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MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE ACTIVITIES (SEPTEMBER 2024) CLAREMONT POLYCHEMICAL OPERABLE UNIT 5 GROUND WATER TREATMENT SYSTEM, OLD BETHPAGE, NY

**MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE
ACTIVITIES (SEPTEMBER 2024)
CLAREMONT POLYCHEMICAL OPERABLE UNIT 5 GROUND
WATER TREATMENT SYSTEM, OLD BETHPAGE, NY**

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LIST OF ACRONYMS AND ABBREVIATIONS

AS	Air Stripper
A/V	Air and Vacuum
ASF	Air Stripper feed
BNA	Base Neutral & Acid Extractables
CPC	Claremont Polychemical
CSE	Confined Space Entry
DOSR	Daily Operations Summary Report
EE	Electrical Engineer
GAC	Granular Activated Carbon
GES	Groundwater & Environmental Services, Inc.
GPM	Gallons Per Minute
GWTS	Groundwater extraction, treatment, and reinjection system
HDR	Henningson, Durham & Richardson Architecture and Engineering, P.C.
HMI	Human Machine Interface
HVAC	Heating, Ventilation, and Air Conditioning
MTBA	Tert-Butyl-Methyl ether
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
O&M	Operation and Maintenance
OU4	Operable Unit 4
OU5	Operable Unit 5
PD	Plant Discharge
PDB	Passive Diffusion Bag
PFAS	Per- and polyfluoroalkyl substances
PFOS	Perfluorooctanesulfonic acid
PFOA	Perfluorooctanoic acid
PID	Photoionization Detector
PFF	Pressure Filter Feed
PLC	Programmable Logic Controller
ppm	parts per million
PW	Process Water
Ramboll	Ramboll Americas Engineering Solutions, Inc.
RW	Recovery Well, Process Well
SPEDES	State Pollutant Discharge Elimination System
SSHP	Site Safety and Health Plan
SU	Standard pH Units
SVOCs	Semi-Volatile Organic Compounds
TBA	Tert-butyl alcohol
TDS	Total Dissolved Solids
TKN	Total Kjeldahl Nitrogen
TOC	Total Organic Carbon
TOGS	Technical and Operational Guidance Series
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency
US Water	US Water Services Corporation
VOCs	Volatile Organic Compounds,

1. OPERATION AND MAINTENANCE ACTIVITIES

On behalf of Ramboll Americas Engineering Solutions, Inc. (Ramboll), Groundwater & Environmental Services, Inc. (GES) continued the daily operation and maintenance (O&M) of the Claremont Polychemical (CPC) Superfund Site Groundwater Treatment System (GWTS) Operable Unit 5 (OU5) during the month of September 2024. In addition, former Operable Unit (OU4) was inspected once per month to ensure security and building code compliance. For this report every time plant is mentioned it refers to OU5. OU4 will be referred to as such whenever discussed. This report covers the O&M activities for the system during the period defined as beginning at approximately 0800 hours, September 3, 2024, through approximately 0800 hours, October 1, 2024. O&M conducted during this reporting period was guided by the site O&M Manual.

The GWTS – treatment plant, grounds, and well systems - were maintained for the 28 days in this reporting period during which the treatment system experienced 0 minutes of downtime. Readings of the key plant process parameters are normally recorded each workday. These readings and the Human Machine Interface (HMI) flow trend lines are used to monitor the system's performance and condition. Selected readings are recorded in the daily database which is an electronic file maintained in the monthly operating documents folder. If the plant is not occupied, the system is monitored remotely.

The treatment process control and alarm systems are functional. The recovery well pumps, process pumps, and air stripper blower are operated in the automatic mode and are normally remotely controlled and monitored. The RW-3, RW-4 and RW-5 recovery wells were functional during the month of September. RW-4 and RW-5 recovery wells were periodically turned-off to accommodate granular activated carbon (GAC) treatment system operational limitations (pressure and optimal flow rate).

1.1 Daily Operations Summary Reports

The GWTS's daily operations and maintenance activities, project tasks, and observations during this period are briefly described in the Daily Operations Summary Report (DOSR). The DOSR is based in part on the treatment system's daily operating worksheets and logs which include:

- Daily Operating Log – flow readings and calculations (Form-01)
- Daily Site and Safety Inspection – plant condition checklist (Form-02)
- Daily Plant Activity Notes – plant manager's daily summary (Form-03)
- Sign-In Sheet – GES/Ramboll employee on-site hours (Form-15)
- Daily Process Data Sheet – point process readings (Form-30)
- Logbook CPC 5-8– plant operator's daily logbook
- Daily Database – daily process readings (September 24 Database.xlsx)
- NYSDEC Log-in Sheet – Entry/Exit Log with COVID-19 Acknowledgement

1.2 Summary of Maintenance Activities

The operation and maintenance of the treatment system, facility, and associated equipment is performed in accordance with the site O&M Manual. These tasks and inspections incorporate the equipment manufacturers' recommendations, operations experience, and good engineering and

maintenance practices. A detailed accounting of the September activities is further provided in the plant operator's daily logbook.

Maintenance and project activities undertaken during the September period included:

- Routine and general maintenance tasks were conducted at the plant, on the grounds, and in the well fields.
- Single Air Stripper Feed (ASF) pumps were placed into hand mode and frequently switched to cycle their activity.
- The monthly process equipment tests were conducted.
- The Operable Unit 4 (OU4) comprehensive inspections were completed.
- The monthly Process/Recovery Well (RW) system inspection was completed.
- Basin 33 was inspected.
- Basin 1 was inspected.
- The ASF pumps were lubricated, and the seals tightened.
- The OU5 comprehensive inspections were completed.
- The PFF pumps were lubricated, and the seals tightened.
- The fire alarm system components were inspected.
- The monthly electrical device survey was completed.
- The SUNY wellfield was inspected.

1.3 Maintenance Logs

The following operating logbooks are currently in use and maintained at OU5:

- CL-18 OU-4 Log (at OU4)
- CL-43 General Field Support Log (truck)
- CL-47 Misc. Projects Field Notebook (Brian Dunn)
- CPC 5-4 Project Support Logbook (site)
- CPC 5-8 Site Supervisor's Daily Logbook (Brian Dunn)

2. TECHNICAL SUPPORT ACTIVITIES

2.1 GES/Ramboll Personnel

- GES maintained the system throughout the period.

2.2 NYSDEC Personnel, Sub - contractors, and Other Visitors

- On September 19, 2024 BK Fire Suppression & Security Services was on site to inspect/test the exterior fire hydrant and the inactive fire suppression system at OU-4.
- On September 25, 2024 a Calgon Carbon crew was on site to conduct carbon media pump out, following the completion of GAC treatment system pilot study.

2.3 Deliveries

- On September 25, 2024 Pace Analytical Laboratory delivered coolers for the system sampling event. Sunbelt Rentals delivered compressor rental equipment for carbon pump out activities.
- On September 26, 2024 UPS delivered equipment and materials for the quarterly groundwater sampling activities.

3. HEALTH AND SAFETY

Work at the Claremont GWTS OU5 was conducted in accordance with the approved and Ramboll adopted Site Safety and Health Plan (SSHP). Safety related activities during this period included:

- The water remained off at OU4. Both potable and non-potable lines were drained. (No sanitary water).
- Daily site safety inspections were completed as part of the routine O&M activities.

4. PLANNED ACTIVITIES AND SCHEDULES

The evaluation of the plant operating system and equipment is ongoing by GES/Ramboll. A list in the form of corrective actions or maintenance tasks has been generated as a monthly system status report. These reports are updated as needed and reviewed at least monthly. Both are electronically filed. The corrective action list is included at the end of this report as **Table 1** – Claremont Corrective Action Summary.

Upcoming tasks include:

- Close and exercise all globe valves at the non-operational recovery wells.
- Plan for replacement of non-functional plant process room lighting (with LED lighting).
- Plan for replacement of non-functional emergency heaters in the process room.
- Evaluate HVAC system upgrades for adequate heat production.

5. MONITORING WELL WATER ELEVATIONS

The monitoring well system's groundwater elevation data table was updated after the August 2024 quarterly GW elevation recording task. This database is available for review. The next set of synoptic water level measurements will be scheduled for October 2024 and will be conducted by Ramboll.

6. TREATMENT SYSTEM FLOWS

During the September period, the plant continued to operate in the auto control mode. The volume of treated water discharged by the treatment system to the selected recharge basin was calculated from the plant influent and effluent flow meter readings. These readings are taken at the HMI and recorded in the daily database.

During the month of September 2024, recovery wells RW-3, RW-4, and RW-5 operated normally.

RW-4 was placed offline on May 21, 2024 due to random electrical shutdowns. The pump was restarted on June 14, 2024; however, it shut down on June 19, 2024 due to possible motor starter issues. RW-4 is operational but remained offline during this period to accommodate GAC treatment system operational limitations (pressure and optimal flow rate). RW-4 was restarted on September 17, 2024, following the completion of GAC treatment system pilot study.

RW-5 was placed online on May 21, 2024, with the pump experiencing motor controls electrical shut down on May 28, 2024. A used motor starter and relay overload were taken from RW-1 controls and installed at RW-5 on June 18, 2024. Subsequently, RW-5 was restarted and has remained operational throughout the remainder of the period. RW-5 was temporarily turned off on July 24, 2024 due to loss of the PF-2 transfer pump, which caused insufficient transfer flow rates. RW-5 was fully restarted on September 17, 2024, following the completion of GAC treatment system pilot study.

During the month of September, the plant discharge was directed entirely to Recharge Basin # 33.

The total volume of treated water discharged from ~0800 hours September 3, 2024 to ~0800 hours October 1, 2024 was approximately 21,187,000 gallons. The data in **Table 2** is a summary of plant discharge flows.

A graphic representation of the system's daily plant discharge output is provided in **Figure 1** and the daily plant totalizer readings for September 2024 are provided in **Table 3**, both following the text of this report.

Under current conditions, the PLC and the control system are functioning as designed. Flows from the individual recovery wells are remotely read, transmitted, and totalized.

The flow summary for the individual components of the system can be found in **Table 4** at the end of this report.

7. CHEMICAL CONSUMPTION

The hydrochloric acid feed system is currently off-line, and the system is void of acid. There are four drums of virgin acid on site. No acid was used for water treatment purposes in September of 2024.

The sodium hydroxide storage system is currently not in use and the system is empty of caustic. There is no bulk sodium hydroxide on site and no caustic was used in September of 2024.

The sodium hypochlorite storage system is currently not in use and the system is empty of bleach. No bulk sodium hypochlorite is stored on site. No sodium hypochlorite was used in September of 2024.

8. WASTE DISPOSALS

Routine accumulation of waste materials continued from plant day to day operations. Waste removal is being handled by National Waste Services, LLC. The waste container was last emptied in July 2024.

9. MONTHLY DISCHARGE MONITORING REPORT

The GWTS is operated under an equivalency permit from the NYSDEC. **Table 5** presents the Claremont OU5 O&M Sampling and Measurement requirements and their frequency. The analytical results for the plant discharge sampling conducted on September 4, 2024 indicate that the analyzed parameters were compliant with permit limits (**Table 6**). As part of the pilot study associated with the GAC treatment system, additional mid-month system sampling was conducted on September 16, 2024 to evaluate the effectiveness of the GAC treatment. Monthly and mid-month system sampling analytical results are provided in **Attachment 1**.

The OU5 GWTS plant's water discharge permit is in the process of being renewed by the NYSDEC.

10. PENDING ISSUES AND CONSIDERATIONS

Ramboll is currently planning demolition of the OU4 building; and is tentatively scheduled for 1st Q 2025.

The discrepancies/inaccuracies in the plant flow meter readings at OU5 may be due to the inappropriate configuration of the local piping. Future calibration or adjustment of pulse reading may be required.

The pump in recovery well RW-3 experienced an electric malfunction on March 3, 2024. The pump was replaced and put back into operation on April 5, 2024.

Recovery well RW-4 shut down on May 21, 2024, due to possible electrical overload or motor thermal overload. The RW-4 submersible pump remains operational but shuts down unexpectedly. The pump was operational between June 14 and 18, 2024 but placed offline due to random electrical shutdowns. RW-4 remained offline during this period to accommodate GAC treatment system operational limitations (pressure and optimal flow rate). The recovery well has been fully operational as of September 17, 2024, following the shutdown of the GAC treatment system.

RW-5 shut down on May 28, 2024 due to motor starter issues. The pump could not be restarted and was pending electrical evaluation. The motor starter was replaced on June 18 and the pump was placed online. RW-5 has been operating intermittently during the last reporting period due to GAC treatment system flow limitation. The recovery well has been fully operational as of September 17, 2024, following the shutdown of the GAC treatment system.

The PF-2 transfer pump in the OU5 GWTS experienced a malfunction on July 23, 2024, and remained offline and was unable to start through the end of July (pending further electrical troubleshooting). The pump was repaired on August 7, 2024 and is operational.

