETAINING WALL
- MONITORING WELL
- ABANDONED MONITORING WELL
- STREAM GAUGE
- SEEP LOCATION
- PIEZOMETER
- ABANDONED PIEZOMETER
- GROUNDWATER EXTRACTION WELL
- ABANDONED GROUNDWATER EXTRACTION WELL
- TRENCH PIEZOMETER
- RECOVERY SUMP
- 580 —— 580 GROUNDWATER CONTOUR
- (580.00) GROUNDWATER ELEVATION (FT)
- (NM) NOT MEASURED

NOTE:

1. BASE MAP FROM A GROUNDWATER & ENVIRONMENTAL SERVICES, INC. FIGURE TITLED "PROPOSED GROUNDWATER COLLECTION TRENCH LOCATION MAP" DATED 4/13/2013.

0 100' 200'

GRAPHIC SCALE

FORMER IROQUOIS GAS/WESTWOOD PHARMACEUTICAL SITE
120 DART ST. AND 40 BRADLEY ST.
BUFFALO, NEW YORK

GROUNDWATER ELEVATION CONTOUR MAP SEPTEMBER 14, 2023

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB: L.POSENAUER PM/TM: M.BENOIT LYR:(Opt)ON="OFF=*REF*
C:\Users\AZoanetti\OneDrive - ARCADIS\Documents\Projects\Bristol-Myers Squibb\BMS Buffalo, NY\Annual Report\FIGURE 1 & 2.dwg LAYOUT: GAUGING EVENT TWO SAVED: 1/3/2024 1:58 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACAD.CTB PLOTTED: 1/5/2024 11:15 AM
BY: ZOANETTI, ANDREW

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB: L.POSENAUER PM/TM: M.BENOIT LYR:(Opt)ON="OFF="REF"
C:\Users\AZoanetti\OneDrive - ARCADIS\Documents\Projects\Bristol-Myers Squibb\BMS Buffalo, NY\Annual Report\FIGURE 3 & 4.dwg LAYOUT: SAMPLING EVENT ONE SAVED: 12/1/2023 1:19 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ACAD.CTB PLOTTED: 1/12/2024 10:35
AM BY: ZOANETTI, ANDREW

B8R	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	45
TOLUENE	ND < 20
ETHYLBENZENE	140
m,p-XYLENE	20 J
o-XYLENE	29

P8R	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	170
TOLUENE	4.1 J
ETHYLBENZENE	190
m,p-XYLENE	16
o-XYLENE	52

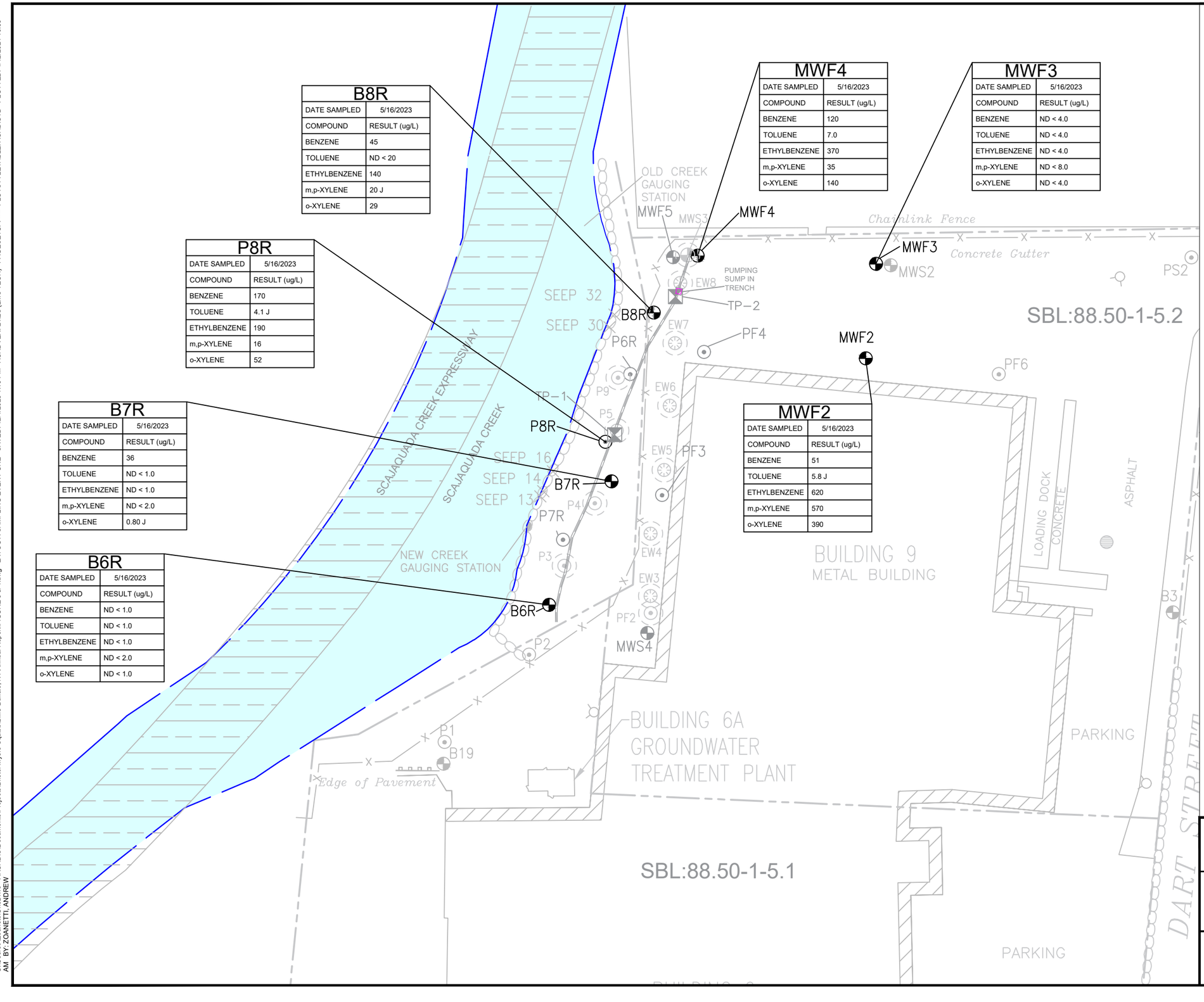
B7R	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	36
TOLUENE	ND < 1.0
ETHYLBENZENE	ND < 1.0
m,p-XYLENE	ND < 2.0
o-XYLENE	0.80 J

B6R	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	ND < 1.0
TOLUENE	ND < 1.0
ETHYLBENZENE	ND < 1.0
m,p-XYLENE	ND < 2.0
o-XYLENE	ND < 1.0

MWF4	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	120
TOLUENE	7.0
ETHYLBENZENE	370
m,p-XYLENE	35
o-XYLENE	140

MWF3	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	ND < 4.0
TOLUENE	ND < 4.0
ETHYLBENZENE	ND < 4.0
m,p-XYLENE	ND < 8.0
o-XYLENE	ND < 4.0

MWF2	
DATE SAMPLED	5/16/2023
COMPOUND	RESULT (ug/L)
BENZENE	51
TOLUENE	5.8 J
ETHYLBENZENE	620
m,p-XYLENE	570
o-XYLENE	390



LEGEND :

- INTERCEPTOR TRENCH
- PROPERTY BOUNDARY
- FENCE
- SHEET PILE RETAINING WALL
- MONITORING WELL
- ABANDONED MONITORING WELL
- STREAM GAUGE
- SEEP LOCATION
- PIEZOMETER
- ABANDONED PIEZOMETER
- GROUNDWATER EXTRACTION WELL
- ABANDONED GROUNDWATER EXTRACTION WELL
- TRENCH PIEZOMETER
- RECOVERY SUMP
- ug/L — MICROGRAM PER LITER
- ND — NOT DETECTED
- J — ESTIMATED CONCENTRATION

NOTE:

1. BASE MAP FROM A GROUNDWATER & ENVIRONMENTAL SERVICES, INC. FIGURE TITLED "PROPOSED GROUNDWATER COLLECTION TRENCH LOCATION MAP" DATED 4/13/2013.

0 75 150

GRAPHIC SCALE

FORMER IROQUOIS GAS/WESTWOOD PHARMACEUTICAL SITE
120 DART ST. AND 40 BRADLEY ST.
BUFFALO, NEW YORK

VOLATILE ORGANIC COMPOUND CONCENTRATIONS MAY 16, 2023

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB: L.POSENAUER PM/TM: M.BENOIT LYR:(Opt)ON="OFF="REF"
C:\Users\AZoanetti\OneDrive - ARCADIS\Documents\Projects\Bristol-Myers Squibb\BMS Buffalo, NY\Annual Report CAD\FIGURE 3 & 4.dwg LAYOUT: SAMPLING EVENT TWO SAVED: 9/26/2023 9:10 AM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACAD.CTB PLOTTED: 12/1/2023
1:19 PM BY: ZOANETTI, ANDREW

B8R	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	430
TOLUENE	ND < 20
ETHYLBENZENE	250
m,p-XYLENE	44
o-XYLENE	53

P8R	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	86
TOLUENE	ND < 5.0
ETHYLBENZENE	130
m,p-XYLENE	8.8 J
o-XYLENE	43

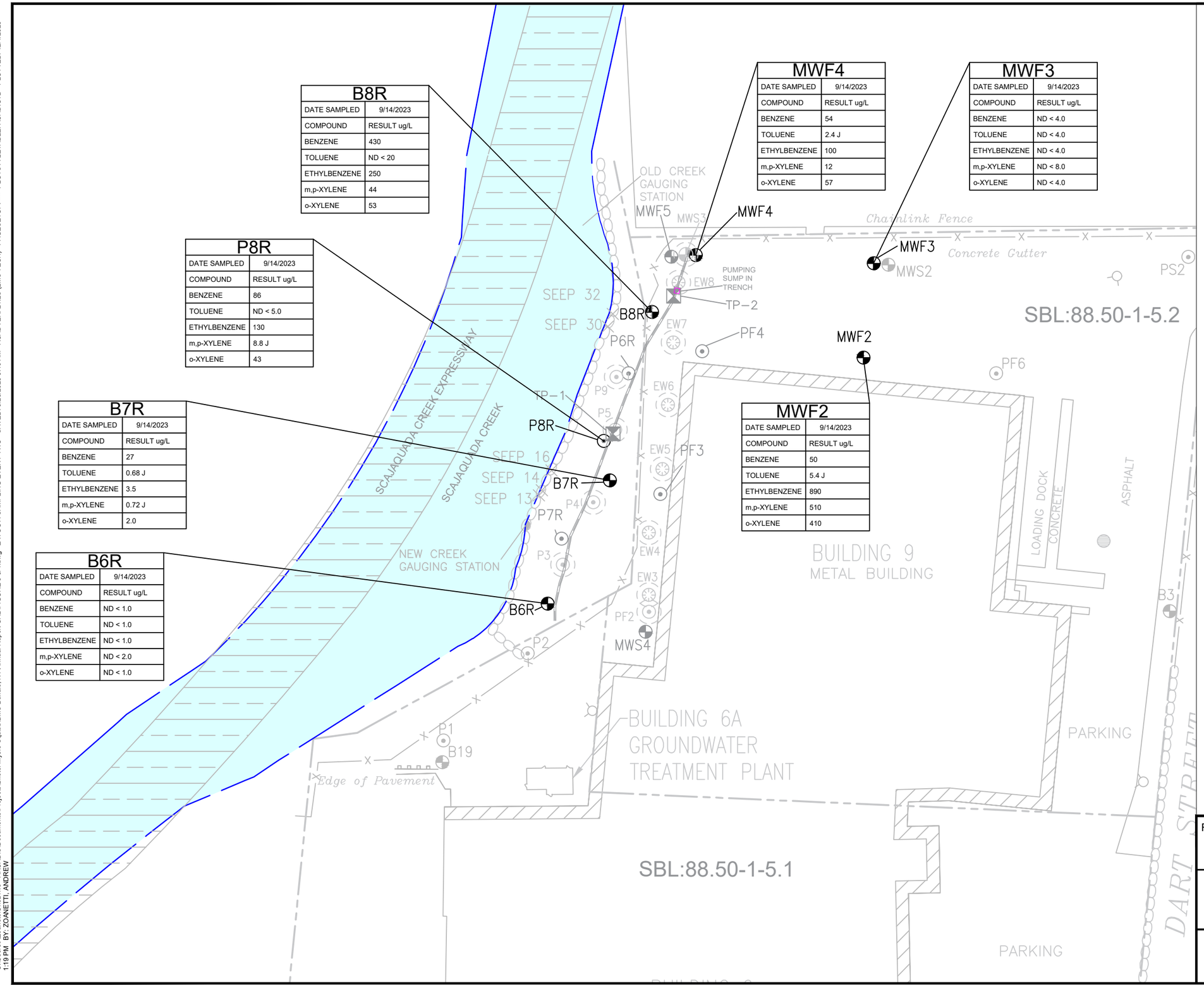
B7R	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	27
TOLUENE	0.68 J
ETHYLBENZENE	3.5
m,p-XYLENE	0.72 J
o-XYLENE	2.0

B6R	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	ND < 1.0
TOLUENE	ND < 1.0
ETHYLBENZENE	ND < 1.0
m,p-XYLENE	ND < 2.0
o-XYLENE	ND < 1.0

MWF4	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	54
TOLUENE	2.4 J
ETHYLBENZENE	100
m,p-XYLENE	12
o-XYLENE	57

MWF3	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	ND < 4.0
TOLUENE	ND < 4.0
ETHYLBENZENE	ND < 4.0
m,p-XYLENE	ND < 8.0
o-XYLENE	ND < 4.0

MWF2	
DATE SAMPLED	9/14/2023
COMPOUND	RESULT ug/L
BENZENE	50
TOLUENE	5.4 J
ETHYLBENZENE	890
m,p-XYLENE	510
o-XYLENE	410



LEGEND :

- INTERCEPTOR TRENCH
- PROPERTY BOUNDARY
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- ABANDONED MONITORING WELL
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- ABANDONED PIEZOMETER
- GROUNDWATER EXTRACTION WELL
- ABANDONED GROUNDWATER EXTRACTION WELL
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- RECOVERY SUMP
- ug/L — MICROGRAM PER LITER
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- J — ESTIMATED CONCENTRATION

NOTE:

1. BASE MAP FROM A GROUNDWATER & ENVIRONMENTAL SERVICES, INC. FIGURE TITLED "PROPOSED GROUNDWATER COLLECTION TRENCH LOCATION MAP" DATED 4/13/2013.