The OU4 plant is offline and its disposition including that of the injection well system and vapor carbon beds is pending.

The status of key aspects of OU4 are as follows:

- The plant heat is currently off, and the system is out of service.
- The fire alarm panels are off-line.
- The fire sprinkler system is currently off-line. The water has been drained from the system. Although BK Fire Suppression Systems LLC installed a central monitoring and an alarm system on the sprinkler system at OU4 in the past, the system is not operational.
- The facility is secure, and its physical monitoring continues.
- The facility and grounds are not maintained except for the facility entrance and plant egress points.
- NYSDEC plans on decommissioning and demolishing OU4. A team from Ramboll is in the process of selecting a contractor for this work which is tentatively scheduled for 1st Q 2025.

11. PLANT DOCUMENTS

Procedures and standard forms are written, reviewed, and revised as needed. As-built drawings are generated and updated as necessary.

12. MONITORING RESULTS

The CPC GWTS is monitored through the analysis of off-site laboratory analytical data and on-site field data.

12.1 Off-site Analytical Data Results

Monthly Plant Discharge (PD) samples are taken for organic analysis in compliance with the NYSDEC discharge permit. Quarterly groundwater samples are taken for organic analysis, and quarterly process water (PW) samples are taken for organic, inorganic, and generic analysis. At the direction of the NYSDEC in an August 17, 2022 email, analysis of Per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane were added to monthly sampling for both influent and effluent for the foreseeable future. The September 2024 PFAS and 1,4-dioxane influent and effluent results can be found in **Table 7** following the text of this report. Monthly and quarterly system sampling analytical results are provided in **Attachment 1**.

The September sampling activities included:

- Monthly and quarterly system sampling was completed on September 4, 2024.
- GAC sediment sampling was completed on September 5, 2024.
- Mid-month GAC system sampling was completed on September 16, 2024.

12.2 Field Data

12.2.1 Plant Discharge pH and Temperature

The treatment plant effluent is monitored for pH and temperature on a weekly basis to obtain a monthly average in compliance with the NYSDEC discharge permit requirements. These

measurements are taken from the plant effluent at a controlled point with a calibrated portable meter. The plant discharge readings for September 2024 can be found in **Table 8** following the text of this report.

The September 2024 average pH measurement was 7.21 standard units (su). The NYSDEC discharge permit requires the plant discharge to have an average monthly pH between 6.5 and 8.5 su. The results for this month meet this requirement. Data showing the plant discharge's monthly average pH trend over several months is provided in **Table 9** following the text of this report.

12.2.2 Air Stripper (AS) Tower Air Monitoring

Using a calibrated photoionization detector (PID), the vapor discharge from the air stripper tower was monitored weekly for volatile organic compounds (VOCs). The measurements were taken from the tower's effluent air stream through Port B when the treatment system is online. The September 2024 readings from the AS tower are provided in **Table 10**.

Other routine data collected in September 2024 included:

- The electric and water meter readings at OU5 were recorded weekly.
- The plant vaults and selected areas were monitored for VOCs weekly.
- The plant sound levels were recorded bi-weekly.
- The monthly electric and gas meter readings for OU4 were recorded.
- The recharge basins were inspected weekly.
- The differential pressure readings across the AS Tower were recorded bi-weekly.

13. PROCESS ANALYSIS AND SYSTEM STATUS

The treatment system is currently operated 24/7 in the automatic mode. It is remotely monitored as necessary. The GAC treatment system has been operational from April 25, 2024 through September 17, 2024.

13.1 Extraction (RW) Processes

- The monthly system inspection was completed.
- The vault space heating units were reactivated in late December of 2023.
- The recovery well pump system is remotely controlled and monitored, it operates in the auto mode.
- The pump at RW-3 stopped working on March 3, 2024 due to a suspected electrical or mechanical issue. The pump, pump motor and down well wiring were replaced on April 5, 2024.
- RW-4 pump experienced electrical issues and shut down on May 21, 2024. It has been subsequently placed back online, however, it continues to experience randomized shut downs. Upon further testing, GES plans to replace the motor starter and relay overload at the controls of RW-4.
- RW-5 pump experienced electrical issues and shut down on May 28, 2024. The motor starter and relay overload were replaced on June 18, 2024 and the pump has been placed back in automatic operating mode.

- Pump flow readouts are transmitted to the plant and the totalizers for pumps RW-3, and RW-4 are fully functional. The local flow meter for RW-5 occasionally stops transmitting.
- Air/Vacuum (A/V) valve at station 33+96 encountered a leak in May 2023 that required the vault to be pumped out and have its air/vacuum valve removed. Currently a stopper has been fitted to the pit that allows water to flow through the system.
- The Air/Vacuum (A/V) valve at station 16+57 and 17+10 remain isolated from the transmission line.
- RW-1 and RW-2 are offline and periodically run for preventative maintenance purposes. Their flow meters are not transmitting through the PLC. When repairs were made at RW-1 in November 2021, stones were removed from the flow meterhousing. There was a thick coating of iron salt deposits on the housing and impeller. Both RW-1 and RW-2 are isolated from the process pipeline throughout the operating period. On a monthly basis, the isolation valves are actuated open and pumps are run for five minutes to rotate the motors. The pumps were tested operational as of June 2024. The motor controls (motor starter with relay overload) were taken from RW-1 and installed at RW-5 on June 18, 2024 due to these parts being obsolete. RW-1 will remain offline and inoperative until suitable replacement can be obtained.

13.2 AS Process

- The three OU5 ASF pumps in the AS Process are fully functional.
- Motors and seals were lubricated on a bi-weekly schedule. Seals were tightened and the drains were cleared as necessary.
- The AS tower main drain valve's manual actuator is not functional (fail open).
- The tower media appears clean as the pressure differential between the top and bottom ports remains relatively constant. The lower section of media has been visually inspected.
- The discharge valves for ASF P1 and P2 appear to be frozen in the open position.

13.3 GAC Monitoring

The GAC treatment system was started on April 26, 2024 using startup procedures developed by Ramboll and GES specifically for that treatment unit. Once started, the GAC unit was online through the end of the reporting period. Going forward while the GAC treatment system is operating, the operator will perform the following routine monitoring of the performance of that system on a daily basis. These operating parameters will be recorded on a Process Data datasheet developed specifically for the GAC treatment unit.

- RW-3 Flow
- RW-4 Flow
- RW-5 Flow
- RW Total Flow
- INF Flow
- ASF Flow
- PFF Pump ON
- GAC Effluent (PFF) Flow
- GAC Influent Pressure (PFF Transfer pumps)
- PV-1 Effluent Pressure
- PV-1 Differential Pressure
- PV-2 Effluent Pressure (GAC Effluent)
- PV-2 Differential Pressure

In an effort to monitor the efficacy of GAC treatment, PFAS will be sampled bi-monthly and 1,4-dioxane sampled monthly during the GAC treatment system pilot study. The first bi-monthly sample collection event each month will coincide with monthly system sampling to avoid sample redundancy. As part of bi-monthly sampling, samples will be collected from the following locations:

- Pre-GAC – collected from the same location as AS influent
- Mid-GAC – from location between GAC vessels
- Post-GAC – from location following second GAC vessel (new system effluent location)

The GAC treatment system was turned off on September 17, 2024 with the intent to dismantle this temporary treatment system in October 2024.

13.4 PD Process

- The plant discharge flow is directed intermittently to Recharge Basin 1 and Recharge Basin 33 based on the RB33 liquid level.
- Pump PF-1 was historically taken out of service due to excessive noise and vibration. A full evaluation is required.
- Pump PF-2 experienced operational malfunction on July 23, 2024. The pump was repaired on August 7, 2024 and is operational.
- Pump PF-3 remains fully functional.
- The motors and seals were lubricated as necessary.
- The discharge valve for PFF P3 has failed open.
- The plant was shut down between March 28 and April 4, 2024 to install discharge bypass lines in anticipation of GAC vessel install.

13.5 Other

- The plant's first bank of lights is wired to the emergency-light recharging system. The circuit is kept on 24/7. The lamps appear burnt out. The second bank of lights provides sufficient lighting for general tasks. Additional work lights were installed around the plant area to further illuminate work areas.
- The potential for leaks in the water supply line running through the plant will continue to be monitored.
- The fire alarm and central monitoring systems are fully functional. A false fire alarm was sent out on May 16, 2024 due to full power loss at the OU-5 plant and neighboring properties.

14. GROUNDS

14.1 Plant Perimeter

- General outdoor clean-up tasks are on-going.
- The fencing is clear and secure.

14.2 Well Field

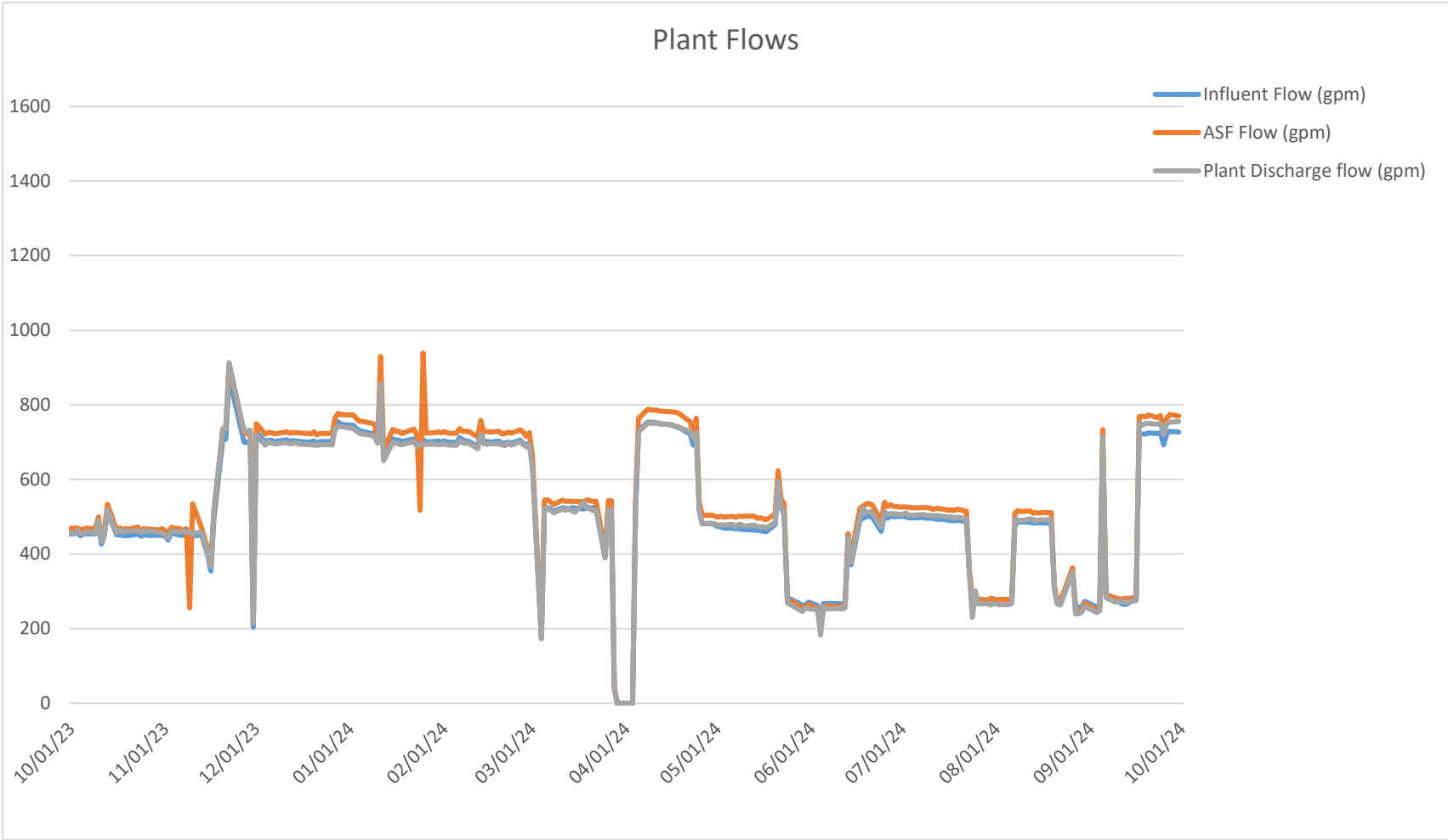
- Well field, and recharge basin inspections continue. Quarterly groundskeeping activities are performed to clear vegetation and poison ivy from around all well fields in anticipation of quarterly groundwater sampling events. In addition, the entrance to Recharge Basin 33 is maintained for ease of access.

14.3 Other

- The CPC GWTF OU4 is secure.
- The property at and around the OU4 site continues to be inspected. While the grounds are not maintained, the treatment plant's entrance and egress points are kept clear and functional.

FIGURE

Figure 1
Plant Discharge Daily Flow



TABLES

Table 1
Claremont Corrective Actions Summary

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
The RW Discharge Manifold integrity is suspect	The condition of the various devices on the RW discharge manifold are suspect. The Air Vent valve in the vault on the N-side of the 6th fairway is leaking from the influent nipple. The shut-off valve was closed and the device isolated. The air-vent valve in the vault to the east of the 6th green is leaking. The shut-off valve was closed and the device isolated. The manifold employs isolation, venting, and drain valves as well as other devices. Along the path of the manifold are vaults which house some of these devices. These vaults need to be accessed, pumped out, and the devices tested. Two isolation valves were closed between RW-1 and RW-3. These valves seemed to hold.	Plant staff and outside contractors	Possible shutdown	May require a Confined Space Entry (CSE)
AS Tower main drain valve is not controlled	The valve does not respond to manipulation of its actuator. <i>This valve should be replaced.</i> <i>No further action is planned at this time.</i>	Operator	Plant will need to be shut down to change out the valve	None

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
OU4 fire alarm system is not functioning Central monitoring of the fire alarm system or fire suppression system does not exist OU4 electrical system has been unstable	The Nassau County Fire Code indicates that the sprinkler system must have central monitoring for flow and valve tampering. The fire alarm system needs to be replaced and centrally monitored. Several contractors have been at the site to propose options for the system. BK Fire installed central monitoring on the sprinkler system. Both are offline as the sprinkler system will remain drained until the HVAC system is repaired. Certain OU4 lights currently create a large amount of noise in the fan box within the control room. The southern lights flicker and then die including the emergency system. OU4 is currently being planned for demolition.	Plant operator, Electrical Engineer (EE) and outside vender	None at this time	Fire code violations. High altitude tasks, safety code violations
Several leaks were observed in the plant overhead water supply line	Adjacent to the north door a clam-shell type clamp was applied. The second leak observed above the AS Blower is not readily accessible. It is not problematic. Repair work may require evaluation and outside resources. Currently the situation is controlled.	Outside plumbing contractor	None	Sanitary water may be shut off during repairs
The float controls for the PFF pump system have intermittently shorted out causing the system to not properly control the pumping operation	The wiring of the pump control system is connected below grade. The junction box in the wet well is thought to be filled with water creating a problem with the float switches to control relay wiring. The box cannot be opened without damage to it and the conduit. This appears to have been a longstanding problem, as when switches have been replaced in the	Plant operator and GES resources	Plant shut down is required	Possible Confined Space Entry work

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
	past, they were spliced outside the box. The float switches have been replaced and spliced above the sump but there remains a problem with the L2 circuit. The output from the W-2 relay was moved to the output for the W-1 relay. This has stopped the short cycling. <i>The control wiring should be changed and moved above grade. Currently the second splices to the floats are above ground outside the vault.</i>			
PFF P1 has failed PFF P2 has failed	The pump when activated immediately makes a lot of noise, and the pump drop pipe shakes. Smoke/fumes emanated at the Motor-shaft connection. The motor appears to be good. The pump was removed from service, February 24, 2020. Pump PF-2 has failed and is currently pending electrical troubleshooting. Repaired on August 7, 2024 <i>It is recommended that the motor be disconnected, lifted, and the mechanical connection checked.</i>	Outside contractors	Less water is being treated.	To be determined
As the ASF pumps cycle off/on, the check valves have started to slam closed. When reactivating, the motor starter contact is rather violent. Both actions tend to rattle the piping and fixtures	There is no available literature regarding the check valves, so the exact description of their functioning parts is to be determined. A softer start/stop control may fix this issue. <i>This will need further investigation. Soft-start</i>	Plant operator and EE support	If replacement or repairs are necessary, a plant shutdown will be required as the units can- not be isolated	To be determined

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
	<i>equipment and variable frequency controls were discussed.</i>			
The flowmeters for system flow, ASF flow and plant discharge are out of sync with the flow meters on the recovery wells	While the ASF flow meter is the most out of line, it is plumbed correctly. The influent system flow meter and the plant discharge flow meters are piped incorrectly. The same style of relay is used to count pulses, but the meters have not been calibrated. The system needs further investigation to determine if any changes are warranted.	EE support	To be determined	none
EF-4 is not operable	The fan is controlled through the mezzanine thermostat, but it does not appear to be operating. The fan requires electrical testing. The system was checked, it appears that the fan is not functioning. The fan should be replaced.	EE support	Only in an emergency	Only in an emergency
Wiring nests in main control console	The wiring in the main control console needs to be cleaned up and labeled, to facilitate problem troubleshooting and process improvements.	EE support	A shut down may be necessary	Electrical work
Pressure Filter Feed pump controls	With P1 out of service, the sequencing of pumps allows for the PFF vault to reach HHL conditions in certain circumstances. Reprogram the sequencing to eliminate the position of P1.	EE support	To be determined	To be determined

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
Air vacuum valve removal	On May 22, 2022 RW-4 was shut down due to a leak detected in the field near an air/vacuum valve pit. On May 24 2022 through May 25, 2022 water was pumped out of the vault and on May 31, 2022 a confined space entry was made to attempt to tighten the valve in an effort to stop the leak. This tightening was unsuccessful, and the valve was removed entirely and replaced with a blank flange until further notice.	GES Mechanical Support	Less water is treated	Confined space entry required to do work in vault
Plant Electric Heater UH-3 failure and HVAC system performance	During sub-20 deg.F weather, the emergency electric heater failed. The HVAC system struggled to produce heat and the plant temperatures dipped to around mid-30's during that time.	Outside contractor	Water lines freezing	Equipment damage
RW-3 has failed	On March 3, 2024 the pump motor failed and remains offline until replacement activities can occur. Pump and motor were replaced on April 5, 2024.	Plant Operator and Ramboll	Less water is treated	To be determined
RW-4 has failed	On May 21, 2024 the pump motor experience unexpected shut downs. The pump was tested to be operational, but full electrical testing is needed.	Outside contractor	Less water is treated	To be determined
RW-5 has failed	On May 28, 2024 the pump motor controls experienced electrical issues. Electric motor starter and relay overload were replaced on June 18, 2024 and the pump was placed online.	GES Mechanical Support	Less water is treated	Electrical shock
GAC treatment increased operational pressures	The primary GAC vessels were operating at elevated backpressure and requires draining as a measure to mobilize sediment accumulation and lower pressures.	Plant Operator and outside contractor	Less water is treated through GAC	To be determined

Other Plant Conditions of Note (no action required at this time)

- The methane detection system is offline. **To function, it will need a technical inspection and maintenance.** However, methane does not currently appear to be a hazard. A Town of Oyster Bay contractor completed plant and surrounding area testing for methane gas on March 25, 2024.

- It has been determined that intrinsically safe components are no longer required in the plant.
- There has been no need for acid washing of the AS Tower media, the hydrochloric acid feed and storage system have not been operated. The tanks have not been filled and the level monitoring system has not been operated.

As previously noted, there are pieces of equipment that are out of service and require repairs. Currently there are no plans for addressing these conditions as the operation of this equipment is not necessary or needed for the operation of the treatment system.

Equipment	Fault	Status
Plant electric heater UH-1	Needs transformer	Heater is not needed
Plant electric heater UH-2	Needs relay timer and wiring repairs	Heater is not needed
Recovery well pump pressure switch assembly	Units are unwieldy and subject to vibration, corrosion, and leaks	Each unit requires assessment and disposition
NaOH sump pump	Pump is not operating	No water or chemicals stored in vault. Portable submersible pump in sump should suffice
Plant lights are wired to the emergency light charging system	Un-segregated light cannot be shut off. Several of the lamps may have burnt out	The bank of lights appear to have failed/burnt out. The second bank of lights are sufficient
Plant exhaust fans are part of methane system	Fans cannot be manually operated	Once the methane monitoring system is online, the fans can be operated
Plant discharge drain	Leak in Victaulic fitting	Drain line on plant discharge intermittently leaks. Parts are in-house. Not pressing
ASF pump isolation valve	Valve P1 has failed open	Not needed at this time
PFF pump isolation valve	Valve P3 has failed open	Not needed at this time
RW-1 flow meter	The meter is not operating	Pump is offline. Rocks were pulled from the housing and iron sediment was encrusting the flow meter impeller and housing
RW-2 flow meter	The meter is not transmitting	Pump is offline
Air stripper flow meter	Non-functional and removed	
AH-1 condenser	Air conditioner is non-functional	Two window AC units in place
Plant outdoor lights	9 of 12 lights not functioning	Not a security issue

Table 2
Plant Discharge Average Flow & Volume

Period	Average Flow (gpm)	Average Daily volume (gal)	Total Period Flow (gal)	Min off	Min on
Q4 2016	517	745,000	68,540,000	7,309	125,171
Q1 2017	520	748,244	67,342,000	655	128,945
Q2 2017	576	829,130	76,280,000	6,165	126,315
Q3 2017	634	913,576	84,049,000	1,110	131,370
Q4 2017	256	368,762	33,926,110	69,165	63,315
Q1 2018	53	75,989	6,839,000	118,180	11,420
Q2 2018	179	258,284	23,762,103	102,929	29,551
Q3 2018	504	725,280	66,725,717	57,416	75,064
Q4 2018	726	1,045,065	96,145,984	23,734	108,746
Q1 2019	527	758,467	68,262,000	735	128,865
Q2 2019	662	953,877	87,756,724	405	132,075
Q3 2019	685	985,802	90,693,740	108	132,372
Q4 2019	655	943,871	82,116,780	5,039	129,326
Q1 2020	480	682,527	62,110,000	1,824	129,326
Q2 2020	698	996,998	88,732,846	3,838	127,185
Q3 2020	669	955,928	87,945,333	1,099	131,401
Q4 2020	695	1,001,365	92,125,539	52	132,497
Q1 2021	708	1,019,733	91,776,000	0	129,603
Q2 2021	709	1,021,317	92,939,850	0	131,040
Q3 2021	615	884,934	81,413,897	0	132,475
Q4 2021	677	928,370	85,410,047	6,317	126,185
Q1 2022	633	1,291,661	80,082,987	5,280	124,320
Q2 2022	434	624,605	53,716,000	12,200	123,840
Q3 2022	365	514,501	46,283,000	3,004	124,994

Period	Average Flow (gpm)	Average Daily volume (gal)	Total Period Flow (gal)	Min off	Min on
Q4 2022	257	369,307	34,007,000	491	132,154
Q1 2023	305	434,900	37,841,000	323	123,817
Q2 2023	548	799,720	74,309,000	204	135,126
Q3 2023	560	806,666	72,430,000	102	130,998
Q4 2023	572	818,838	75,728,000	1,733	129,307
Q1 2024	642	915,413	79,922,000	1,336	123,944
Q2 2024	498	656,134	62,091,000	8,998*	126,218
Q3 2024	440	633,318	57,658,000	35	132,445

Acronyms: gal – gallons gpm – gallons per minute,

* Planned system shut down to conduct system re-piping and install of GAC vessel bypass lines.

Table 3
Plant Daily Totalizer Readings

September 2024 Flows						
Plant Influent			Plant Discharge		RW Discharge	
Date	Volume	Avg. Flow	Volume	Avg. Flow	Volume	Avg. Flow
09/03/24	-	269	-	260	-	274
09/04/24	360,000	250	351,000	244	373,000	259
09/05/24	372,000	258	358,000	249	379,000	263
09/06/24	1,056,000	733	1,027,000	713	1,000,000	694
09/09/24	1,264,000	293	1,223,000	283	1,260,000	292
09/10/24	405,000	281	392,000	272	406,000	282
09/11/24	405,000	281	391,000	272	399,000	277
09/12/24	399,000	277	395,000	274	385,000	267
09/13/24	405,000	281	390,000	271	381,000	265
09/16/24	1,210,000	280	1,172,000	271	1,149,000	266
09/17/24	410,000	285	397,000	276	412,000	286
09/18/24	1,107,000	769	1,082,000	751	1,041,000	723
09/19/24	1,108,000	769	1,073,000	745	1,039,000	722
09/20/24	1,106,000	768	1,080,000	750	1,040,000	722
09/23/24	3,338,000	773	3,242,000	750	3,130,000	725
09/24/24	1,102,000	765	1,077,000	748	1,042,000	724
09/25/24	1,111,000	772	1,080,000	750	1,045,000	726
09/26/24	1,061,000	737	1,036,000	719	998,000	693
09/27/24	1,100,000	764	1,079,000	749	1,039,000	722
09/30/24	3,346,000	775	3,254,000	753	3,149,000	729
10/01/24	1,109,000	770	1,088,000	756	1,047,000	727
September Total Plant Influent (Gal)			21,774,000			
September Total Plant Effluent (Gal)			21,187,000			
September Total RW Discharge (Gal)			20,714,000			

Acronyms: gal - gallons gpm – gallons per minute

Table 4
Pump System Flow Readings

September	On-Time Minutes (actual)	Avg. Flow (gpm)	Avg. Flow (gpd)	Total Flow (gal)
RW-1*	0	NR	0	0
RW-2*	5	NR	0	~1,045
RW-3	40,320	261	375,786	10,522,000
RW-4	23,040	240	197,464	5,529,000
RW-5	23,040	226	185,964	5,207,000
RW Totals	40,320	514	739,786	20,714,000
Plant Influent	40,320	540	777,643	21,774,000
Plant Effluent	40,320	525	756,679	21,187,000

Acronyms: gal - gallons gpm – gallons per minute gpd – gallons per day

The treatment process was online 28 days during this period with 0 minutes of downtime. Treatment system experience multiple instances of influent to effluent transfer flow imbalance due to higher pressures at carbon vessels. Influent flow rate was reduced to keep the system from overfilling.