0 75 150

GRAPHIC SCALE

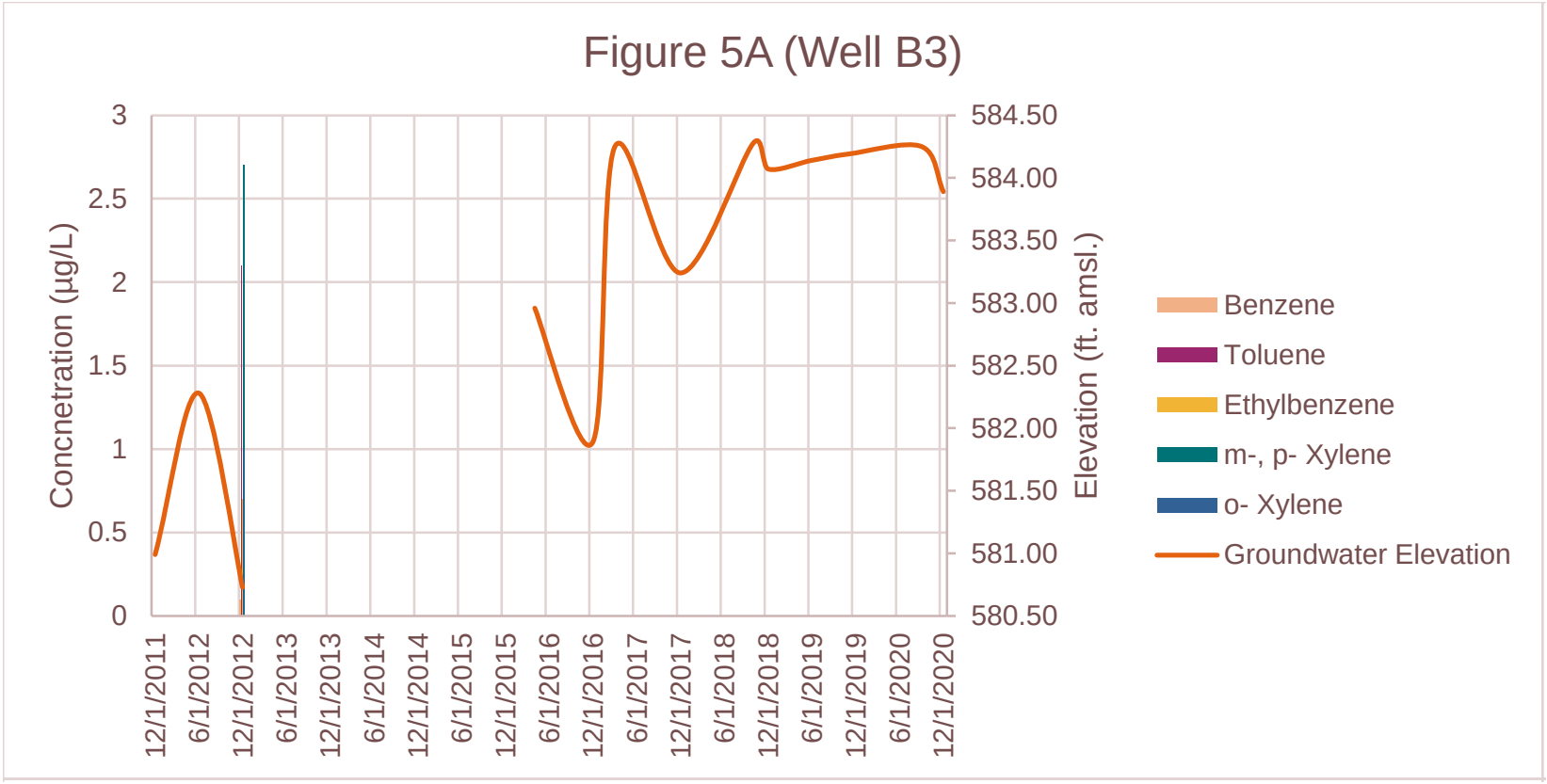
FORMER IROQUOIS GAS/WESTWOOD PHARMACEUTICAL SITE
120 DART ST. AND 40 BRADLEY ST.
BUFFALO, NEW YORK

VOLATILE ORGANIC COMPOUND CONCENTRATIONS SEPTEMBER 14, 2023

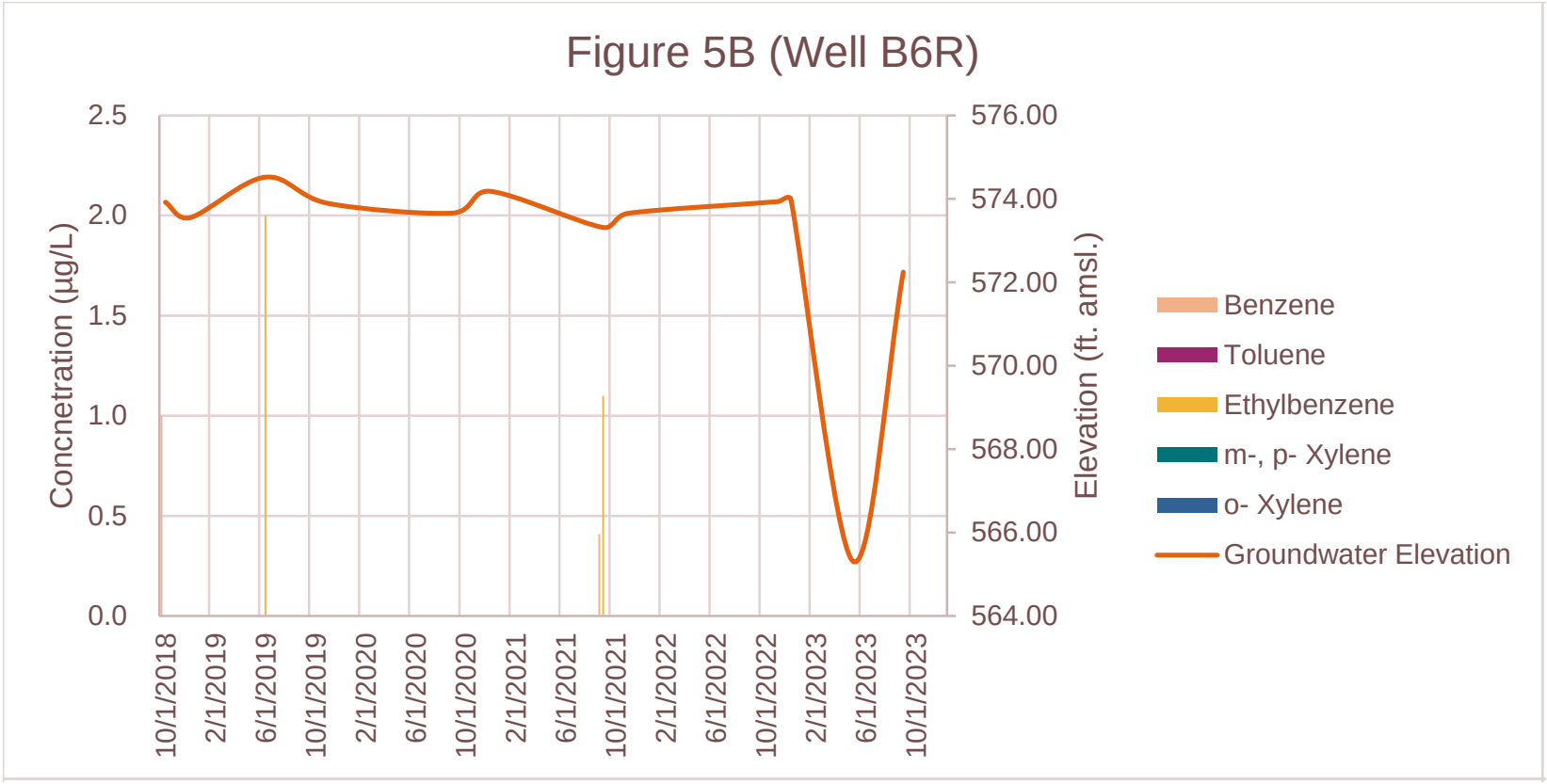
ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

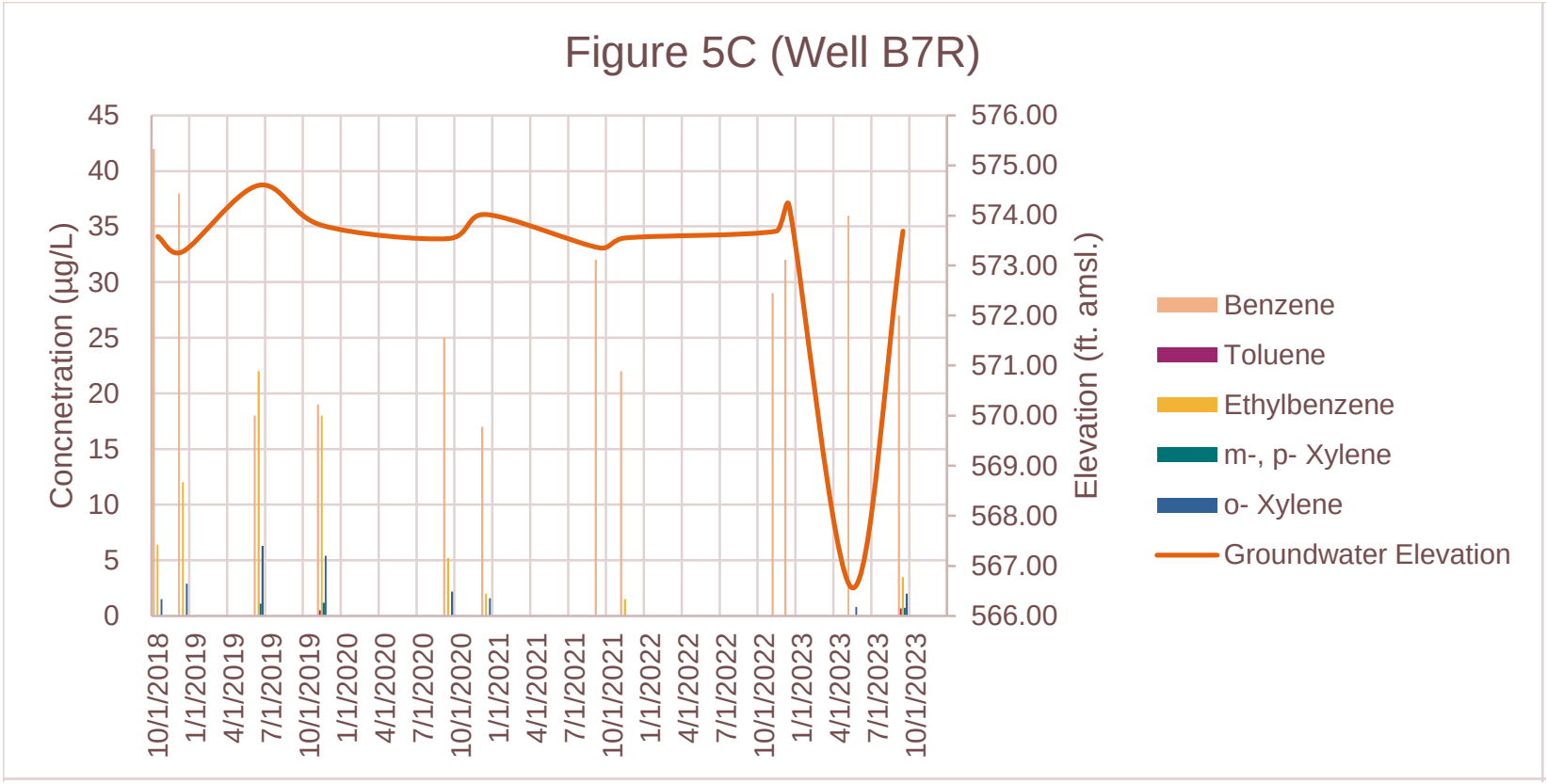
Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