RW-4 has shut down on May 21, 2024 due to electrical overloads at the pump. Pump was tested to be operational.

RW-5 has been temporarily shut down on April 25, 2024 to reduce flow in order for the GAC filtration to work properly. Pump was restarted on May 21, 2024 until electrical controls issues were encountered on May 28, 2024. The controls were replaced on June 18, 2024 and the pump has been restarted and operational. The pump was placed offline on July 24, 2024 due to reduced transfer flow at the treatment facility due to PF-2 pump malfunction. During August reporting period, RW-5 was periodically placed offline based on backpressures and flows at the GAC treatment system.

* Offline aside from monthly process equipment test to check their functionality. There are no average gallons per day.

Table 5
Claremont OU5 O&M Sampling/Measurement Program and Frequency

Measurement / Analyte	Sampling Location			
	System Influent	Plant Discharge	Recovery Wells	Monitoring Wells
Flow	Daily	Daily	Daily	NA
pH	Quarterly	Weekly	Quarterly	Quarterly
VOCs (+Tert-Butyl-Methyl ether (MTBA) & Tert-butyl alcohol (TBA))	Quarterly	Monthly	Quarterly	Quarterly
Semi-Volatile Organic Compound (SVOC) Base Neutral & Acid Extractables (BNA)	Quarterly	Monthly	NS	NS
Per- and polyfluoroalkyl substances (PFAS)	Bi-Monthly	Bi-Monthly	NS	Quarterly ⁽¹⁾
1,4-Dioxane	Monthly	Monthly	NS	Quarterly ⁽¹⁾
Total Kjeldahl Nitrogen→ (TKN)	NS	Quarterly	NS	NS
Total Suspended Solids (TSS)	Quarterly	NS	Quarterly	NS
Total Organic Carbon (TOC)	Quarterly	NS	NS	NS
Total Dissolved Solids (TDS)	NS	Quarterly	NS	NS
Cyanide	NS	Quarterly	NS	NS
Hexavalent Chromium	NS	Quarterly	NS	NS
Mercury	NS	Quarterly	NS	NS
Metals	Quarterly	Quarterly	Quarterly	NS
Anions	NS	Quarterly	NS	NS

Notes: NA – Not applicable; NS – Not sampled. ⁽¹⁾ – CPC wells only

Table 6
Plant Discharge Analytical Results
September 4, 2024

Parameters	Discharge Limitations (SPDES)	Units	Results
<i>pH (range)</i>	6.5 – 8.5	<i>su</i>	7.21
1,1,1-Trichloroethane	5	ug/l	U
1,1-Dichloroethane	5	ug/l	U
1,1-Dichloroethylene	5	ug/l	U
1,2- Dichloroethane	0.6	ug/l	U
Benzene	0.7	ug/l	U
Chlorobenzene	5	ug/l	U
Chloroform	7	ug/l	U
CIS 1,2-Dichloroethylene	5	ug/l	U
Ethylbenzene	5	ug/l	U
Methylene Chloride	5	ug/l	U
Tert-butyl alcohol (TBA)	Not indicated	ug/l	U
Tert-Butyl-Methyl ether (MTBA)	5	ug/l	U
Tetrachloroethylene (PCE)	5	ug/l	U
Toluene	5	ug/l	U
Trans 1,2-Dichloroethylene	5	ug/l	U
Trichloroethylene (TCE)	5	ug/l	U
Bis(2-ethylhexyl) phthalate	5	ug/l	U
Di-n-butyl phthalate	50	ug/l	U
Nitro Benzene	0.4	ug/l	U
Antimony, Total recoverable	3	ug/l	U
Arsenic, Total recoverable	50	ug/l	U
Barium, Total recoverable	2000	ug/l	57
Chromium, Hexavalent	100	ug/l	U
Lead, Total recoverable	50	ug/l	U
Iron, Total recoverable	600	ug/l	U
Manganese, Total recoverable	600	ug/l	14
Mercury	Not indicated	ug/l	U
Zinc	Not indicated	ug/l	21
Nitrogen, Total (as N)	10	mg/l	8.4
Selenium, Total recoverable	40	ug/l	U
Solids, Total Dissolved	1000	mg/l	290
Chloride Ion	NL	mg/l	150
Cyanide	Not indicated	ug/l	U
Fluoride Ion	NL	mg/l	U

Parameters	Discharge Limitations (SPDES)	Units	Results
Sulfate Ion	NL	mg/l	25
J – Estimated value U – Analyzed but not detected NL – Monitor only NS – Not sampled SPDES – State Pollutant Discharge Elimination System ug/l – micrograms per liter ng/l – nanograms per liter mg/l – milligrams per liter Discharge limitations updates as per the water discharge permit. Note: Parameters shaded in gray are analyzed quarterly with results generally being provided March, June, October, and December.			

Table 7
Emerging Contaminant Analytical Results
September 4 and September 16, 2024

Parameters	Guidance Values	Units	Influent / Pre-GAC Results	Mid-GAC Results	Effluent / Post-GAC Results
September 4, 2024 Sampling					
PFOA	6.7 ¹	ng/l	50	18	U
PFOS	2.7 ¹	ng/l	18	3.5	U
1,4-Dioxane	0.35 ¹	ug/l	27	NS	26
September 16, 2024 Sampling					
PFOA	6.7 ¹	ng/l	50	20	U
PFOS	2.7 ¹	ng/l	19	3.4	U
1,4-Dioxane	0.35 ¹	ug/l	28	27	28
J – Estimated value U – Analyzed but not detected ug/l – micrograms per liter ng/l – nanograms per liter x / x – indicates primary/duplicate results PFOA - Perfluorooctanoic acid PFOS - Perfluorooctanesulfonic acid NS – Not Sampled					
¹ NYSDEC - 2023 Addendum to June 1998 Division of Water Technical and Operational Guidance Series (TOGS) NO. 1.1.1.					

Table 8
Effluent pH and Temperature Readings

Date	pH (su)	Temp (° C)
09/04/2024	7.25	18.2
09/11/2024	7.28	18.3
09/15/2024	7.32	16.9
09/26/2024	6.98	16.9
September Average	7.21 su	17.6 °C

Table 9
Plant Discharge Monthly Average pH

Month	pH(su)
Aug '19	6.56
Sept '19	7.45
Oct '19	6.86
Nov '19	6.88
Dec '19	6.84
Jan '20	6.63
Feb '20	6.75
Mar '20	6.74
Apr '20	6.65
May '20	6.8
June '20	6.8
July '20	6.9
Aug '20	6.8
Sept '20	6.8
Oct. '20	6.95
Nov '20	6.8
Dec '20	6.64
Jan '21	6.8
Feb '21	6.75
Mar '21	6.76
Apr '21	7.28
May '21	7.53
June '21	7.44
July '21	7.41
Aug '21	7.42
Sept '21	7.13
Oct '21	7.10
Nov '21	7.09
Dec '21	7.01
Jan '22	6.90
Feb '22	6.90
Mar '22	6.80
Apr '22	6.78
May '22	6.79
June '22	6.79
July '22	7.01
Aug '22	6.99
Sept '22	7.19
Oct '22	7.62
Nov '22	7.68
Dec '22	7.52

Month	pH(su)
Jan `23	7.24
Feb `23	7.36
Mar `23	7.56
Apr `23	7.28
May `23	7.56
June`23	7.36
July` 23	7.39
Aug ` 23	7.24
Sept` 23	7.25
Oct` 23	7.22
Nov` 23	6.99
Dec` 23	6.94
Jan` 24	6.81
Feb` 24	6.94
Mar` 24	7.00
Apr` 24	7.23
May` 24	7.20
Jun` 24	7.28
July` 24	7.21
Aug` 24	7.11
Sep` 24	7.21

Plant Discharge Monthly Average pH Reading

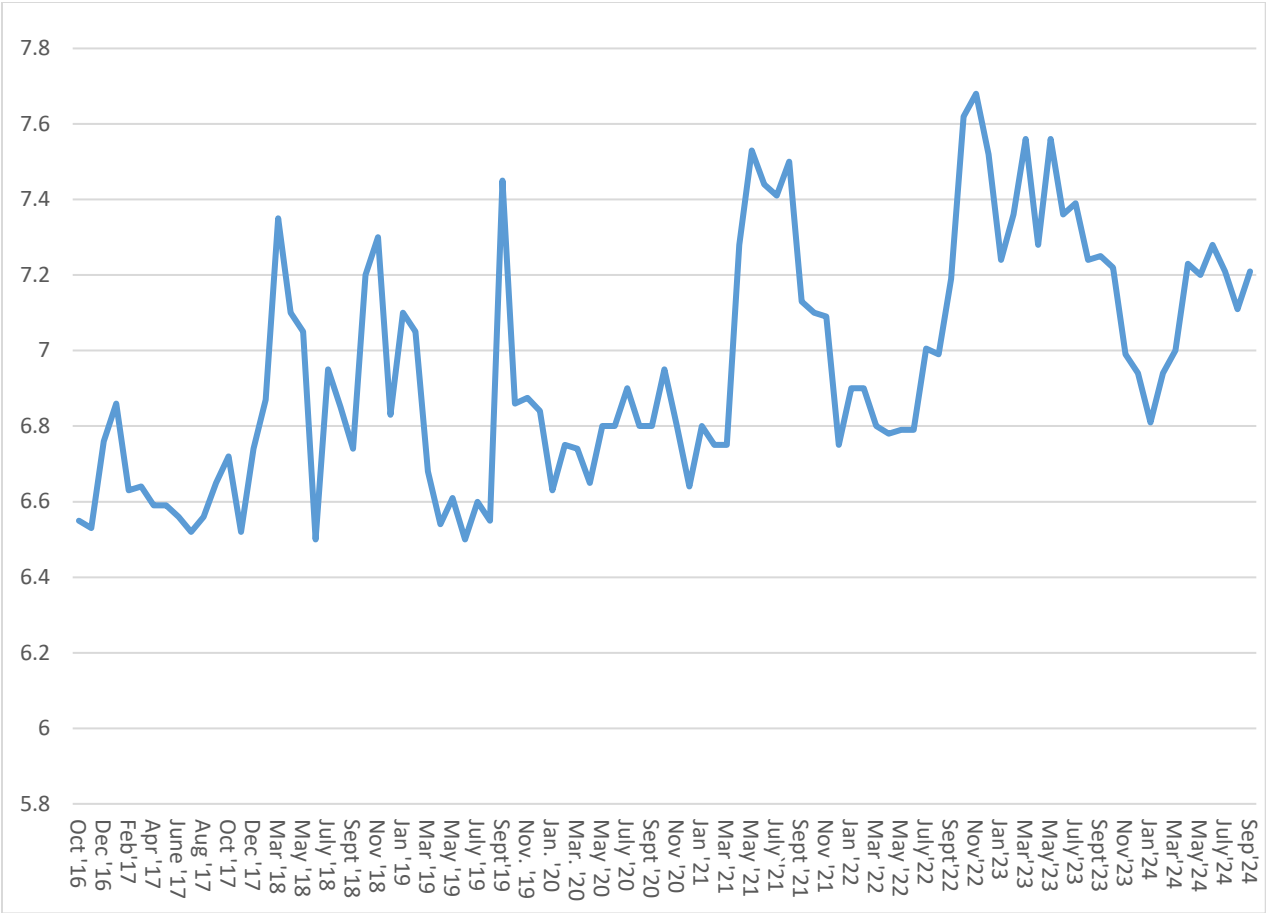


Table 10
AS Tower Air Monitoring Readings

Recorded Date	Port B (ppm)
09/06/24	0.0
09/11/24	0.0
09/18/24	0.0
09/24/24	0.0

ATTACHMENT 1
MONTHLY O&M SAMPLING ANALYTICAL RESULTS –SEPTEMBER 4, 2024

October 16, 2024

Payson Long
NYDEC_Ramboll US Consulting, Inc. - Syracuse
333 West Washington Street, PO Box 4873
Syracuse, NY 13221