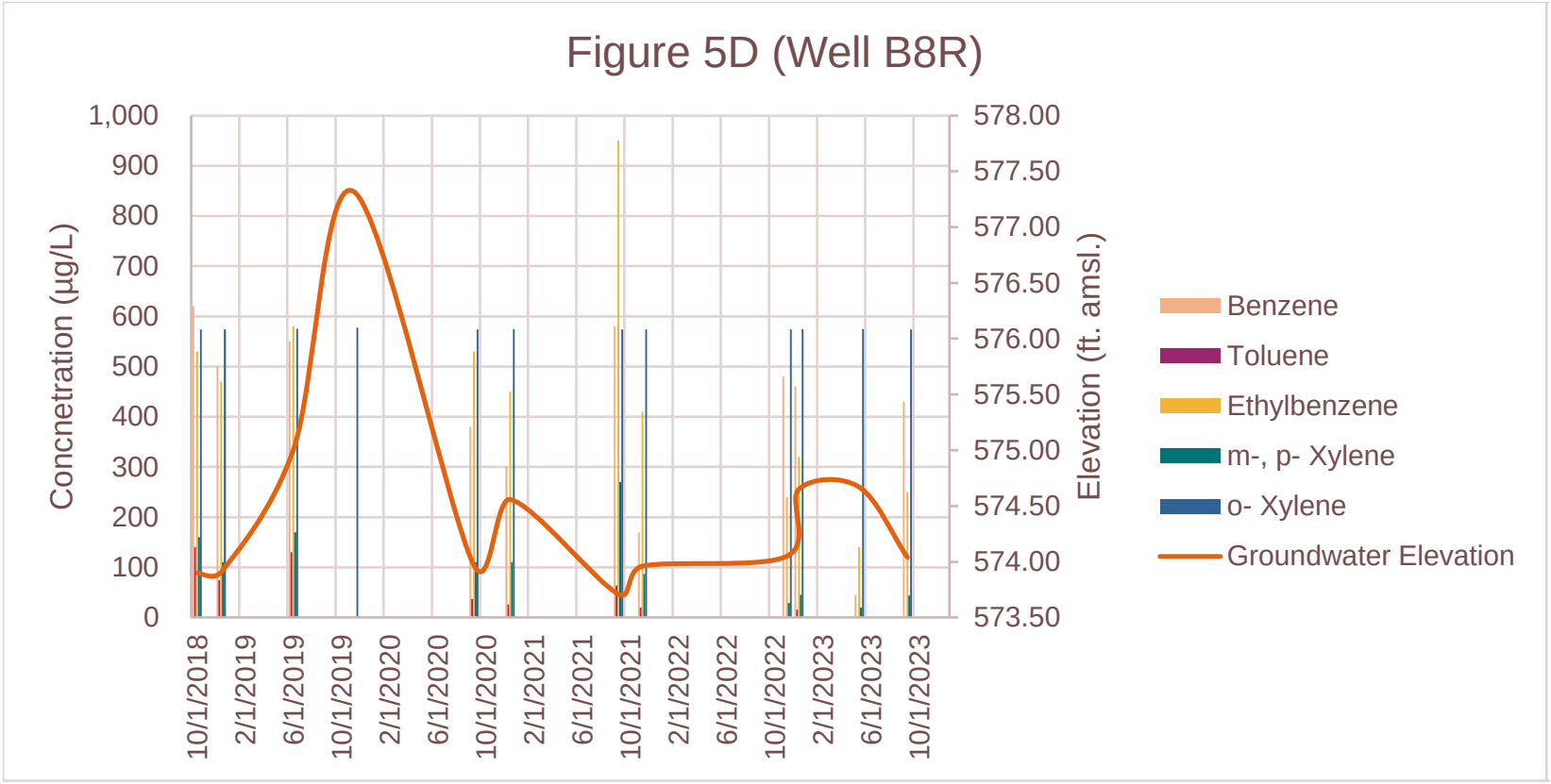
Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



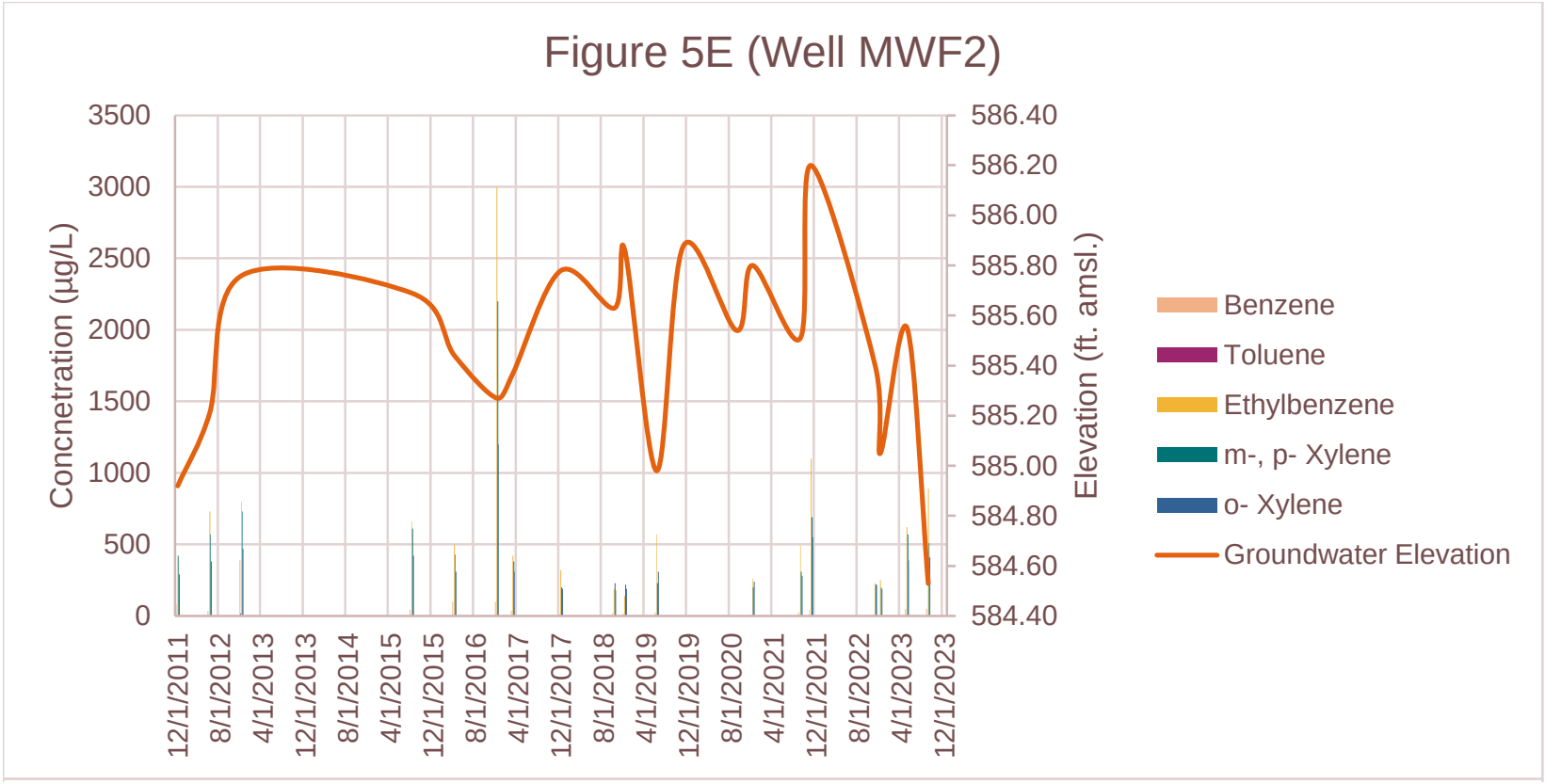
Groundwater Analytical Data Trends for Volatile Organic Compounds
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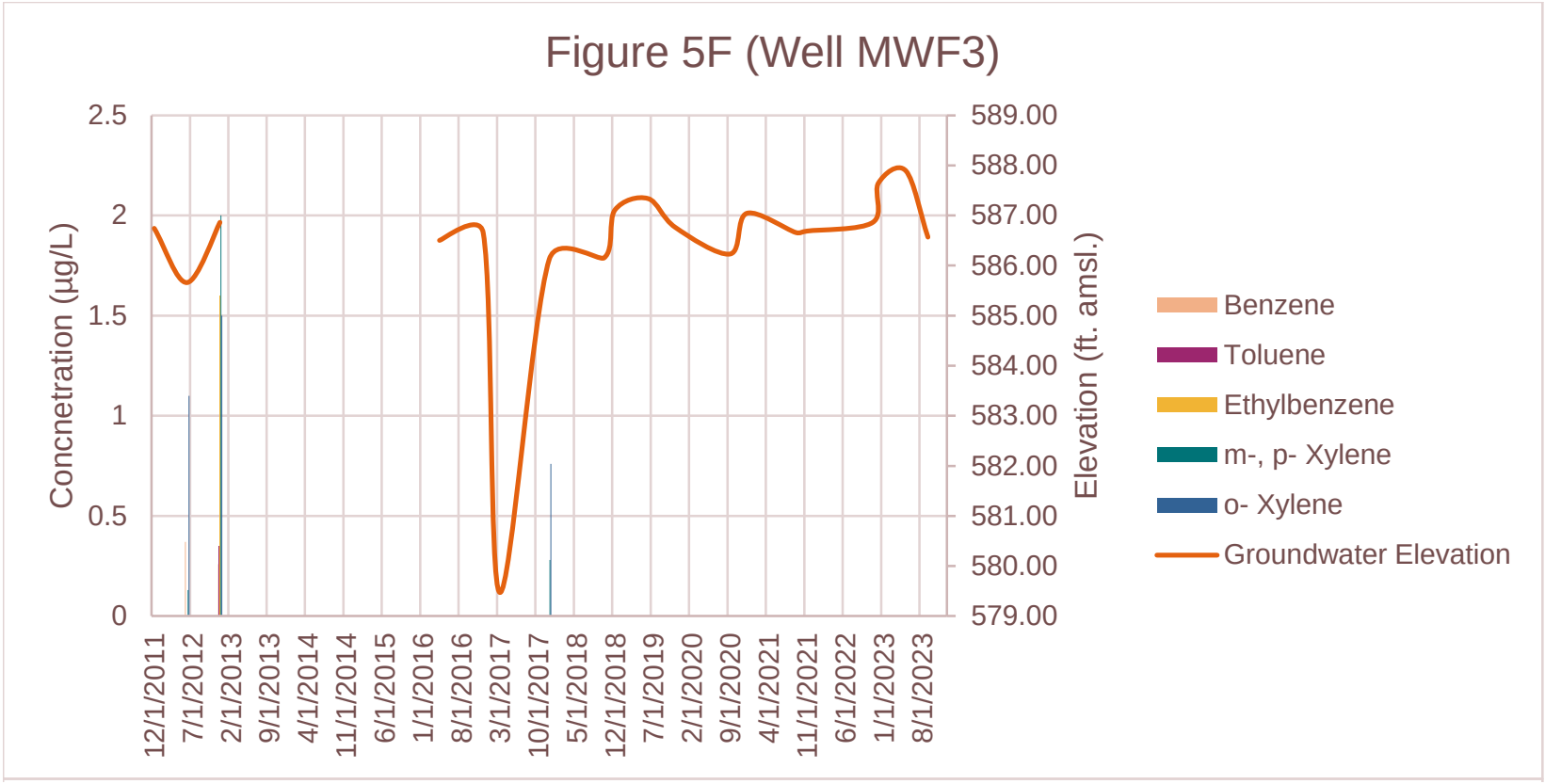
Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