Project Location: Old Bethpage, New York
Client Job Number:
Project Number: 130015
Laboratory Work Order Number: 24I0588

Enclosed are results of analyses for samples as received by the laboratory on September 5, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

NYDEC_Ramboll US Consulting, Inc. - Syracuse
333 West Washington Street, PO Box 4873
Syracuse, NY 13221
ATTN: Payson Long

REPORT DATE: 10/16/2024

PURCHASE ORDER NUMBER: 151811

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24I0588

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Old Bethpage, New York

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
ASF-CP-00-090424	24I0588-01	Ground Water		Draft Method 1633 SM 21-23 5310B SM21-23 2540D SW-846 6010D SW-846 7470A SW-846 8260D SW-846 8270E	
ASF-CP-01-090424	24I0588-02	Ground Water		Draft Method 1633 SM 21-23 5310B SW-846 6010D SW-846 7470A SW-846 8270E	
PD-CP-00-090424	24I0588-03	Ground Water		Draft Method 1633 EPA 300.0 SM19-23 4500-N Org B,C-NH3 C SM21-23 2540C SW-846 6010D SW-846 7196A SW-846 7470A SW-846 8260D SW-846 8270E SW-846 9014	
PD-CP-01-090424	24I0588-04	Ground Water		Draft Method 1633 EPA 300.0 SM19-23 4500-N Org B,C-NH3 C SM21-23 2540C SW-846 7196A SW-846 8260D SW-846 8270E SW-846 9014	
RW3-CP-001-090424	24I0588-05	Ground Water		SM21-23 2540D	
RW4-CP-01-090424	24I0588-06	Ground Water		SM21-23 2540D SW-846 6010D SW-846 7470A SW-846 8260D	
RW5-CP-01-090424	24I0588-07	Ground Water		SW-846 6010D SW-846 7470A SW-846 8260D	
TB-090424	24I0588-08	Trip Blank Water		SW-846 8260D	
MIDGAC-CP-00-090424	24I0588-09	Ground Water		Draft Method 1633	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332NYDEC_Ramboll US Consulting, Inc. - Syracuse
333 West Washington Street, PO Box 4873
Syracuse, NY 13221
ATTN: Payson Long

REPORT DATE: 10/16/2024

PURCHASE ORDER NUMBER: 151811

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24I0588

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Old Bethpage, New York

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RW3-CP-00-090424	24I0588-10	Ground Water		SM21-23 2540D	
				SW-846 6010D	
				SW-846 7470A	
				SW-846 8260D	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Draft Method 1633**Qualifications:****D-04**

Sample extracted at a dilution due to insufficient volume provided.

Analyte & Samples(s) Qualified:

24I0588-09[MIDGAC-CP-00-090424]

H-02

Gross violation of holding time. Analysis performed after 2X the allowable holding time.

Analyte & Samples(s) Qualified:**Total Suspended Solids**

24I0588-09[MIDGAC-CP-00-090424]

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:**13C5-PFPeA**

S111976-CCV3

Perfluoropentanoic acid (PFPeA)

S111976-CCV3

EPA 300.0**Qualifications:****L-06**

Laboratory fortified blank/laboratory control sample recovery and/or duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**Chloride**

24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B386111-BS1, B386111-BSD1

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:**Sulfate**

24I0588-03[PD-CP-00-090424], B387627-MS1, B387627-MSD1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:**Chloride**

24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B386111-MS1, B386111-MSD1

SM 21-23 5310B**Qualifications:****H-01**

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:**Total Organic Carbon**

24I0588-02[ASF-CP-01-090424]

MS-11

Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:**Total Organic Carbon**

24I0588-01[ASF-CP-00-090424], B386592-MSD1

SM21-23 2540D**Qualifications:**

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DL-16

Test results of sample did not achieve the method required minimum yield of 2.5mg of dried residue and for which less than 1L of sample was filtered.

Analyte & Samples(s) Qualified:**Total Suspended Solids**

24I0588-01[ASF-CP-00-090424], 24I0588-06[RW4-CP-01-090424], 24I0588-10[RW3-CP-00-090424], B385527-DUP1

SW-846 6010D**Qualifications:**

B

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:**Aluminum**

B387599-BS2, B387599-BSD2

B-05

Data is not affected by elevated level in laboratory blank since sample(s) result is "Not Detected".

Analyte & Samples(s) Qualified:**Aluminum**

24I0588-10[RW3-CP-00-090424], B387599-BLK2

B-07

Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:**Aluminum**

B387599-BLK2

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:**Sodium**

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-07[RW5-CP-01-090424], B386361-MS1, B386361-MSD1, B386463-MS1, B386463-MSD1, B389062-MS1

R-03

Duplicate RPD outside of control limits. Reduced precision is expected for values near the reporting limit.

Analyte & Samples(s) Qualified:**Zinc**

24I0588-07[RW5-CP-01-090424], B389062-DUP1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Silver**

24I0588-06[RW4-CP-01-090424], S110773-CCV3

SW-846 7196A**Qualifications:**

H-03

Sample received after recommended holding time was exceeded.

Analyte & Samples(s) Qualified:**Hexavalent Chromium**

24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385168-MS2, B385168-MSD2

SW-846 7470A**Qualifications:**

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H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:**Mercury**

24I0588-07[RW5-CP-01-090424]

SW-846 8260D**Qualifications:****L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:**Methyl Acetate**

B385261-BS1, B385261-BSD1, B385502-BS1, B385502-BSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:**Methyl Acetate**

B385261-MSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene**

24I0588-10[RW3-CP-00-090424], B385502-BLK1, B385502-BS1, B385502-BSD1, S110245-CCV1

1,2-Dibromo-3-chloropropane (DBCP)

24I0588-10[RW3-CP-00-090424], B385502-BLK1, B385502-BS1, B385502-BSD1, S110245-CCV1

Naphthalene

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], 24I0588-06[RW4-CP-01-090424], 24I0588-07[RW5-CP-01-090424], 24I0588-08[TB-090424], 24I0588-10[RW3-CP-00-090424], B385261-BLK1, B385261-BS1, B385261-BSD1, B385502-BLK1, B385502-BS1, B385502-BSD1, S110169-CCV1, S110245-CCV1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:**Tetrachloroethylene**

24I0588-10[RW3-CP-00-090424], B385502-BS1, B385502-BSD1, S110245-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**

S110245-CCV1

Carbon Disulfide

S110245-CCV1

Methyl Acetate

S110169-CCV1, S110245-CCV1

Trichlorofluoromethane (Freon 11)

S110245-CCV1

SW-846 8270E**Qualifications:****L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Caprolactam**

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, B385151-BS1, B385151-BSD1

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L-07A

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**Pyridine**B385151-BSD1

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**1,2,4,5-Tetrachlorobenzene**

B385151-BS1, B385151-BSD1

2,4-Dimethylphenol

B385151-BS1, B385151-BSD1

Benzaldehyde

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, B385151-BS1, B385151-BSD1

Bis(2-chloroethyl)ether

B385151-BS1, B385151-BSD1

Hexachlorobutadiene

B385151-BS1, B385151-BSD1

Naphthalene

B385151-BS1, B385151-BSD1

Nitrobenzene

B385151-BS1, B385151-BSD1

PyridineB385151-BS1

S-07

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:**Phenol-d6**B385151-BLK1

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol**

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, B385151-BS1, B385151-BSD1, S 110209-CCV1, S110246-CCV1

Di-n-octylphthalate24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, B385151-BS1, B385151-BSD1, S 110209-CCV1, S110246-CCV1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**4-Nitrophenol**

B385151-BS1, B385151-BSD1, S110209-CCV1

Aniline

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, B385151-BS1, B385151-BSD1, S 110209-CCV1, S110246-CCV1

ButylbenzylphthalateB385151-BS1, B385151-BSD1, S110209-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol**

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, S110246-CCV1

3-Nitroaniline

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, S110246-CCV1

Di-n-octylphthalate

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, S110246-CCV1

V-34

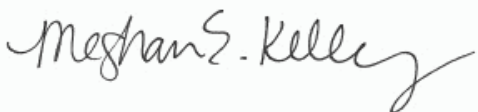
Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:**Pyridine**

24I0588-01[ASF-CP-00-090424], 24I0588-03[PD-CP-00-090424], 24I0588-04[PD-CP-01-090424], B385151-BLK1, B385151-BS1, B385151-BSD1, S109935-ICV1, S110209-CCV1, S110246-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
cis-1,2-Dichloroethylene	1.1	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/6/24	9/9/24 11:23	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Tetrachloroethylene	6.3	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Trichloroethylene	47	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:23	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	95.7	70-130							
Toluene-d8	97.5	70-130							
4-Bromofluorobenzene	102	70-130							

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/6/24	9/9/24 11:23	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,3,4,6-Tetrachlorophenol	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Atrazine	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Benzaldehyde	ND	9.0	µg/L	1	R-05	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Biphenyl	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Caprolactam	ND	9.0	µg/L	1	L-04	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Acenaphthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Acenaphthylene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Acetophenone	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Aniline	ND	18	µg/L	1	V-05	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Anthracene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Benzo(a)anthracene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Benzo(a)pyrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Benzo(b)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Benzo(g,h,i)perylene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Benzo(k)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Bis(2-chloroethoxy)methane	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Bis(2-chloroethyl)ether	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,2'-oxybis(1-Chloropropane)	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4-Bromophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Butylbenzylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Carbazole	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4-Chloroaniline	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4-Chloro-3-methylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2-Chloronaphthalene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2-Chlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4-Chlorophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Chrysene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Dibenz(a,h)anthracene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Dibenzofuran	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Di-n-butylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
3,3-Dichlorobenzidine	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,4-Dichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Diethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,4-Dimethylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Dimethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4,6-Dinitro-2-methylphenol	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,4-Dinitrophenol	ND	9.0	µg/L	1	V-04, V-20	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,4-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,6-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Di-n-octylphthalate	ND	9.0	µg/L	1	V-04, V-20	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Fluorene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Hexachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Hexachlorocyclopentadiene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Hexachloroethane	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Isophorone	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
1-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
3/4-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Naphthalene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
3-Nitroaniline	ND	9.0	µg/L	1	V-20	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Nitrobenzene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
4-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
N-Nitrosodi-n-propylamine	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Pentachlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Phenanthrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Phenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Pyrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
Pyridine	ND	18	µg/L	1	V-34	SW-846 8270E	9/5/24	9/10/24 19:18	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,4,5-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL
2,4,6-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:18	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	41.6	15-110	9/10/24 19:18
Phenol-d6	31.3	15-110	9/10/24 19:18
Nitrobenzene-d5	73.3	30-130	9/10/24 19:18
2-Fluorobiphenyl	71.9	30-130	9/10/24 19:18
2,4,6-Tribromophenol	87.3	15-110	9/10/24 19:18
p-Terphenyl-d14	82.2	30-130	9/10/24 19:18

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sample ID: 24I0588-01

Sample Matrix: Ground Water

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Description:

Sampled: 9/4/2024 09:00

Work Order: 24I0588

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	27	0.19	µg/L	1		SW-846 8270E	9/10/24	9/16/24 11:25	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	19.6	15-110						9/16/24 11:25	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	39	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoropentanoic acid (PFPeA)	24	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorohexanoic acid (PFHxA)	38	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoroheptanoic acid (PFHpA)	15	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorooctanoic acid (PFOA)	50	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorononanoic acid (PFNA)	11	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorobutanesulfonic acid (PFBS)	5.9	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoropentanesulfonic acid (PFPeS)	4.8	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorohexanesulfonic acid (PFHxS)	9.9	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorooctanesulfonic acid (PFOS)	18	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
N-EtFOSAA (NEtFOSAA)	4.8	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
11Cl-PF3OUs (F53B Major)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 10:56	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	80.2	10-130						9/28/24 10:56	
13C5-PFPeA	86.4	35-150						9/28/24 10:56	
13C5-PFHxA	75.8	55-150						9/28/24 10:56	
13C4-PFHpA	75.3	55-150						9/28/24 10:56	
13C8-PFOA	75.5	60-140						9/28/24 10:56	
13C9-PFNA	81.5	55-140						9/28/24 10:56	
13C6-PFDA	74.4	50-140						9/28/24 10:56	
13C7-PFUnA	74.4	30-140						9/28/24 10:56	
13C2-PFDoA	64.5	10-150						9/28/24 10:56	
13C2-PFTeDA	54.3	10-130						9/28/24 10:56	
13C3-PFBS	80.0	55-150						9/28/24 10:56	
13C3-PFHxS	79.9	55-150						9/28/24 10:56	
13C8-PFOS	77.3	45-140						9/28/24 10:56	
13C2-4:2FTS	148	60-200						9/28/24 10:56	
13C2-6:2FTS	122	60-200						9/28/24 10:56	
13C2-8:2FTS	84.2	50-200						9/28/24 10:56	
13C8-PFOSA	61.9	30-130						9/28/24 10:56	
D3-NMeFOSA	45.3	15-130						9/28/24 10:56	
D5-NEtFOSA	44.2	10-130						9/28/24 10:56	
D3-NMeFOSAA	70.6	45-200						9/28/24 10:56	
D5-NEtFOSAA	78.7	10-200						9/28/24 10:56	
D7-NMeFOSE	49.3	10-150						9/28/24 10:56	
D9-NEtFOSE	46.6	10-150						9/28/24 10:56	
13C3-HFPO-DA	68.3	25-160						9/28/24 10:56	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Antimony	ND	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Barium	0.051	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Calcium	7.9	0.50	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Copper	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/21/24 23:25	HNN
Iron	0.059	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Lead	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/21/24 23:25	HNN
Magnesium	5.8	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Manganese	0.20	0.010	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	9/11/24	9/12/24 15:18	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/21/24 23:25	HNN
Potassium	13	2.0	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Selenium	ND	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Sodium	91	2.0	mg/L	1	MS-19	SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Thallium	ND	0.050	mg/L	1		SW-846 6010D	9/18/24	9/19/24 14:08	HNN
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/23/24 14:12	HNN
Zinc	ND	0.010	mg/L	1		SW-846 6010D	9/18/24	9/21/24 23:25	HNN