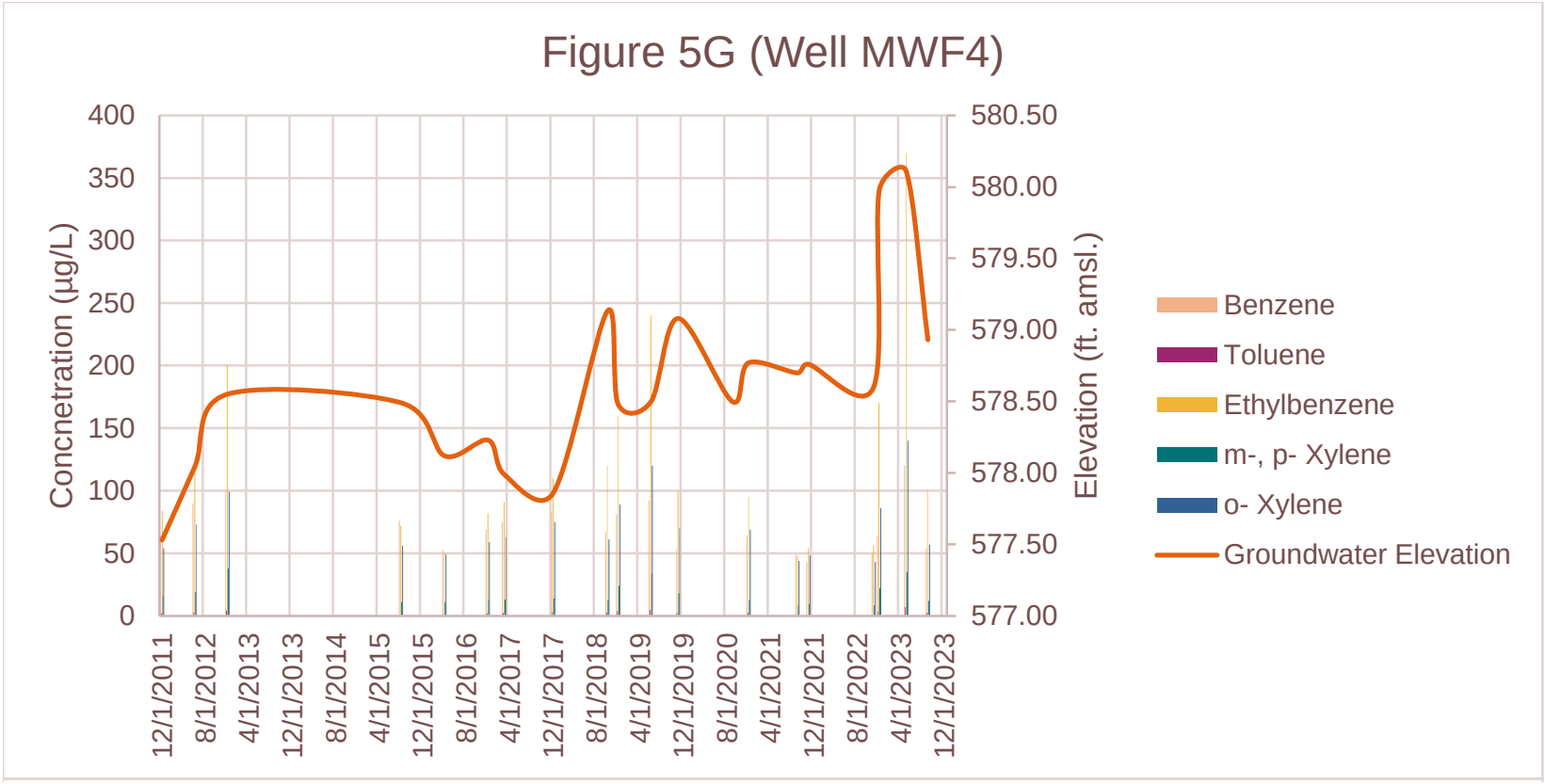
Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



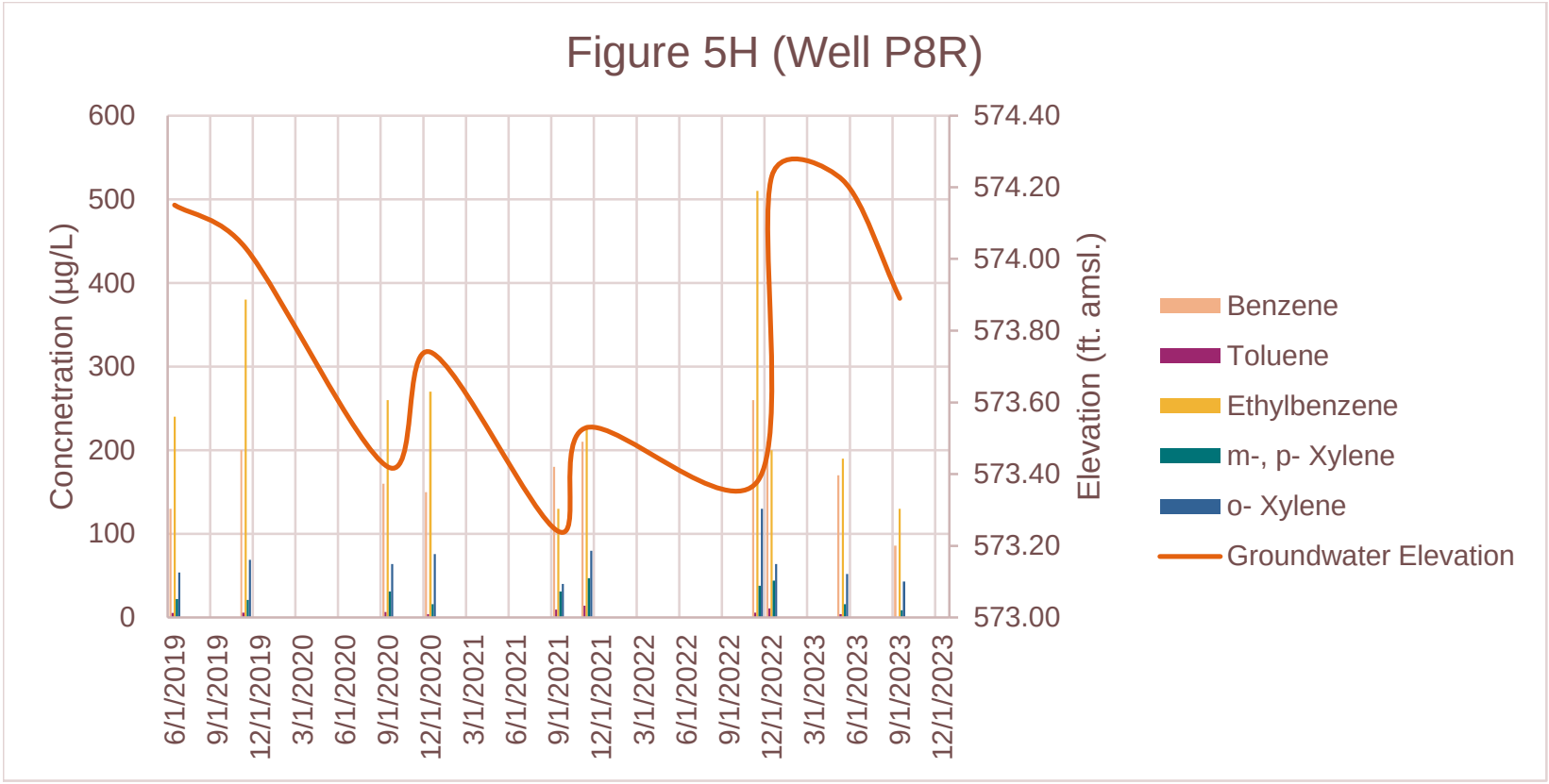
Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



Groundwater Analytical Data Trends for Volatile Organic Compounds
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St., Buffalo, New York



Attachment 1 – Groundwater Purge and Sampling Logs

Groundwater Gauging Table
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Measured By: JTG/MB Date: 5/16/23

Well ID	Time	Total Depth (ft.)	Depth to Water (ft.)	Notes
B19	0724	21.78	7.70	HB
B3	—	—	—	Destroyed
B6R	0929	30.65	25.55	SB
B7R	0937	29.50	25.03	SB
B8R	0836	29.75	17.49	SB, Trace DNAPL
MWF1	0757	13.70	7.73	HB
MWF2	0904	20.76	9.11	HB
MWF3	0857	19.10	3.77	HB
MWF4	0825	23.54	13.89	SB
MWF5	0821	29.53	12.60	SB
MWS2	0859	35.76	10.66	HB
MWS4	0816	34.93	11.44	HB
P1	0730	21.16	14.89	SB
P2	0926	27.51	17.40	SB
P6R	0947	30.45	16.81	SB, 0.10' LNAPL
P7R	0933	29.88	24.58	SB
P8R	0940	30.68	17.06	
PF3	0919	25.26	14.26	HB
PF4	0844	22.39	19.09	SB, Trace DNAPL
PF6	0906	27.02	7.21	SB Needs Hinge
PS1	0751	47.61	10.31	SB
PS2	0810	22.45	12.35	HB
TP1	0944	26.98	17.18	SB
TP2	0830	23.30	15.46	SB
Pumping Sump in Trench	1002	30.65	18.70	HB
Bridge	0746	~~10.80~~	10.80	—

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Matthew Buzzeo Weather: 60°F, Sunny, windy

Date: 5/16/23 Time Began: ~~1046~~ 1032 Time Ended: 1057

Well ID: BGR

Purge Data

Measuring Point (describe): TOC

Sounded Well Depth (ft. bgs): 30.65

Depth to Water (ft. bmp.): 25.55

Water Column in Well (ft): 5.10

Casing Diameter: 2"

Volume in Well (gal.): 0.83

Volume Purged Prior to Sampling (gal.): 2.49

Evacuation Method: Bailer

Sampling Method: Bailer

Purge Time Begin: 1032

Purge Time End: 1045

Field Parameters

Color: @ ~~Hazy~~ Clear

Odor: None

Appearance: Hazy

Notes: * DUP Pulled

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCL

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Jason Gutkowski Weather: 60°F sunny

Date: 5/16/23 Time Began: 1041 Time Ended: 1102

Well ID: B7R

Purge Data

Measuring Point (describe): TOC
Sounded Well Depth (ft. bgs): 29.50
Depth to Water (ft. bmp.): 25.03
Water Column in Well (ft): 4.47
Casing Diameter: 2"
Volume in Well (gal.): 0.72
Volume Purged Prior to Sampling (gal.): 2.18
Evacuation Method: Bailer
Sampling Method: Bailer
Purge Time Begin: 1043
Purge Time End: 1058

Field Parameters

Color: Gray
Odor: None
Appearance: Cloudy

Notes: * MS/MSD collected

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCL

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Matthew Buzzeo Weather: 70°F Sunny

Date: 05/16/23 Time Began: 1520 Time Ended: 1548

Well ID: BGR

Purge Data

Measuring Point (describe): TOC
Sounded Well Depth (ft. bgs): 29.75
Depth to Water (ft. bmp.): 17.49
Water Column in Well (ft): 12.26
Casing Diameter: 2"
Volume in Well (gal.): 2.00
Volume Purged Prior to Sampling (gal.): 6.00
Evacuation Method: Bailer
Sampling Method: Bailer
Purge Time Begin: 1520
Purge Time End: 1546

Field Parameters

Color: Grey
Odor: Slight
Appearance: Hazy

Notes: None

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Matthew Bozzo Weather: 70°F Sunny Windy

Date: 05/16/23 Time Began: 1300 Time Ended: 1338

Well ID: MWF2

Purge Data

Measuring Point (describe): TOC
Sounded Well Depth (ft. bgs): 20.76
Depth to Water (ft. bmp.): 9.11
Water Column in Well (ft): 11.56
Casing Diameter: 2"
Volume in Well (gal.): 1.90
Volume Purged Prior to Sampling (gal.): 5.70
Evacuation Method: Bailer
Sampling Method: Bailer
Purge Time Begin: 1300
Purge Time End: 1335

Field Parameters

Color: Brown
Odor: Strong
Appearance: Cloudy

Notes: None

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Matthew Breed Weather: 60° Sunny Windy

Date: 05/16/23 Time Began: 1110 Time Ended: 1137

Well ID: MWF3

Purge Data

Measuring Point (describe): TOC

Sounded Well Depth (ft. bgs): 19.10

Depth to Water (ft. bmp.): 3.77

Water Column in Well (ft): 15.33

Casing Diameter: 2"

Volume in Well (gal.): ~~7.5~~ 2.50

Volume Purged Prior to Sampling (gal.): 7.50

Evacuation Method: Bailer

Sampling Method: Bailer

Purge Time Begin: 1110

Purge Time End: 1135

Field Parameters

Color: Yellow

Odor: None

Appearance: Hazy

Notes: None

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Matthew Bizzeo Weather: 70°F Sunny

Date: 05/16/23 Time Began: 1215 Time Ended: 1239

Well ID: MWF4

Purge Data

Measuring Point (describe): TOC
Sounded Well Depth (ft. bgs): 23.54
Depth to Water (ft. bmp.): 13.89
Water Column in Well (ft): 9.65
Casing Diameter: 2"
Volume in Well (gal.): 1.54
Volume Purged Prior to Sampling (gal.): 4.77
Evacuation Method: Bailer
Sampling Method: Bailer
Purge Time Begin: 1215
Purge Time End: 1236

Field Parameters

Color: Gray
Odor: None
Appearance: Clear

Notes: None

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

Groundwater Sampling Log
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Sampled By: Matthew Buzzell Weather: 60°F Sunny

Date: 05/16/23 Time Began: 1412 Time Ended: 1440

Well ID: PGR

Purge Data

Measuring Point (describe): TOC
Sounded Well Depth (ft. bgs): 30.68
Depth to Water (ft. bmp.): 17.06
Water Column in Well (ft): 13.62
Casing Diameter: 2"
Volume in Well (gal.): 2.22
Volume Purged Prior to Sampling (gal.): 6.66
Evacuation Method: Bailer
Sampling Method: Bailer
Purge Time Begin: 1412
Purge Time End: 1436

Field Parameters

Color: clear
Odor: None
Appearance: Hazy

Notes: None

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

Groundwater Gauging Table
Former Iroquois Gas/Westwood Pharmaceutical Site
120 Dart St. and 40 Bradley St. Buffalo, New York

ARCADIS

Measured By JTG/CC Date: 9/14/23

Well ID	Time	Total Depth (ft.)	Depth to Water (ft.)	Notes
B19	0718	21.79	10.23	HB
B3	—	—	—	—
B6R	0730	30.65	18.62	SB
B7R	0737	29.50	17.90	SB
B8R	0900	29.75	18.12	SB
MWF1	0813	13.68	8.29	HB
MWF2	0833	30.60	10.13	HB
MWF3	0827	19.09	5.09	SB
MWF4	0846	23.51	15.07	SB
MWF5	0850	29.53	13.65	SB
MWS2	0822	82.29	10.73	HB
MWS4	0914	34.99	11.78	HB
P1	0721	21.14	14.97	SB
P2	0726	27.50	17.66	SB
P6R	0749	30.45	17.57	SB
P7R	0733	29.84	24.97	SB
P8R	0741	30.65	17.39	SB
PF3	0909	25.25	14.44	HB
PF4	0904	29.57	19.79	SB
PF6	0839 ~~0809~~	27.04	8.01	SB
PS1	0809	47.60	10.49	SB
PS2	0818	22.49	12.46	HB
TP1	0745	26.97	18.98	SB
TP2	0857	23.28	17.85	SB
Pumping Sump in Trench	0853	30.65	19.03	HB
	Bridge 0759	—		—

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: BGR | Replicate No.: – | Weather: 67°F Sun/Clouds

Sampling Personnel: JTO | Sampling Time: Begin 1455 End 1458

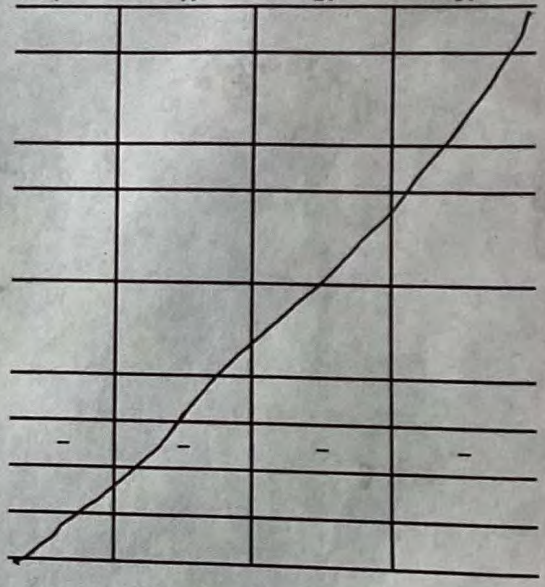
Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	30.65
Depth to Water (ft bmp)	18.62
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	12.03
Casing Diameter	2"
Gallons in Well	1.96
Gallons Purged Prior to Sampling	5.88
Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1434 End 1455

Field Parameters

Color	Clear
Odor	None
Appearance	Cloudy

	I	1V	2V	3V
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				



Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: B7R | Replicate No.: – | Weather: 66° & Sun

Sampling Personnel: CC | Sampling Time: Begin 1442 End 1444

Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	29.50
Depth to Water (ft bmp)	17.90
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	11.60
Casing Diameter	2
Gallons in Well	1.89
Gallons Purged Prior to Sampling	5.67
Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1429 End 1441

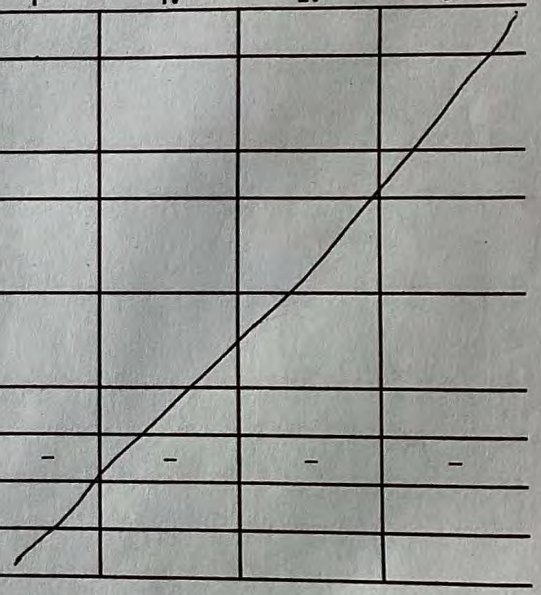
Field Parameters

Color: Grey

Odor: None

Appearance: Cloudy

	1	1V	2V	3V
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				



Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/4" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: B8R | Replicate No.: – | Weather: 65°F Sun/Clouds

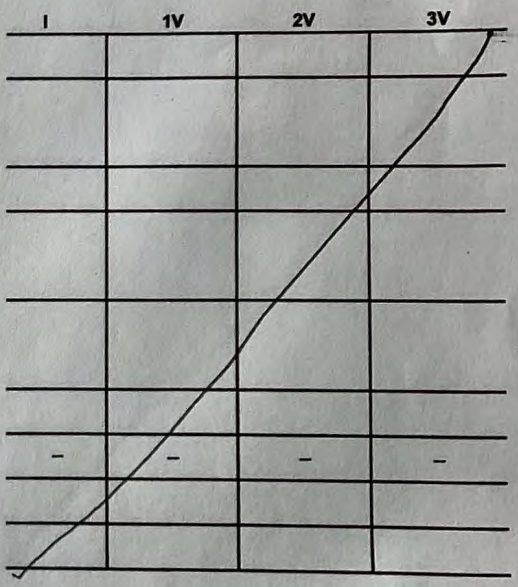
Sampling Personnel: CC | Sampling Time: Begin 1337 End 1340

Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	29.75
Depth to Water (ft bmp)	18.12
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	11.63
Casing Diameter	2"
Gallons in Well	1.89
Gallons Purged Prior to Sampling	5.67
Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1325 End 1337

Field Parameters

	I	1V	2V	3V
Color	Grey			
Odor	Slight			
Appearance	Cloudy			
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				



Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: MW-52 | Replicate No.: – | Weather: 630 f Sun

Sampling Personnel: JT6 | Sampling Time: Begin 1243 | End 1245

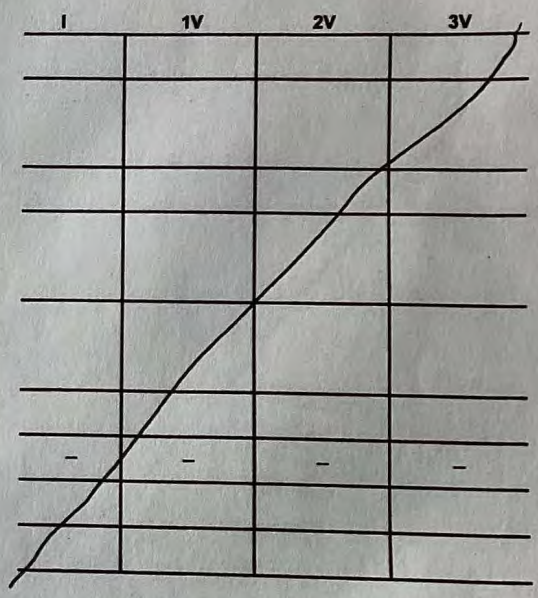
Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	30.60
Depth to Water (ft bmp)	10.13
Depth to Packer (ft bmp)	–
Water Column in Well (ft)	20.47
Casing Diameter	2"
Gallons in Well	3.33
Gallons Purged Prior to Sampling	9.99
Pump Intake Setting (ft bmp)	–
Packer Pressure (psi)	–
Pumping Rate (gpm)	–
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1203 End 1242

Field Parameters

Color	Light Brown
Odor	Strong Odor
Appearance	Cloudy

	1	1V	2V	3V
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				



Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	6	HCL

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: MWF3 | Replicate No.: — | Weather: 62°F Sun/Clouds

Sampling Personnel: CC | Sampling Time: Begin 1206 | End 1209

Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	19.09
Depth to Water (ft bmp)	5.09
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	14.00
Casing Diameter	2"
Gallons in Well	2.28
Gallons Purged Prior to Sampling	6.84
Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1141 End 1205

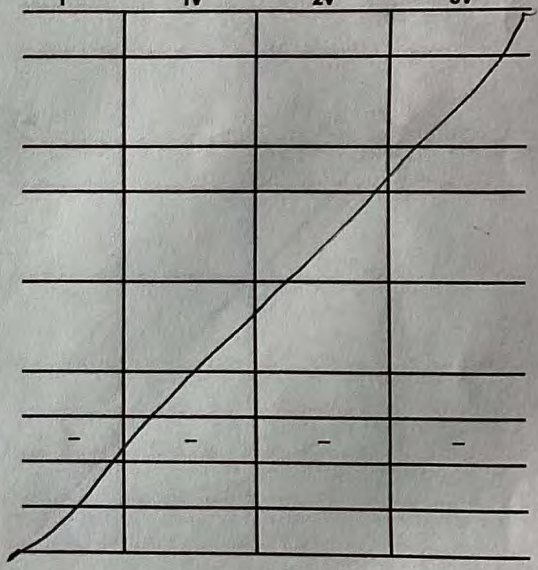
Field Parameters

Color: Light Yellow Brown

Odor: None

Appearance: Cloudy

	1	1V	2V	3V
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				



Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCL

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: MWF4 | Replicate No.: – | Weather: 65°F Sun/clouds

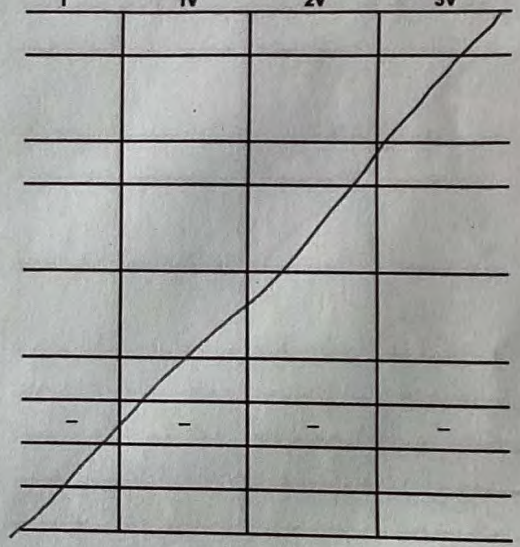
Sampling Personnel: JTG | Sampling Time: Begin 1327 End 1329

Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	23.51
Depth to Water (ft bmp)	15.07
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	8.44
Casing Diameter	2
Gallons in Well	1.37
Gallons Purged Prior to Sampling	4.11
Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1315 End 1326

Field Parameters

	I	1V	2V	3V
Color	Gray			
Odor	None			
Appearance	Clear			
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				



Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

ARCADIS | Design & Consultancy for natural and built assets

Water Sampling Log

Project: BMS | Project No.: 30185775

Site Location: Buffalo | Date: 9/14/23

Well No.: D8R | Replicate No.: – | Weather: 66°F Sun/Clouds

Sampling Personnel: CC | Sampling Time: Begin 1419 | End 1421

Purge Data

Measuring Point (describe)	TOC
Sounded Well Depth (ft bmp)	30.65
Depth to Water (ft bmp)	17.39
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	13.26
Casing Diameter	2"
Gallons in Well	2.16
Gallons Purged Prior to Sampling	6.48
Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Bailer
Sampling Method	Bailer
Purge Time	Begin 1401 End 1419

Field Parameters

Color: Clear

Odor: None

Appearance: Cloudy

	1	1V	2V	3V
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)				
DO (mg/L)				
ORP (mV)				
Turbidity (NTU)	–	–	–	–
Time				
DTW (ft bmp)				

Remarks:

Parameter	Container	No.	Preservative
BTEX	VOA	3	HCl

PID Reading: N/A

Well Casing Volumes

Gal./Ft.				
	1 1/4" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/4" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

1) Circle one unit type

Attachment 2 – Laboratory Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 5/24/2023 12:37:01 PM

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.- Semi-Annual

JOB NUMBER

480-208934-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

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Authorized for release by
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(413)642-2616

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Qualifiers

GC/MS VOA

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

Glossary

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

Job ID: 480-208934-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-208934-1

Receipt
The samples were received on 5/16/2023 5:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.4°C

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MWF3 (480-208934-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted due to the abundance of non-target analytes: B8R (480-208934-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWF2 (480-208934-4), MWF4 (480-208934-6) and P8R (480-208934-7). 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.

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Client Sample ID: B6R — Lab Sample ID: 480-208934-1

No Detections.

Client Sample ID: B7R — Lab Sample ID: 480-208934-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	36		1.0	0.41	ug/L	1		8260C	Total/NA
o-Xylene	0.80	J	1.0	0.76	ug/L	1		8260C	Total/NA
Xylenes, Total	0.80	J	2.0	0.66	ug/L	1		8260C	Total/NA
Total BTEX	37	F1	2.0	1.0	ug/L	1		8260C	Total/NA

Client Sample ID: B8R — Lab Sample ID: 480-208934-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	45		20	8.2	ug/L	20		8260C	Total/NA
Ethylbenzene	140		20	15	ug/L	20		8260C	Total/NA
m-Xylene & p-Xylene	20	J	40	13	ug/L	20		8260C	Total/NA
o-Xylene	29		20	15	ug/L	20		8260C	Total/NA
Xylenes, Total	49		40	13	ug/L	20		8260C	Total/NA
Total BTEX	230		40	20	ug/L	20		8260C	Total/NA

Client Sample ID: MWF2 — Lab Sample ID: 480-208934-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	51		10	4.1	ug/L	10		8260C	Total/NA
Toluene	5.8	J	10	5.1	ug/L	10		8260C	Total/NA
Ethylbenzene	620		10	7.4	ug/L	10		8260C	Total/NA
m-Xylene & p-Xylene	570		20	6.6	ug/L	10		8260C	Total/NA
o-Xylene	390		10	7.6	ug/L	10		8260C	Total/NA
Xylenes, Total	960		20	6.6	ug/L	10		8260C	Total/NA
Total BTEX	1600		20	10	ug/L	10		8260C	Total/NA

Client Sample ID: MWF3 — Lab Sample ID: 480-208934-5

No Detections.