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-00-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Organic Carbon	3.0	1.0	mg/L	1	MS-11	SM 21-23 5310B	9/19/24	9/19/24 17:10	NRH
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	9/9/24	9/9/24 13:47	LL
Total Suspended Solids	ND	5.0	mg/L	1	DL-16	SM21-23 2540D	9/10/24	9/10/24 17:36	EMF

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: ASF-CP-01-090424

Sample ID: 24I0588-02

Sample Matrix: Ground Water

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Description:

Sampled: 9/4/2024 09:00

Work Order: 24I0588

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	27	0.20	µg/L	1		SW-846 8270E	9/10/24	9/16/24 11:45	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	24.2	15-110						9/16/24 11:45	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: ASF-CP-01-090424

Sampled: 9/4/2024 09:00

Sample ID: 2410588-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	41	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoropentanoic acid (PFPeA)	26	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorohexanoic acid (PFHxA)	37	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoroheptanoic acid (PFHpA)	15	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorooctanoic acid (PFOA)	47	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorononanoic acid (PFNA)	11	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorobutanesulfonic acid (PFBS)	5.8	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoropentanesulfonic acid (PFPeS)	5.0	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorohexanesulfonic acid (PFHxS)	11	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorooctanesulfonic acid (PFOS)	17	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
N-EtFOSAA (NEtFOSAA)	4.3	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
11Cl-PF3OUDS (F53B Major)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-01-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:12	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	80.7	10-130						9/28/24 11:12	
13C5-PFPeA	87.7	35-150						9/28/24 11:12	
13C5-PFHxA	77.4	55-150						9/28/24 11:12	
13C4-PFHpA	73.6	55-150						9/28/24 11:12	
13C8-PFOA	77.6	60-140						9/28/24 11:12	
13C9-PFNA	76.9	55-140						9/28/24 11:12	
13C6-PFDA	78.4	50-140						9/28/24 11:12	
13C7-PFUnA	73.5	30-140						9/28/24 11:12	
13C2-PFDoA	67.9	10-150						9/28/24 11:12	
13C2-PFTeDA	59.0	10-130						9/28/24 11:12	
13C3-PFBS	81.0	55-150						9/28/24 11:12	
13C3-PFHxS	75.3	55-150						9/28/24 11:12	
13C8-PFOS	79.7	45-140						9/28/24 11:12	
13C2-4:2FTS	147	60-200						9/28/24 11:12	
13C2-6:2FTS	118	60-200						9/28/24 11:12	
13C2-8:2FTS	87.1	50-200						9/28/24 11:12	
13C8-PFOSA	63.5	30-130						9/28/24 11:12	
D3-NMeFOSA	56.2	15-130						9/28/24 11:12	
D5-NEtFOSA	56.5	10-130						9/28/24 11:12	
D3-NMeFOSAA	71.6	45-200						9/28/24 11:12	
D5-NEtFOSAA	80.8	10-200						9/28/24 11:12	
D7-NMeFOSE	56.0	10-150						9/28/24 11:12	
D9-NEtFOSE	53.8	10-150						9/28/24 11:12	
13C3-HFPO-DA	68.3	25-160						9/28/24 11:12	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-01-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-02

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Antimony	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/19/24 19:19	HNN
Barium	0.058	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Calcium	8.3	0.50	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Copper	0.061	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:21	HNN
Iron	0.056	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Lead	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:21	HNN
Magnesium	5.7	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Manganese	0.21	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	9/17/24	9/18/24 11:18	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Potassium	13	2.0	mg/L	1		SW-846 6010D	9/17/24	9/19/24 19:19	HNN
Selenium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Sodium	89	2.0	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Thallium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:59	HNN
Zinc	0.015	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:21	HNN

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: ASF-CP-01-090424

Sampled: 9/4/2024 09:00

Sample ID: 24I0588-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Organic Carbon	3.2	1.0	mg/L	1	H-01	SM 21-23 5310B	10/2/24	10/2/24 15:13	NRH
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	9/9/24	9/9/24 13:47	LL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/6/24	9/9/24 11:49	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 11:49	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	97.2	70-130							
Toluene-d8	97.2	70-130							
4-Bromofluorobenzene	101	70-130							

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/6/24	9/9/24 11:49	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,3,4,6-Tetrachlorophenol	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Atrazine	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Benzaldehyde	ND	9.0	µg/L	1	R-05	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Biphenyl	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Caprolactam	ND	9.0	µg/L	1	L-04	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Acenaphthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Acenaphthylene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Acetophenone	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Aniline	ND	18	µg/L	1	V-05	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Anthracene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Benzo(a)anthracene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Benzo(a)pyrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Benzo(b)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Benzo(g,h,i)perylene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Benzo(k)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Bis(2-chloroethoxy)methane	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Bis(2-chloroethyl)ether	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,2'-oxybis(1-Chloropropane)	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4-Bromophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Butylbenzylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Carbazole	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4-Chloroaniline	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4-Chloro-3-methylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2-Chloronaphthalene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2-Chlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4-Chlorophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Chrysene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Dibenz(a,h)anthracene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Dibenzofuran	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Di-n-butylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
3,3-Dichlorobenzidine	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,4-Dichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Diethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,4-Dimethylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Dimethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4,6-Dinitro-2-methylphenol	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,4-Dinitrophenol	ND	9.0	µg/L	1	V-04, V-20	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,4-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,6-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Di-n-octylphthalate	ND	9.0	µg/L	1	V-04, V-20	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Fluorene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Hexachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Hexachlorocyclopentadiene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Hexachloroethane	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Isophorone	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
1-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
3/4-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Naphthalene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
3-Nitroaniline	ND	9.0	µg/L	1	V-20	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Nitrobenzene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
4-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
N-Nitrosodi-n-propylamine	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Pentachlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Phenanthrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Phenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Pyrene	ND	4.5	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
Pyridine	ND	18	µg/L	1	V-34	SW-846 8270E	9/5/24	9/10/24 19:39	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,4,5-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL
2,4,6-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	9/5/24	9/10/24 19:39	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	43.8	15-110	9/10/24 19:39
Phenol-d6	31.4	15-110	9/10/24 19:39
Nitrobenzene-d5	72.5	30-130	9/10/24 19:39
2-Fluorobiphenyl	73.0	30-130	9/10/24 19:39
2,4,6-Tribromophenol	93.7	15-110	9/10/24 19:39
p-Terphenyl-d14	88.8	30-130	9/10/24 19:39

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	26	0.19	µg/L	1		SW-846 8270E	9/10/24	9/16/24 12:05	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	26.4	15-110						9/16/24 12:05	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 2410588-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	48	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoropentanoic acid (PFPeA)	7.3	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorohexanoic acid (PFHxA)	1.3	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorooctanoic acid (PFOA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorononanoic acid (PFNA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorodecanoic acid (PFDA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.3	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
11Cl-PF3OUDS (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:28	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	80.9	10-130						9/28/24 11:28	
13C5-PFPeA	90.2	35-150						9/28/24 11:28	
13C5-PFHxA	76.6	55-150						9/28/24 11:28	
13C4-PFHpA	76.5	55-150						9/28/24 11:28	
13C8-PFOA	81.8	60-140						9/28/24 11:28	
13C9-PFNA	78.1	55-140						9/28/24 11:28	
13C6-PFDA	77.8	50-140						9/28/24 11:28	
13C7-PFUnA	73.1	30-140						9/28/24 11:28	
13C2-PFDoA	63.7	10-150						9/28/24 11:28	
13C2-PFTeDA	53.1	10-130						9/28/24 11:28	
13C3-PFBS	82.1	55-150						9/28/24 11:28	
13C3-PFHxS	81.4	55-150						9/28/24 11:28	
13C8-PFOS	75.8	45-140						9/28/24 11:28	
13C2-4:2FTS	70.3	60-200						9/28/24 11:28	
13C2-6:2FTS	76.0	60-200						9/28/24 11:28	
13C2-8:2FTS	67.5	50-200						9/28/24 11:28	
13C8-PFOSA	67.7	30-130						9/28/24 11:28	
D3-NMeFOSA	54.8	15-130						9/28/24 11:28	
D5-NEtFOSA	50.3	10-130						9/28/24 11:28	
D3-NMeFOSAA	70.4	45-200						9/28/24 11:28	
D5-NEtFOSAA	75.2	10-200						9/28/24 11:28	
D7-NMeFOSE	52.6	10-150						9/28/24 11:28	
D9-NEtFOSE	50.6	10-150						9/28/24 11:28	
13C3-HFPO-DA	75.5	25-160						9/28/24 11:28	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Antimony	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/19/24 19:08	HNN
Barium	0.057	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Calcium	8.3	0.50	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Copper	0.029	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:10	HNN
Iron	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Lead	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:10	HNN
Magnesium	5.6	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Manganese	0.014	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	9/11/24	9/12/24 15:20	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Potassium	14	2.0	mg/L	1		SW-846 6010D	9/17/24	9/19/24 19:08	HNN
Selenium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Sodium	87	2.0	mg/L	1	MS-19	SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Thallium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 15:41	HNN
Zinc	0.021	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:10	HNN

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 24I0588-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	150	10	mg/L	10	L-06, V-06	EPA 300.0	9/16/24	9/16/24 20:10	NRH
Cyanide	ND	0.010	mg/L	1		SW-846 9014	9/15/24	9/16/24 12:20	DET
Fluoride	ND	0.10	mg/L	1		EPA 300.0	9/28/24	9/28/24 22:52	MMH
Hexavalent Chromium	ND	0.0040	mg/L	1	H-03	SW-846 7196A	9/5/24	9/5/24 18:50	jec
Sulfate	25	1.0	mg/L	1	MS-07A	EPA 300.0	9/28/24	9/28/24 22:52	MMH
Total Kjeldahl Nitrogen	8.4	1.0	mg/L	1		SM19-23 4500-N Org B,C-NH3 C	9/27/24	9/28/24 12:27	EC
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	9/9/24	9/9/24 13:43	LL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: PD-CP-00-090424

Sampled: 9/4/2024 09:45

Sample ID: 2410588-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Dissolved Solids	290	10	mg/L	1		SM21-23 2540C	9/10/24	9/10/24 12:10	II

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/6/24	9/9/24 12:15	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:15	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	97.4	70-130							
Toluene-d8	97.7	70-130							
4-Bromofluorobenzene	103	70-130							