Client Sample ID: MWF4 — Lab Sample ID: 480-208934-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		4.0	1.6	ug/L	4		8260C	Total/NA
Toluene	7.0		4.0	2.0	ug/L	4		8260C	Total/NA
Ethylbenzene	370		4.0	3.0	ug/L	4		8260C	Total/NA
m-Xylene & p-Xylene	35		8.0	2.6	ug/L	4		8260C	Total/NA
o-Xylene	140		4.0	3.0	ug/L	4		8260C	Total/NA
Xylenes, Total	180		8.0	2.6	ug/L	4		8260C	Total/NA
Total BTEX	670		8.0	4.0	ug/L	4		8260C	Total/NA

Client Sample ID: P8R — Lab Sample ID: 480-208934-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	170		5.0	2.1	ug/L	5		8260C	Total/NA
Toluene	4.1	J	5.0	2.6	ug/L	5		8260C	Total/NA
Ethylbenzene	190		5.0	3.7	ug/L	5		8260C	Total/NA
m-Xylene & p-Xylene	16		10	3.3	ug/L	5		8260C	Total/NA
o-Xylene	52		5.0	3.8	ug/L	5		8260C	Total/NA
Xylenes, Total	68		10	3.3	ug/L	5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: P8R (Continued)
Lab Sample ID: 480-208934-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total BTEX	430		10	5.0	ug/L	5		8260C	Total/NA

Client Sample ID: DUP
Lab Sample ID: 480-208934-8

No Detections.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-208934-9

No Detections.

Client Sample ID: B6R
Lab Sample ID: 480-208934-1

Date Collected: 05/16/23 10:57
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			05/17/23 15:47	1
Toluene	ND		1.0	0.51	ug/L			05/17/23 15:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/17/23 15:47	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			05/17/23 15:47	1
o-Xylene	ND		1.0	0.76	ug/L			05/17/23 15:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/17/23 15:47	1
Total BTEX	ND		2.0	1.0	ug/L			05/17/23 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/17/23 15:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/17/23 15:47*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*05/17/23 15:47*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*05/17/23 15:47*	*1*

Client Sample ID: B7R
Lab Sample ID: 480-208934-2

Date Collected: 05/16/23 11:02
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**36**		1.0	0.41	ug/L			05/18/23 12:34	1
Toluene	ND		1.0	0.51	ug/L			05/18/23 12:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/18/23 12:34	1
m-Xylene & p-Xylene	ND	F1	2.0	0.66	ug/L			05/18/23 12:34	1
o-Xylene	**0.80**	**J**	1.0	0.76	ug/L			05/18/23 12:34	1
Xylenes, Total	**0.80**	**J**	2.0	0.66	ug/L			05/18/23 12:34	1
Total BTEX	**37**	**F1**	2.0	1.0	ug/L			05/18/23 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/18/23 12:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/18/23 12:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/18/23 12:34*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/18/23 12:34*	*1*

Client Sample ID: B8R
Lab Sample ID: 480-208934-3

Date Collected: 05/16/23 15:47
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**45**		20	8.2	ug/L			05/17/23 16:30	20
Toluene	ND		20	10	ug/L			05/17/23 16:30	20
Ethylbenzene	**140**		20	15	ug/L			05/17/23 16:30	20
m-Xylene & p-Xylene	**20**	**J**	40	13	ug/L			05/17/23 16:30	20
o-Xylene	**29**		20	15	ug/L			05/17/23 16:30	20
Xylenes, Total	**49**		40	13	ug/L			05/17/23 16:30	20
Total BTEX	**230**		40	20	ug/L			05/17/23 16:30	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/17/23 16:30*	*20*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*05/17/23 16:30*	*20*

Client Sample ID: B8R
Lab Sample ID: 480-208934-3

Date Collected: 05/16/23 15:47
Matrix: Water
Date Received: 05/16/23 17:37

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*05/17/23 16:30*	*20*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/17/23 16:30*	*20*

Client Sample ID: MWF2
Lab Sample ID: 480-208934-4

Date Collected: 05/16/23 13:38
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**51**		10	4.1	ug/L			05/17/23 16:52	10
Toluene	**5.8**	**J**	10	5.1	ug/L			05/17/23 16:52	10
Ethylbenzene	**620**		10	7.4	ug/L			05/17/23 16:52	10
m-Xylene & p-Xylene	**570**		20	6.6	ug/L			05/17/23 16:52	10
o-Xylene	**390**		10	7.6	ug/L			05/17/23 16:52	10
Xylenes, Total	**960**		20	6.6	ug/L			05/17/23 16:52	10
Total BTEX	**1600**		20	10	ug/L			05/17/23 16:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/17/23 16:52*	*10*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/17/23 16:52*	*10*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/17/23 16:52*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/17/23 16:52*	*10*

Client Sample ID: MWF3
Lab Sample ID: 480-208934-5

Date Collected: 05/16/23 11:37
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.0	1.6	ug/L			05/17/23 17:14	4
Toluene	ND		4.0	2.0	ug/L			05/17/23 17:14	4
Ethylbenzene	ND		4.0	3.0	ug/L			05/17/23 17:14	4
m-Xylene & p-Xylene	ND		8.0	2.6	ug/L			05/17/23 17:14	4
o-Xylene	ND		4.0	3.0	ug/L			05/17/23 17:14	4
Xylenes, Total	ND		8.0	2.6	ug/L			05/17/23 17:14	4
Total BTEX	ND		8.0	4.0	ug/L			05/17/23 17:14	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/17/23 17:14*	*4*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/17/23 17:14*	*4*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*05/17/23 17:14*	*4*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*05/17/23 17:14*	*4*

Client Sample ID: MWF4
Lab Sample ID: 480-208934-6

Date Collected: 05/16/23 12:34
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**120**		4.0	1.6	ug/L			05/17/23 17:36	4
Toluene	**7.0**		4.0	2.0	ug/L			05/17/23 17:36	4

Client Sample ID: MWF4
Lab Sample ID: 480-208934-6

Date Collected: 05/16/23 12:34
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	370		4.0	3.0	ug/L			05/17/23 17:36	4
m-Xylene & p-Xylene	35		8.0	2.6	ug/L			05/17/23 17:36	4
o-Xylene	140		4.0	3.0	ug/L			05/17/23 17:36	4
Xylenes, Total	180		8.0	2.6	ug/L			05/17/23 17:36	4
Total BTEX	670		8.0	4.0	ug/L			05/17/23 17:36	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/17/23 17:36*	*4*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*05/17/23 17:36*	*4*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/17/23 17:36*	*4*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*05/17/23 17:36*	*4*

Client Sample ID: P8R
Lab Sample ID: 480-208934-7

Date Collected: 05/16/23 14:40
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	170		5.0	2.1	ug/L			05/17/23 17:58	5
Toluene	4.1	J	5.0	2.6	ug/L			05/17/23 17:58	5
Ethylbenzene	190		5.0	3.7	ug/L			05/17/23 17:58	5
m-Xylene & p-Xylene	16		10	3.3	ug/L			05/17/23 17:58	5
o-Xylene	52		5.0	3.8	ug/L			05/17/23 17:58	5
Xylenes, Total	68		10	3.3	ug/L			05/17/23 17:58	5
Total BTEX	430		10	5.0	ug/L			05/17/23 17:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/17/23 17:58*	*5*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*05/17/23 17:58*	*5*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/17/23 17:58*	*5*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/17/23 17:58*	*5*

Client Sample ID: DUP
Lab Sample ID: 480-208934-8

Date Collected: 05/16/23 00:00
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			05/18/23 12:56	1
Toluene	ND		1.0	0.51	ug/L			05/18/23 12:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/18/23 12:56	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			05/18/23 12:56	1
o-Xylene	ND		1.0	0.76	ug/L			05/18/23 12:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/18/23 12:56	1
Total BTEX	ND		2.0	1.0	ug/L			05/18/23 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/18/23 12:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/18/23 12:56*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*05/18/23 12:56*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/18/23 12:56*	*1*

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-208934-9
Date Collected: 05/16/23 00:00
Matrix: Water
Date Received: 05/16/23 17:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			05/17/23 18:42	1
Toluene	ND		1.0	0.51	ug/L			05/17/23 18:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/17/23 18:42	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			05/17/23 18:42	1
o-Xylene	ND		1.0	0.76	ug/L			05/17/23 18:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/17/23 18:42	1
Total BTEX	ND		2.0	1.0	ug/L			05/17/23 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*		*05/17/23 18:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/17/23 18:42*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*05/17/23 18:42*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*05/17/23 18:42*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

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)
480-208934-1	B6R	103	103	110	109
480-208934-2	B7R	101	105	103	105
480-208934-2 MS	B7R	102	101	107	105
480-208934-2 MSD	B7R	102	104	106	107
480-208934-3	B8R	101	104	103	104
480-208934-4	MWF2	100	105	98	102
480-208934-5	MWF3	101	103	105	104
480-208934-6	MWF4	102	107	100	107
480-208934-7	P8R	100	109	99	105
480-208934-8	DUP	100	105	104	105
480-208934-9	TRIP BLANK	104	102	107	106
LCS 480-669778/5	Lab Control Sample	101	100	105	104
LCS 480-669924/5	Lab Control Sample	99	104	96	105
MB 480-669778/7	Method Blank	97	105	95	99
MB 480-669924/7	Method Blank	101	103	103	102

Surrogate Legend

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

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

Lab Sample ID: MB 480-669778/7
Matrix: Water
Analysis Batch: 669778

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			05/17/23 12:00	1
Toluene	ND		1.0	0.51	ug/L			05/17/23 12:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/17/23 12:00	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			05/17/23 12:00	1
o-Xylene	ND		1.0	0.76	ug/L			05/17/23 12:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/17/23 12:00	1
Total BTEX	ND		2.0	1.0	ug/L			05/17/23 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/17/23 12:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*05/17/23 12:00*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*05/17/23 12:00*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/17/23 12:00*	*1*

Lab Sample ID: LCS 480-669778/5
Matrix: Water
Analysis Batch: 669778

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	27.4		ug/L		110	71 - 124
Toluene	25.0	27.3		ug/L		109	80 - 122
Ethylbenzene	25.0	27.6		ug/L		110	77 - 123
m-Xylene & p-Xylene	25.0	27.8		ug/L		111	76 - 122
o-Xylene	25.0	27.8		ug/L		111	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*

Lab Sample ID: MB 480-669924/7
Matrix: Water
Analysis Batch: 669924

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			05/18/23 12:12	1
Toluene	ND		1.0	0.51	ug/L			05/18/23 12:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/18/23 12:12	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			05/18/23 12:12	1
o-Xylene	ND		1.0	0.76	ug/L			05/18/23 12:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/18/23 12:12	1
Total BTEX	ND		2.0	1.0	ug/L			05/18/23 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/18/23 12:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*05/18/23 12:12*	*1*

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

Lab Sample ID: MB 480-669924/7
Matrix: Water
Analysis Batch: 669924

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		73 - 120		05/18/23 12:12	1
Dibromofluoromethane (Surr)	102		75 - 123		05/18/23 12:12	1

Lab Sample ID: LCS 480-669924/5
Matrix: Water
Analysis Batch: 669924

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	27.5		ug/L		110	71 - 124
Toluene	25.0	26.5		ug/L		106	80 - 122
Ethylbenzene	25.0	26.8		ug/L		107	77 - 123
m-Xylene & p-Xylene	25.0	26.8		ug/L		107	76 - 122
o-Xylene	25.0	26.5		ug/L		106	76 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Dibromofluoromethane (Surr)	105		75 - 123

Lab Sample ID: 480-208934-2 MS
Matrix: Water
Analysis Batch: 669924

Client Sample ID: B7R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	36		25.0	65.0		ug/L		116	71 - 124
Toluene	ND		25.0	30.3		ug/L		121	80 - 122
Ethylbenzene	ND		25.0	30.7		ug/L		123	77 - 123
m-Xylene & p-Xylene	ND	F1	25.0	30.4		ug/L		122	76 - 122
o-Xylene	0.80	J	25.0	30.8		ug/L		120	76 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	107		73 - 120
Dibromofluoromethane (Surr)	105		75 - 123

Lab Sample ID: 480-208934-2 MSD
Matrix: Water
Analysis Batch: 669924

Client Sample ID: B7R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	36		25.0	65.4		ug/L		117	71 - 124	1	13
Toluene	ND		25.0	30.4		ug/L		122	80 - 122	0	15
Ethylbenzene	ND		25.0	30.9		ug/L		123	77 - 123	1	15
m-Xylene & p-Xylene	ND	F1	25.0	30.9	F1	ug/L		124	76 - 122	1	16
o-Xylene	0.80	J	25.0	31.1		ug/L		121	76 - 122	1	16

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

Lab Sample ID: 480-208934-2 MSD
Matrix: Water
Analysis Batch: 669924

Client Sample ID: B7R
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

GC/MS VOA

Analysis Batch: 669778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208934-1	B6R	Total/NA	Water	8260C	
480-208934-3	B8R	Total/NA	Water	8260C	
480-208934-4	MWF2	Total/NA	Water	8260C	
480-208934-5	MWF3	Total/NA	Water	8260C	
480-208934-6	MWF4	Total/NA	Water	8260C	
480-208934-7	P8R	Total/NA	Water	8260C	
480-208934-9	TRIP BLANK	Total/NA	Water	8260C	
MB 480-669778/7	Method Blank	Total/NA	Water	8260C	
LCS 480-669778/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 669924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208934-2	B7R	Total/NA	Water	8260C	
480-208934-8	DUP	Total/NA	Water	8260C	
MB 480-669924/7	Method Blank	Total/NA	Water	8260C	
LCS 480-669924/5	Lab Control Sample	Total/NA	Water	8260C	
480-208934-2 MS	B7R	Total/NA	Water	8260C	
480-208934-2 MSD	B7R	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Client Sample ID: B6R
Lab Sample ID: 480-208934-1
Date Collected: 05/16/23 10:57
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	669778	AXK	EET BUF	05/17/23 15:47

Client Sample ID: B7R
Lab Sample ID: 480-208934-2
Date Collected: 05/16/23 11:02
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	669924	AXK	EET BUF	05/18/23 12:34

Client Sample ID: B8R
Lab Sample ID: 480-208934-3
Date Collected: 05/16/23 15:47
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	669778	AXK	EET BUF	05/17/23 16:30

Client Sample ID: MWF2
Lab Sample ID: 480-208934-4
Date Collected: 05/16/23 13:38
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		10	669778	AXK	EET BUF	05/17/23 16:52

Client Sample ID: MWF3
Lab Sample ID: 480-208934-5
Date Collected: 05/16/23 11:37
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	669778	AXK	EET BUF	05/17/23 17:14

Client Sample ID: MWF4
Lab Sample ID: 480-208934-6
Date Collected: 05/16/23 12:34
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	669778	AXK	EET BUF	05/17/23 17:36

Client Sample ID: P8R
Lab Sample ID: 480-208934-7
Date Collected: 05/16/23 14:40
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	669778	AXK	EET BUF	05/17/23 17:58

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Client Sample ID: DUP
Lab Sample ID: 480-208934-8

Date Collected: 05/16/23 00:00
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	669924	AXK	EET BUF	05/18/23 12:56

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-208934-9

Date Collected: 05/16/23 00:00
Matrix: Water
Date Received: 05/16/23 17:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	669778	AXK	EET BUF	05/17/23 18:42

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Total BTEX

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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: ARCADIS U.S. Inc
Job ID: 480-208934-1
Project/Site: Iroquois Gas/Westwood Pharm.- Semi-Annual

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-208934-1	B6R	Water	05/16/23 10:57	05/16/23 17:37
480-208934-2	B7R	Water	05/16/23 11:02	05/16/23 17:37
480-208934-3	B8R	Water	05/16/23 15:47	05/16/23 17:37
480-208934-4	MWF2	Water	05/16/23 13:38	05/16/23 17:37
480-208934-5	MWF3	Water	05/16/23 11:37	05/16/23 17:37
480-208934-6	MWF4	Water	05/16/23 12:34	05/16/23 17:37
480-208934-7	P8R	Water	05/16/23 14:40	05/16/23 17:37
480-208934-8	DUP	Water	05/16/23 00:00	05/16/23 17:37
480-208934-9	TRIP BLANK	Water	05/16/23 00:00	05/16/23 17:37

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

Chain of Custody Record

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Client Information	Sampler: Matthew Bazzeo	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-184536-36164.1
Client Contact: Mr. Raymond Wagner	Phone: 716-213-8065	E-Mail: Steve.Hartmann@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS U.S. Inc	PWSID:			Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			
City: Syracuse	TAT Requested (days): Standard			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 30125855 task 00002			
Email: raymond.wagner@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm.-Semi-Annual	Project #: 48011056			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

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 - 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
~~B3~~	—	—	—	Water					
B6R	05/16/23	1057	G	Water	N		3		
B7R	05/16/23	1102	G	Water	N	Y	9		MS/MSD
B8R	05/16/23	1547	G	Water	N		3		
MWF2	05/16/23	1838	G	Water	N		3		
MWF3	05/16/23	1137	G	Water	N		3		
MWF4	05/16/23	1239	G	Water	N		3		
P8R	05/16/23	1440	G	Water	N		3		
DUP	05/16/23	—	G	Water	N		3		
TRIP Blank	—	—	—	Water	—		2		

480-208934 Chain of Custody

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	Date/Time	Company	Received by	Date/Time	Company
1	M. Bazzeo	05/16/23 1737	Arcadis	LC	5/16/23 1737	
2						
3						

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

Cooler Temperature(s) °C and Other Remarks: 14.4 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-208934-1

Login Number: 208934

List Source: Eurofins Buffalo

List Number: 1

Creator: Sabuda, Brendan D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	14.4 #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Dustin Kirschner
ARCADIS U.S. Inc
One Lincoln Center
110 West Fayette St, Suite 300
Syracuse, New York 13202

Generated 9/25/2023 1:02:22 PM Revision 1

JOB DESCRIPTION

Iroquois Gas/Westwood Pharm.

JOB NUMBER

480-212718-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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9/25/2023 1:02:22 PM
Revision 1

Authorized for release by
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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

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.

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

Job ID: 480-212718-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-212718-1

Revision
The report being provided is a revision of the original report sent on 9/22/2023. The report (revision 1) is being revised: to include m-Xylene & p-Xylene, and o-Xylene results.

Receipt
The samples were received on 9/14/2023 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º C.

GC/MS VOA
Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: B8R (480-212718-3), MWF3 (480-212718-5) and DUP (480-212718-8). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MWF2 (480-212718-4), MWF4 (480-212718-6) and P8R (480-212718-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed within the 7-day holding time specified for unpreserved samples: MWF2 (480-212718-4) and MWF3 (480-212718-5).

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

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: B6R — Lab Sample ID: 480-212718-1

No Detections.

Client Sample ID: B7R — Lab Sample ID: 480-212718-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	27		1.0	0.41	ug/L	1		8260C	Total/NA
Toluene	0.68	J	1.0	0.51	ug/L	1		8260C	Total/NA
Ethylbenzene	3.5		1.0	0.74	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	0.72	J	2.0	0.66	ug/L	1		8260C	Total/NA
o-Xylene	2.0		1.0	0.76	ug/L	1		8260C	Total/NA
Xylenes, Total	2.7		2.0	0.66	ug/L	1		8260C	Total/NA

Client Sample ID: B8R — Lab Sample ID: 480-212718-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	430		20	8.2	ug/L	20		8260C	Total/NA
Ethylbenzene	250		20	15	ug/L	20		8260C	Total/NA
m-Xylene & p-Xylene	44		40	13	ug/L	20		8260C	Total/NA
o-Xylene	53		20	15	ug/L	20		8260C	Total/NA
Xylenes, Total	97		40	13	ug/L	20		8260C	Total/NA

Client Sample ID: MWF2 — Lab Sample ID: 480-212718-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	50		10	4.1	ug/L	10		8260C	Total/NA
Toluene	5.4	J	10	5.1	ug/L	10		8260C	Total/NA
Ethylbenzene	890		10	7.4	ug/L	10		8260C	Total/NA
m-Xylene & p-Xylene	510		20	6.6	ug/L	10		8260C	Total/NA
o-Xylene	410		10	7.6	ug/L	10		8260C	Total/NA
Xylenes, Total	920		20	6.6	ug/L	10		8260C	Total/NA

Client Sample ID: MWF3 — Lab Sample ID: 480-212718-5

No Detections.

Client Sample ID: MWF4 — Lab Sample ID: 480-212718-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	54		4.0	1.6	ug/L	4		8260C	Total/NA
Toluene	2.4	J	4.0	2.0	ug/L	4		8260C	Total/NA
Ethylbenzene	100		4.0	3.0	ug/L	4		8260C	Total/NA
m-Xylene & p-Xylene	12		8.0	2.6	ug/L	4		8260C	Total/NA
o-Xylene	57		4.0	3.0	ug/L	4		8260C	Total/NA
Xylenes, Total	69		8.0	2.6	ug/L	4		8260C	Total/NA

Client Sample ID: P8R — Lab Sample ID: 480-212718-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	86		5.0	2.1	ug/L	5		8260C	Total/NA
Ethylbenzene	130		5.0	3.7	ug/L	5		8260C	Total/NA
m-Xylene & p-Xylene	8.8	J	10	3.3	ug/L	5		8260C	Total/NA
o-Xylene	43		5.0	3.8	ug/L	5		8260C	Total/NA
Xylenes, Total	52		10	3.3	ug/L	5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: DUP
Lab Sample ID: 480-212718-8

No Detections.

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-212718-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: B6R
Lab Sample ID: 480-212718-1
Date Collected: 09/14/23 14:58
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			09/18/23 15:50	1
Toluene	ND		1.0	0.51	ug/L			09/18/23 15:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/23 15:50	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/23 15:50	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/23 15:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/18/23 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/18/23 15:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*09/18/23 15:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/18/23 15:50*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/18/23 15:50*	*1*

Client Sample ID: B7R
Lab Sample ID: 480-212718-2
Date Collected: 09/14/23 14:44
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**27**		1.0	0.41	ug/L			09/18/23 16:12	1
Toluene	**0.68**	**J**	1.0	0.51	ug/L			09/18/23 16:12	1
Ethylbenzene	**3.5**		1.0	0.74	ug/L			09/18/23 16:12	1
m-Xylene & p-Xylene	**0.72**	**J**	2.0	0.66	ug/L			09/18/23 16:12	1
o-Xylene	**2.0**		1.0	0.76	ug/L			09/18/23 16:12	1
Xylenes, Total	**2.7**		2.0	0.66	ug/L			09/18/23 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*09/18/23 16:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*		*09/18/23 16:12*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/18/23 16:12*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/18/23 16:12*	*1*

Client Sample ID: B8R
Lab Sample ID: 480-212718-3
Date Collected: 09/14/23 13:40
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**430**		20	8.2	ug/L			09/18/23 16:34	20
Toluene	ND		20	10	ug/L			09/18/23 16:34	20
Ethylbenzene	**250**		20	15	ug/L			09/18/23 16:34	20
m-Xylene & p-Xylene	**44**		40	13	ug/L			09/18/23 16:34	20
o-Xylene	**53**		20	15	ug/L			09/18/23 16:34	20
Xylenes, Total	**97**		40	13	ug/L			09/18/23 16:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*		*09/18/23 16:34*	*20*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*09/18/23 16:34*	*20*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*09/18/23 16:34*	*20*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*09/18/23 16:34*	*20*

Client Sample ID: MWF2
Lab Sample ID: 480-212718-4
Date Collected: 09/14/23 12:45
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**50**		10	4.1	ug/L			09/18/23 16:56	10
Toluene	**5.4**	**J**	10	5.1	ug/L			09/18/23 16:56	10
Ethylbenzene	**890**		10	7.4	ug/L			09/18/23 16:56	10
m-Xylene & p-Xylene	**510**		20	6.6	ug/L			09/18/23 16:56	10
o-Xylene	**410**		10	7.6	ug/L			09/18/23 16:56	10
Xylenes, Total	**920**		20	6.6	ug/L			09/18/23 16:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*		*09/18/23 16:56*	*10*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/18/23 16:56*	*10*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*09/18/23 16:56*	*10*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/18/23 16:56*	*10*

Client Sample ID: MWF3
Lab Sample ID: 480-212718-5
Date Collected: 09/14/23 12:09
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.0	1.6	ug/L			09/18/23 17:19	4
Toluene	ND		4.0	2.0	ug/L			09/18/23 17:19	4
Ethylbenzene	ND		4.0	3.0	ug/L			09/18/23 17:19	4
m-Xylene & p-Xylene	ND		8.0	2.6	ug/L			09/18/23 17:19	4
o-Xylene	ND		4.0	3.0	ug/L			09/18/23 17:19	4
Xylenes, Total	ND		8.0	2.6	ug/L			09/18/23 17:19	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*		*09/18/23 17:19*	*4*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/18/23 17:19*	*4*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/18/23 17:19*	*4*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*09/18/23 17:19*	*4*