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/6/24	9/9/24 12:15	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,3,4,6-Tetrachlorophenol	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Atrazine	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Benzaldehyde	ND	8.8	µg/L	1	R-05	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Biphenyl	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Caprolactam	ND	8.8	µg/L	1	L-04	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Acenaphthene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Acenaphthylene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Acetophenone	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Aniline	ND	18	µg/L	1	V-05	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Anthracene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Benzo(a)anthracene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Benzo(a)pyrene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Benzo(b)fluoranthene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Benzo(g,h,i)perylene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Benzo(k)fluoranthene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Bis(2-chloroethoxy)methane	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Bis(2-chloroethyl)ether	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,2'-oxybis(1-Chloropropane)	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Bis(2-Ethylhexyl)phthalate	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4-Bromophenylphenylether	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Butylbenzylphthalate	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Carbazole	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4-Chloroaniline	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4-Chloro-3-methylphenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2-Chloronaphthalene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2-Chlorophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4-Chlorophenylphenylether	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Chrysene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Dibenz(a,h)anthracene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Dibenzofuran	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Di-n-butylphthalate	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
3,3-Dichlorobenzidine	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,4-Dichlorophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Diethylphthalate	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,4-Dimethylphenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Dimethylphthalate	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4,6-Dinitro-2-methylphenol	ND	18	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,4-Dinitrophenol	ND	8.8	µg/L	1	V-04, V-20	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,4-Dinitrotoluene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,6-Dinitrotoluene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Di-n-octylphthalate	ND	8.8	µg/L	1	V-04, V-20	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Fluoranthene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Fluorene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Hexachlorobenzene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Hexachlorocyclopentadiene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Hexachloroethane	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Indeno(1,2,3-cd)pyrene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Isophorone	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
1-Methylnaphthalene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2-Methylnaphthalene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2-Methylphenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
3/4-Methylphenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Naphthalene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2-Nitroaniline	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
3-Nitroaniline	ND	8.8	µg/L	1	V-20	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4-Nitroaniline	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Nitrobenzene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2-Nitrophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
4-Nitrophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
N-Nitrosodi-n-propylamine	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Pentachlorophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Phenanthrene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Phenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Pyrene	ND	4.4	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
Pyridine	ND	18	µg/L	1	V-34	SW-846 8270E	9/5/24	9/10/24 20:00	BGL
1,2,4,5-Tetrachlorobenzene	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,4,5-Trichlorophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL
2,4,6-Trichlorophenol	ND	8.8	µg/L	1		SW-846 8270E	9/5/24	9/10/24 20:00	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	48.7	15-110	9/10/24 20:00
Phenol-d6	33.2	15-110	9/10/24 20:00
Nitrobenzene-d5	82.4	30-130	9/10/24 20:00
2-Fluorobiphenyl	78.0	30-130	9/10/24 20:00
2,4,6-Tribromophenol	95.9	15-110	9/10/24 20:00
p-Terphenyl-d14	90.6	30-130	9/10/24 20:00

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	26	0.19	µg/L	1		SW-846 8270E	9/10/24	9/16/24 12:25	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	26.5	15-110						9/16/24 12:25	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 2410588-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	48	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoropentanoic acid (PFPeA)	7.3	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorohexanoic acid (PFHxA)	1.2	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorooctanoic acid (PFOA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorononanoic acid (PFNA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.95	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
11Cl-PF3OUs (F53B Major)	ND	3.8	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
3-Perfluoroheptyl propanoic acid (FHPrPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	9/26/24	9/28/24 11:44	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	79.7	10-130						9/28/24 11:44	
13C5-PFPeA	90.1	35-150						9/28/24 11:44	
13C5-PFHxA	78.1	55-150						9/28/24 11:44	
13C4-PFHpA	73.8	55-150						9/28/24 11:44	
13C8-PFOA	74.3	60-140						9/28/24 11:44	
13C9-PFNA	75.0	55-140						9/28/24 11:44	
13C6-PFDA	66.2	50-140						9/28/24 11:44	
13C7-PFUnA	65.9	30-140						9/28/24 11:44	
13C2-PFDoA	54.5	10-150						9/28/24 11:44	
13C2-PFTeDA	48.6	10-130						9/28/24 11:44	
13C3-PFBS	81.2	55-150						9/28/24 11:44	
13C3-PFHxS	77.7	55-150						9/28/24 11:44	
13C8-PFOS	68.4	45-140						9/28/24 11:44	
13C2-4:2FTS	72.5	60-200						9/28/24 11:44	
13C2-6:2FTS	76.5	60-200						9/28/24 11:44	
13C2-8:2FTS	62.4	50-200						9/28/24 11:44	
13C8-PFOSA	60.8	30-130						9/28/24 11:44	
D3-NMeFOSA	40.9	15-130						9/28/24 11:44	
D5-NEtFOSA	41.5	10-130						9/28/24 11:44	
D3-NMeFOSAA	60.0	45-200						9/28/24 11:44	
D5-NEtFOSAA	63.6	10-200						9/28/24 11:44	
D7-NMeFOSE	42.1	10-150						9/28/24 11:44	
D9-NEtFOSE	40.9	10-150						9/28/24 11:44	
13C3-HFPO-DA	73.1	25-160						9/28/24 11:44	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	150	10	mg/L	10	L-06, V-06	EPA 300.0	9/16/24	9/16/24 22:23	NRH
Cyanide	ND	0.010	mg/L	1		SW-846 9014	9/15/24	9/16/24 12:20	DET
Fluoride	ND	0.10	mg/L	1		EPA 300.0	9/28/24	9/28/24 23:58	MMH
Hexavalent Chromium	ND	0.0040	mg/L	1	H-03	SW-846 7196A	9/5/24	9/5/24 18:50	jec
Sulfate	25	1.0	mg/L	1		EPA 300.0	9/28/24	9/28/24 23:58	MMH
Total Kjeldahl Nitrogen	9.0	1.0	mg/L	1		SM19-23 4500-N Org B,C-NH3 C	9/27/24	9/28/24 12:34	EC
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	9/9/24	9/9/24 13:43	LL

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: PD-CP-01-090424

Sample ID: 24I0588-04

Sample Matrix: Ground Water

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Description:

Sampled: 9/4/2024 12:30

Work Order: 24I0588

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Dissolved)									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Dissolved Solids	290	10	mg/L	1		SM21-23 2540C	9/10/24	9/10/24 12:10	II

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: **RW3-CP-001-090424**

Sample ID: **24I0588-05**

Sample Matrix: Ground Water

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Description:

Sampled: 9/4/2024 12:30

Work Order: 24I0588

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	2.5	mg/L	1		SM21-23 2540D	9/10/24	9/10/24 17:36	EMF

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW4-CP-01-090424

Sampled: 9/4/2024 12:50

Sample ID: 24I0588-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/6/24	9/9/24 12:41	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: RW4-CP-01-090424

Sampled: 9/4/2024 12:50

Sample ID: 2410588-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 12:41	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	97.7	70-130							
Toluene-d8	98.0	70-130							
4-Bromofluorobenzene	103	70-130							

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW4-CP-01-090424

Sampled: 9/4/2024 12:50

Sample ID: 24I0588-06

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/6/24	9/9/24 12:41	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW4-CP-01-090424

Sampled: 9/4/2024 12:50

Sample ID: 24I0588-06

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.053	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Antimony	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/19/24 19:25	HNN
Barium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Calcium	5.8	0.50	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Copper	0.020	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:27	HNN
Iron	0.79	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Lead	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:27	HNN
Magnesium	3.7	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Manganese	0.030	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	9/17/24	9/18/24 11:20	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Potassium	ND	2.0	mg/L	1		SW-846 6010D	9/17/24	9/19/24 19:25	HNN
Selenium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Silver	ND	0.010	mg/L	1	V-20	SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Sodium	10	2.0	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:27	HNN
Thallium	ND	0.050	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	9/17/24	9/18/24 16:31	HNN
Zinc	0.028	0.010	mg/L	1		SW-846 6010D	9/17/24	9/20/24 11:27	HNN

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: RW4-CP-01-090424

Sampled: 9/4/2024 12:50

Sample ID: 2410588-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	12	mg/L	1	DL-16	SM21-23 2540D	9/10/24	9/10/24 17:36	EMF

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW5-CP-01-090424

Sampled: 9/4/2024 13:10

Sample ID: 24I0588-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,1-Dichloroethylene	1.2	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
cis-1,2-Dichloroethylene	1.6	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/6/24	9/9/24 13:07	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW5-CP-01-090424

Sampled: 9/4/2024 13:10

Sample ID: 24I0588-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Tetrachloroethylene	16	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Trichloroethylene	26	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 13:07	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	99.0	70-130							
Toluene-d8	97.0	70-130							
4-Bromofluorobenzene	102	70-130							

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: RW5-CP-01-090424

Sample ID: 24I0588-07

Sample Matrix: Ground Water

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Sample Description:

Sampled: 9/4/2024 13:10

Work Order: 24I0588

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/6/24	9/9/24 13:07	LBD

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW5-CP-01-090424

Sampled: 9/4/2024 13:10

Sample ID: 24I0588-07

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Antimony	ND	0.050	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/16/24 12:05	HNN
Barium	0.058	0.050	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Calcium	11	0.50	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Copper	0.017	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Iron	0.15	0.050	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Lead	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/16/24 12:05	HNN
Magnesium	6.6	0.050	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Manganese	0.13	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Mercury	ND	0.00020	mg/L	1	H-10	SW-846 7470A	10/11/24	10/14/24 15:43	MJH
Nickel	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Potassium	5.6	2.0	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Selenium	ND	0.050	mg/L	1		SW-846 6010D	10/11/24	10/16/24 12:08	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Sodium	50	2.0	mg/L	1	MS-19	SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Thallium	ND	0.050	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	10/11/24	10/14/24 21:57	HNN
Zinc	0.020	0.010	mg/L	1	R-03	SW-846 6010D	10/11/24	10/14/24 21:57	HNN

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: TB-090424

Sampled: 8/30/2024 00:00

Sample ID: 2410588-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/6/24	9/9/24 10:57	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: TB-090424

Sampled: 8/30/2024 00:00

Sample ID: 2410588-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/6/24	9/9/24 10:57	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	98.2	70-130							
Toluene-d8	96.8	70-130							
4-Bromofluorobenzene	103	70-130							

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: TB-090424

Sample ID: 24I0588-08

Sample Matrix: Trip Blank Water

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Description:

Work Order: 24I0588

Sampled: 8/30/2024 00:00

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/6/24	9/9/24 10:57	LBD

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: MIDGAC-CP-00-090424

Sampled: 9/4/2024 10:10

Sample ID: 24I0588-09

Sample Matrix: Ground Water

Sample Flags: D-04

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	47	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoropentanoic acid (PFPeA)	26	2.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorohexanoic acid (PFHxA)	27	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoroheptanoic acid (PFHpA)	7.9	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorooctanoic acid (PFOA)	18	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorononanoic acid (PFNA)	4.1	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorodecanoic acid (PFDA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoroundecanoic acid (PFUnA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorododecanoic acid (PFDoA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorobutanesulfonic acid (PFBS)	3.2	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoropentanesulfonic acid (PFPeS)	1.7	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorohexanesulfonic acid (PFHxS)	3.8	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorooctanesulfonic acid (PFOS)	3.5	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorononanesulfonic acid (PFNS)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
N-MeFOSAA (NMeFOSAA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
N-EtFOSAA (NEtFOSAA)	ND	1.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
9Cl-PF3ONS (F53B Minor)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
11Cl-PF3OUs (F53B Major)	ND	4.1	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: MIDGAC-CP-00-090424

Sampled: 9/4/2024 10:10

Sample ID: 24I0588-09

Sample Matrix: Ground Water

Sample Flags: D-04

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L	1		Draft Method 1633	10/8/24	10/10/24 12:05	AB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
13C4-PFBA	61.7		10-130					10/10/24 12:05	
13C5-PFPeA	69.5		35-150					10/10/24 12:05	
13C5-PFHxA	59.8		55-150					10/10/24 12:05	
13C4-PFHpA	57.2		55-150					10/10/24 12:05	
13C8-PFOA	61.8		60-140					10/10/24 12:05	
13C9-PFNA	57.7		55-140					10/10/24 12:05	
13C6-PFDA	51.4		50-140					10/10/24 12:05	
13C7-PFUnA	42.6		30-140					10/10/24 12:05	
13C2-PFDoA	39.0		10-150					10/10/24 12:05	
13C2-PFTeDA	36.7		10-130					10/10/24 12:05	
13C3-PFBS	61.8		55-150					10/10/24 12:05	
13C3-PFHxS	60.0		55-150					10/10/24 12:05	
13C8-PFOS	53.1		45-140					10/10/24 12:05	
13C2-4:2FTS	69.1		60-200					10/10/24 12:05	
13C2-6:2FTS	58.1		60-200					10/10/24 12:05	
13C2-8:2FTS	44.4		50-200					10/10/24 12:05	
13C8-PFOSA	47.1		30-130					10/10/24 12:05	
D3-NMeFOSA	38.8		15-130					10/10/24 12:05	
D5-NEtFOSA	37.3		10-130					10/10/24 12:05	
D3-NMeFOSAA	44.6		45-200					10/10/24 12:05	
D5-NEtFOSAA	41.1		10-200					10/10/24 12:05	
D7-NMeFOSE	41.1		10-150					10/10/24 12:05	
D9-NEtFOSE	40.8		10-150					10/10/24 12:05	
13C3-HFPO-DA	56.5		25-160					10/10/24 12:05	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: MIDGAC-CP-00-090424

Sampled: 9/4/2024 10:10

Sample ID: 24I0588-09

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	130	10	mg/L	1	H-02	Draft Method 1633	10/3/24	10/3/24 13:12	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW3-CP-00-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
cis-1,2-Dichloroethylene	1.2	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	9/9/24	9/10/24 11:21	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 2410588