Client Sample ID: MWF4
Lab Sample ID: 480-212718-6
Date Collected: 09/14/23 13:29
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**54**		4.0	1.6	ug/L			09/18/23 17:41	4
Toluene	**2.4**	**J**	4.0	2.0	ug/L			09/18/23 17:41	4
Ethylbenzene	**100**		4.0	3.0	ug/L			09/18/23 17:41	4
m-Xylene & p-Xylene	**12**		8.0	2.6	ug/L			09/18/23 17:41	4
o-Xylene	**57**		4.0	3.0	ug/L			09/18/23 17:41	4
Xylenes, Total	**69**		8.0	2.6	ug/L			09/18/23 17:41	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 120*		*09/18/23 17:41*	*4*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*09/18/23 17:41*	*4*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*09/18/23 17:41*	*4*
Dibromofluoromethane (Surr)	*111*		*75 - 123*		*09/18/23 17:41*	*4*

Client Sample ID: P8R
Lab Sample ID: 480-212718-7
Date Collected: 09/14/23 14:21
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**86**		5.0	2.1	ug/L			09/18/23 18:03	5
Toluene	ND		5.0	2.6	ug/L			09/18/23 18:03	5
Ethylbenzene	**130**		5.0	3.7	ug/L			09/18/23 18:03	5
m-Xylene & p-Xylene	**8.8**	**J**	10	3.3	ug/L			09/18/23 18:03	5
o-Xylene	**43**		5.0	3.8	ug/L			09/18/23 18:03	5
Xylenes, Total	**52**		10	3.3	ug/L			09/18/23 18:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*80 - 120*		*09/18/23 18:03*	*5*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/18/23 18:03*	*5*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*09/18/23 18:03*	*5*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/18/23 18:03*	*5*

Client Sample ID: DUP
Lab Sample ID: 480-212718-8
Date Collected: 09/14/23 00:00
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	0.82	ug/L			09/18/23 18:25	2
Toluene	ND		2.0	1.0	ug/L			09/18/23 18:25	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/18/23 18:25	2
m-Xylene & p-Xylene	ND		4.0	1.3	ug/L			09/18/23 18:25	2
o-Xylene	ND		2.0	1.5	ug/L			09/18/23 18:25	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/18/23 18:25	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*80 - 120*		*09/18/23 18:25*	*2*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/18/23 18:25*	*2*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*09/18/23 18:25*	*2*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/18/23 18:25*	*2*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-212718-9
Date Collected: 09/14/23 00:00
Matrix: Water
Date Received: 09/14/23 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			09/18/23 18:47	1
Toluene	ND		1.0	0.51	ug/L			09/18/23 18:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/23 18:47	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/23 18:47	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/23 18:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/18/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*		*09/18/23 18:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/18/23 18:47*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/18/23 18:47*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/18/23 18:47*	*1*

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: Iroquois Gas/Westwood Pharm.

Job ID: 480-212718-1

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)
480-212718-1	B6R	103	107	103	103
480-212718-2	B7R	105	113	107	106
480-212718-3	B8R	107	107	105	105
480-212718-4	MWF2	104	108	99	106
480-212718-5	MWF3	105	104	103	101
480-212718-6	MWF4	109	107	110	111
480-212718-7	P8R	108	106	109	106
480-212718-8	DUP	108	106	112	106
480-212718-9	TRIP BLANK	107	106	107	107
LCS 480-683828/6	Lab Control Sample	105	110	102	100
LCSD 480-683828/28	Lab Control Sample Dup	104	110	100	101
MB 480-683828/8	Method Blank	106	104	107	104

Surrogate Legend

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

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

Lab Sample ID: MB 480-683828/8
Matrix: Water
Analysis Batch: 683828

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			09/18/23 12:26	1
Toluene	ND		1.0	0.51	ug/L			09/18/23 12:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/23 12:26	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/23 12:26	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/23 12:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/18/23 12:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 120*		*09/18/23 12:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/18/23 12:26*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/18/23 12:26*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/18/23 12:26*	*1*

Lab Sample ID: LCS 480-683828/6
Matrix: Water
Analysis Batch: 683828

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	26.7		ug/L		107	71 - 124		
Toluene			25.0	26.0		ug/L		104	80 - 122		
Ethylbenzene			25.0	26.8		ug/L		107	77 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*

Lab Sample ID: LCSD 480-683828/28
Matrix: Water
Analysis Batch: 683828

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			25.0	26.4		ug/L		105	71 - 124	1	13
Toluene			25.0	25.5		ug/L		102	80 - 122	2	15
Ethylbenzene			25.0	26.4		ug/L		106	77 - 123	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

QC Association Summary

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

GC/MS VOA

Analysis Batch: 683828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-212718-1	B6R	Total/NA	Water	8260C	
480-212718-2	B7R	Total/NA	Water	8260C	
480-212718-3	B8R	Total/NA	Water	8260C	
480-212718-4	MWF2	Total/NA	Water	8260C	
480-212718-5	MWF3	Total/NA	Water	8260C	
480-212718-6	MWF4	Total/NA	Water	8260C	
480-212718-7	P8R	Total/NA	Water	8260C	
480-212718-8	DUP	Total/NA	Water	8260C	
480-212718-9	TRIP BLANK	Total/NA	Water	8260C	
MB 480-683828/8	Method Blank	Total/NA	Water	8260C	
LCS 480-683828/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-683828/28	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: B6R
Lab Sample ID: 480-212718-1
Date Collected: 09/14/23 14:58
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	683828	ZN	EET BUF	09/18/23 15:50

Client Sample ID: B7R
Lab Sample ID: 480-212718-2
Date Collected: 09/14/23 14:44
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	683828	ZN	EET BUF	09/18/23 16:12

Client Sample ID: B8R
Lab Sample ID: 480-212718-3
Date Collected: 09/14/23 13:40
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	683828	ZN	EET BUF	09/18/23 16:34

Client Sample ID: MWF2
Lab Sample ID: 480-212718-4
Date Collected: 09/14/23 12:45
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		10	683828	ZN	EET BUF	09/18/23 16:56

Client Sample ID: MWF3
Lab Sample ID: 480-212718-5
Date Collected: 09/14/23 12:09
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	683828	ZN	EET BUF	09/18/23 17:19

Client Sample ID: MWF4
Lab Sample ID: 480-212718-6
Date Collected: 09/14/23 13:29
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	683828	ZN	EET BUF	09/18/23 17:41

Client Sample ID: P8R
Lab Sample ID: 480-212718-7
Date Collected: 09/14/23 14:21
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	683828	ZN	EET BUF	09/18/23 18:03

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Client Sample ID: DUP
Lab Sample ID: 480-212718-8
Date Collected: 09/14/23 00:00
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	683828	ZN	EET BUF	09/18/23 18:25

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-212718-9
Date Collected: 09/14/23 00:00
Matrix: Water
Date Received: 09/14/23 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	683828	ZN	EET BUF	09/18/23 18:47

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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: ARCADIS U.S. Inc
Job ID: 480-212718-1
Project/Site: Iroquois Gas/Westwood Pharm.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-212718-1	B6R	Water	09/14/23 14:58	09/14/23 16:00
480-212718-2	B7R	Water	09/14/23 14:44	09/14/23 16:00
480-212718-3	B8R	Water	09/14/23 13:40	09/14/23 16:00
480-212718-4	MWF2	Water	09/14/23 12:45	09/14/23 16:00
480-212718-5	MWF3	Water	09/14/23 12:09	09/14/23 16:00
480-212718-6	MWF4	Water	09/14/23 13:29	09/14/23 16:00
480-212718-7	P8R	Water	09/14/23 14:21	09/14/23 16:00
480-212718-8	DUP	Water	09/14/23 00:00	09/14/23 16:00
480-212718-9	TRIP BLANK	Water	09/14/23 00:00	09/14/23 16:00

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

Chain of Custody Record

Syracuse eurofins | Environment Testing

#225

Client Information	Sampler: Jason Gutkowski	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-188542-36164.1
Client Contact: Mr. Raymond Wagner	Phone: 315 436 3605	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: ARCADIS U.S. Inc	PWSID:	Analysis Requested		Job #:
Address: One Lincoln Center 110 West Fayette St, Suite 300	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
City: Syracuse	TAT Requested (days): Standard Turn			
State, Zip: NY, 13202	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 30125855 task 00002			
Email: raymond.wagner@arcadis.com	WO #: 30003542-00001			
Project Name: Iroquois Gas/Westwood Pharm.-Semi-Annual	Project #: 48011056			
Site: New York	SSOW#:			Other:

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 - 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
[redacted]	—	—	G	Water			1		
B6R	9/14/23	1458		Water			3		
B7R	9/14/23	1444		Water			3		
B8R	9/14/23	1340		Water			3		
MWF2	9/14/23	1245		Water			3		
MWF3	9/14/23	1209		Water			3		
MWF4	9/14/23	1329		Water			3		
P8R	9/14/23	1421		Water			3		
DUP	9/14/23	—		Water			3		
TRIP BLANK	9/14/23	—		Water			2		

480-212718 Chain of Custody

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	Date/Time	Company	Received by	Date/Time	Company
Dan Gutkowski	9/14/23 / 1515	Arcadis	Chase Czekanski	9/14/23 1515	Arcadis
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9/14/23 1600	Company: TMG

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

Cooler Temperature(s) °C and Other Remarks: 4.2 #1 1.1 #5

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-212718-1

Login Number: 212718
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	ARCADIS
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	

Appendix C

Creek and Cap Inspections

Creek Inspections

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 4/18/2023

Weather: 39°F, overcast

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 4/18/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 4/18/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 5/16/2023

Weather: 57°F, sunny

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 5/16/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 5/16/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 6/15/2023

Weather: 67°F, sunny

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 6/15/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 6/15/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 7/27/2023

Weather: 73°F, overcast

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 7/27/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 7/27/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 8/29/2023

Weather: 68°F, partly sunny

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 8/29/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 8/29/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 9/14/2023

Weather: 65°F, sunny

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 9/14/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 9/14/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 10/26/2023

Weather: 66°F, overcast

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 10/26/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 10/26/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 11/22/2023

Weather: 48°F, rain

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 11/22/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 11/22/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 12/19/2023

Weather: 28°F, overcast

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 12/19/2023

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 12/19/2023

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 1/18/2024

Weather: 25°F, overcast

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 1/18/2024

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 1/18/2024

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 2/29/2024

Weather: 24°F, sunny

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 2/29/2024

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 2/29/2024

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart St. and 40 Bradley St., Buffalo, NY
NYSDEC Site No. 915141A
Monthly Creek Inspection Report

Inspection Date: 3/26/2024

Weather: 46°F, cloudy

Personnel: Jason Gutkowski

Inspection Notes:

1) ARCADIS performed the inspection via binoculars from the bike path across the creek. There were no visual signs of seepage or sheen observed.

2) Photographs of the bank are attached.

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of water surface

Taken: 3/26/2024

PHOTOGRAPH LOG

Monthly Creek Inspection Report
Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
NYSDEC Site No. 915141A
120 Dart Street and 40 Bradley Street, Buffalo, NY



Photograph of sheet pile wall

Taken: 3/26/2024

Cap Inspections

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 4/6/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	Y			
Cap has No Surface Disturbances		N	Y on 3/17/23	None As Of Now
Cap is Free of Animal Holes and Woody Vegetation	Y			
Drainage Areas Free of Clogs or Obstructions	Y			


Cap
Damage
STOP

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 4/11/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances		X	Prev.	Non
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 4/18/25 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances		X	Prev.	NO
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site

120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 5/11/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	Y		Y	
Cap has No Surface Disturbances	X		Y	Cap Has Been Repaired
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	Y			


Cap
Repair


Cap
Repair

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 6/15/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X	—	N	N/A
Cap has No Surface Disturbances	X	—	↓	↓
Cap is Free of Animal Holes and Woody Vegetation	X	—	↓	↓
Drainage Areas Free of Clogs or Obstructions	X	—	↓	↓

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 7/11/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X	—	N	N/A
Cap has No Surface Disturbances	X	—	↓	↓
Cap is Free of Animal Holes and Woody Vegetation	X	—	↓	↓
Drainage Areas Free of Clogs or Obstructions	X	—	↓	↓

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 8/22/23 **Operator's Initials:** JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X	—	N	N/A
Cap has No Surface Disturbances	X	—	N	↓
Cap is Free of Animal Holes and Woody Vegetation	X	—	N	↓
Drainage Areas Free of Clogs or Obstructions	X	—	N	↓

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 9/14/23 **Operator's Initials:** JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	✓	—	N	N/A
Cap has No Surface Disturbances	✓	—	↓	↓
Cap is Free of Animal Holes and Woody Vegetation	✓	—	↓	↓
Drainage Areas Free of Clogs or Obstructions	✓	—	↓	↓

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 10/4/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances	X			
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 11/1/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances	X			
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site
120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

ARCADIS

Date: 12/1/23 Operator's Initials: JTG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances	X			
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site

120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

Date: 1/11/2024 **Operator's Initials:** JG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances	X			
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site

120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

Date: 02/02/2024 **Operator's Initials:** JG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances	X			
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

Iroquois Gas/Westwood Pharmaceuticals Terrestrial Site

120 Dart Street and 40 Bradley Street, City of Buffalo, Erie County, New York

Date: 03/26/2024 **Operator's Initials:** JG

Inspection List

	Yes	No	Photos Taken?	Corrective Action Taken?
Cap in Good Overall Condition	X			
Cap has No Surface Disturbances	X			
Cap is Free of Animal Holes and Woody Vegetation	X			
Drainage Areas Free of Clogs or Obstructions	X			

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