Date Received: 9/5/2024

Field Sample #: RW3-CP-00-090424

Sampled: 9/4/2024 12:30

Sample ID: 2410588-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Tetrachloroethylene	6.4	1.0	µg/L	1	V-06	SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	V-05	SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Trichloroethylene	49	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	9/9/24	9/10/24 11:21	LBD
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	94.0	70-130							
Toluene-d8	97.6	70-130							
4-Bromofluorobenzene	105	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW3-CP-00-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-10

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	9/9/24	9/10/24 11:21	LBD

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24I0588

Date Received: 9/5/2024

Field Sample #: RW3-CP-00-090424

Sampled: 9/4/2024 12:30

Sample ID: 24I0588-10

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1	B-05	SW-846 6010D	9/27/24	10/1/24 0:06	HNN
Antimony	ND	0.050	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Barium	0.052	0.050	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Calcium	8.1	0.50	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Copper	0.029	0.010	mg/L	1		SW-846 6010D	9/27/24	10/1/24 17:16	HNN
Iron	0.24	0.050	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Lead	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Magnesium	5.7	0.050	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Manganese	0.19	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	9/11/24	9/12/24 15:23	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Potassium	13	2.0	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Selenium	ND	0.050	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	10/1/24 12:50	HNN
Sodium	85	2.0	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Thallium	ND	0.050	mg/L	1		SW-846 6010D	9/27/24	10/1/24 0:06	HNN
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN
Zinc	ND	0.010	mg/L	1		SW-846 6010D	9/27/24	9/28/24 22:56	HNN

Project Location: Old Bethpage, New York

Date Received: 9/5/2024

Field Sample #: RW3-CP-00-090424

Sample ID: 24I0588-10

Sample Matrix: Ground Water

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Description:

Sampled: 9/4/2024 12:30

Work Order: 24I0588

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	12	mg/L	1	DL-16	SM21-23 2540D	9/10/24	9/10/24 17:36	EMF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data**Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I0588-03 [PD-CP-00-090424]	B385362	50.0	09/09/24
24I0588-04 [PD-CP-01-090424]	B385362	50.0	09/09/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B385363	50.0	09/09/24
24I0588-02 [ASF-CP-01-090424]	B385363	50.0	09/09/24

Prep Method:Draft Method 1633 **Analytical Method:**Draft Method 1633 **Leachates were extracted on 9/9/2024 per NO PREP in Batch B385363**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B386975	526	5.00	09/26/24
24I0588-02 [ASF-CP-01-090424]	B386975	527	5.00	09/26/24
24I0588-03 [PD-CP-00-090424]	B386975	540	5.00	09/26/24
24I0588-04 [PD-CP-01-090424]	B386975	528	5.00	09/26/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I0588-09 [MIDGAC-CP-00-090424]	B388108	50.0	10/03/24

Prep Method:Draft Method 1633 **Analytical Method:**Draft Method 1633 **Leachates were extracted on 10/3/2024 per NO PREP in Batch B388108**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-09 [MIDGAC-CP-00-090424]	B388184	493	5.00	10/08/24

Prep Method:EPA 300.0 **Analytical Method:**EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-03 [PD-CP-00-090424]	B386111	10.0	10.0	09/16/24
24I0588-04 [PD-CP-01-090424]	B386111	10.0	10.0	09/16/24

Prep Method:EPA 300.0 **Analytical Method:**EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-03 [PD-CP-00-090424]	B387626	10.0	10.0	09/28/24
24I0588-04 [PD-CP-01-090424]	B387626	10.0	10.0	09/28/24

Prep Method:EPA 300.0 **Analytical Method:**EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-03 [PD-CP-00-090424]	B387627	10.0	10.0	09/28/24
24I0588-04 [PD-CP-01-090424]	B387627	10.0	10.0	09/28/24

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Sample Extraction Data**SM 21-23 5310B**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B386592	50.0	50.0	09/19/24

SM 21-23 5310B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-02 [ASF-CP-01-090424]	B387959	50.0	50.0	10/02/24

Prep Method:SM4500 N Org B C Analytical Method:SM19-23 4500-N Org B,C-NI

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-03 [PD-CP-00-090424]	B387393	25.0	25.0	09/27/24
24I0588-04 [PD-CP-01-090424]	B387393	25.0	25.0	09/27/24

SM21-23 2540C

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I0588-03 [PD-CP-00-090424]	B385497	50.0	09/10/24
24I0588-04 [PD-CP-01-090424]	B385497	50.0	09/10/24

SM21-23 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B385527	500	09/10/24
24I0588-05 [RW3-CP-001-090424]	B385527	1000	09/10/24
24I0588-06 [RW4-CP-01-090424]	B385527	200	09/10/24
24I0588-10 [RW3-CP-00-090424]	B385527	200	09/10/24

Prep Method:SW-846 3005A Analytical Method:SW-846 6010D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-02 [ASF-CP-01-090424]	B386361	50.0	50.0	09/17/24
24I0588-03 [PD-CP-00-090424]	B386361	50.0	50.0	09/17/24
24I0588-06 [RW4-CP-01-090424]	B386361	50.0	50.0	09/17/24

Prep Method:SW-846 3005A Analytical Method:SW-846 6010D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B386463	50.0	50.0	09/18/24

Prep Method:SW-846 3005A Analytical Method:SW-846 6010D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-10 [RW3-CP-00-090424]	B387599	50.0	50.0	09/27/24

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Sample Extraction Data

Prep Method:SW-846 3005A Analytical Method:SW-846 6010D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-07 [RW5-CP-01-090424]	B389062	50.0	50.0	10/11/24

Prep Method:SW-846 3060A Analytical Method:SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-03 [PD-CP-00-090424]	B385168	50.0	50.0	09/05/24
24I0588-04 [PD-CP-01-090424]	B385168	50.0	50.0	09/05/24

Prep Method:SW-846 7470A Prep Analytical Method:SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B385747	10.0	10.0	09/11/24
24I0588-03 [PD-CP-00-090424]	B385747	10.0	10.0	09/11/24
24I0588-10 [RW3-CP-00-090424]	B385747	10.0	10.0	09/11/24

Prep Method:SW-846 7470A Prep Analytical Method:SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-02 [ASF-CP-01-090424]	B386381	10.0	10.0	09/17/24
24I0588-06 [RW4-CP-01-090424]	B386381	10.0	10.0	09/17/24

Prep Method:SW-846 7470A Prep Analytical Method:SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-07 [RW5-CP-01-090424]	B389125	10.0	10.0	10/11/24

Prep Method:SW-846 5030B Analytical Method:SW-846 8260D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B385261	5	5.00	09/06/24
24I0588-03 [PD-CP-00-090424]	B385261	5	5.00	09/06/24
24I0588-04 [PD-CP-01-090424]	B385261	5	5.00	09/06/24
24I0588-06 [RW4-CP-01-090424]	B385261	5	5.00	09/06/24
24I0588-07 [RW5-CP-01-090424]	B385261	5	5.00	09/06/24
24I0588-08 [TB-090424]	B385261	5	5.00	09/06/24

Prep Method:SW-846 5030B Analytical Method:SW-846 8260D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-10 [RW3-CP-00-090424]	B385502	5	5.00	09/09/24

Prep Method:SW-846 3510C Analytical Method:SW-846 8270E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B385151	110	1.00	09/05/24
24I0588-03 [PD-CP-00-090424]	B385151	111	1.00	09/05/24

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method:SW-846 3510C Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-04 [PD-CP-01-090424]	B385151	113	1.00	09/05/24

Prep Method:SW-846 3510C Analytical Method:SW-846 8270E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-01 [ASF-CP-00-090424]	B385540	1050	1.00	09/10/24
24I0588-02 [ASF-CP-01-090424]	B385540	1000	1.00	09/10/24
24I0588-03 [PD-CP-00-090424]	B385540	1050	1.00	09/10/24
24I0588-04 [PD-CP-01-090424]	B385540	1050	1.00	09/10/24

Prep Method:SW-846 9010C Analytical Method:SW-846 9014

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I0588-03 [PD-CP-00-090424]	B386119	50.0	50.0	09/15/24
24I0588-04 [PD-CP-01-090424]	B386119	50.0	50.0	09/15/24

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch B385261 - SW-846 5030B
Blank (B385261-BLK1)

Prepared: 09/06/24 Analyzed: 09/09/24

Acetone	ND	50	µg/L
Benzene	ND	1.0	µg/L
Bromochloromethane	ND	1.0	µg/L
Bromodichloromethane	ND	0.50	µg/L
Bromoform	ND	1.0	µg/L
Bromomethane	ND	2.0	µg/L
2-Butanone (MEK)	ND	20	µg/L
n-Butylbenzene	ND	1.0	µg/L
sec-Butylbenzene	ND	1.0	µg/L
tert-Butylbenzene	ND	1.0	µg/L
Carbon Disulfide	ND	5.0	µg/L
Carbon Tetrachloride	ND	5.0	µg/L
Chlorobenzene	ND	1.0	µg/L
Chlorodibromomethane	ND	0.50	µg/L
Chloroethane	ND	2.0	µg/L
Chloroform	ND	2.0	µg/L
Chloromethane	ND	2.0	µg/L
Cyclohexane	ND	5.0	µg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L
1,2-Dibromoethane (EDB)	ND	0.50	µg/L
1,2-Dichlorobenzene	ND	1.0	µg/L
1,3-Dichlorobenzene	ND	1.0	µg/L
1,4-Dichlorobenzene	ND	1.0	µg/L
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L
1,1-Dichloroethane	ND	1.0	µg/L
1,2-Dichloroethane	ND	1.0	µg/L
1,1-Dichloroethylene	ND	1.0	µg/L
cis-1,2-Dichloroethylene	ND	1.0	µg/L
trans-1,2-Dichloroethylene	ND	1.0	µg/L
1,2-Dichloropropane	ND	1.0	µg/L
cis-1,3-Dichloropropene	ND	0.50	µg/L
trans-1,3-Dichloropropene	ND	0.50	µg/L
Ethylbenzene	ND	1.0	µg/L
2-Hexanone (MBK)	ND	10	µg/L
Isopropylbenzene (Cumene)	ND	1.0	µg/L
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L
Methyl Acetate	ND	1.0	µg/L
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L
Methyl Cyclohexane	ND	1.0	µg/L
Methylene Chloride	ND	5.0	µg/L
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L
Naphthalene	ND	2.0	µg/L
n-Propylbenzene	ND	1.0	µg/L
Styrene	ND	1.0	µg/L
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
Tetrachloroethylene	ND	1.0	µg/L
Toluene	ND	1.0	µg/L
1,2,3-Trichlorobenzene	ND	5.0	µg/L
1,2,4-Trichlorobenzene	ND	1.0	µg/L
1,1,1-Trichloroethane	ND	1.0	µg/L
1,1,2-Trichloroethane	ND	1.0	µg/L
Trichloroethylene	ND	1.0	µg/L

V-05

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385261 - SW-846 5030B										
Blank (B385261-BLK1)										
Prepared: 09/06/24 Analyzed: 09/09/24										
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.1		µg/L	25.00		92.4	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.00		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.00		102	70-130			
LCS (B385261-BS1)										
Prepared: 09/06/24 Analyzed: 09/09/24										
Acetone	106	50	µg/L	100.0		106	70-160			†
Benzene	10.3	1.0	µg/L	10.00		103	70-130			
Bromochloromethane	10.6	1.0	µg/L	10.00		106	70-130			
Bromodichloromethane	10.8	0.50	µg/L	10.00		108	70-130			
Bromoform	10.0	1.0	µg/L	10.00		100	70-130			
Bromomethane	9.33	2.0	µg/L	10.00		93.3	40-160			†
2-Butanone (MEK)	104	20	µg/L	100.0		104	40-160			†
n-Butylbenzene	9.38	1.0	µg/L	10.00		93.8	70-130			
sec-Butylbenzene	9.02	1.0	µg/L	10.00		90.2	70-130			
tert-Butylbenzene	9.01	1.0	µg/L	10.00		90.1	70-130			
Carbon Disulfide	111	5.0	µg/L	100.0		111	70-130			
Carbon Tetrachloride	9.77	5.0	µg/L	10.00		97.7	70-130			
Chlorobenzene	10.5	1.0	µg/L	10.00		105	70-130			
Chlorodibromomethane	10.6	0.50	µg/L	10.00		106	70-130			
Chloroethane	10.9	2.0	µg/L	10.00		109	70-130			
Chloroform	10.5	2.0	µg/L	10.00		105	70-130			
Chloromethane	8.32	2.0	µg/L	10.00		83.2	40-160			†
Cyclohexane	9.56	5.0	µg/L	10.00		95.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.24	5.0	µg/L	10.00		82.4	70-130			
1,2-Dibromoethane (EDB)	11.6	0.50	µg/L	10.00		116	70-130			
1,2-Dichlorobenzene	9.57	1.0	µg/L	10.00		95.7	70-130			
1,3-Dichlorobenzene	9.63	1.0	µg/L	10.00		96.3	70-130			
1,4-Dichlorobenzene	9.49	1.0	µg/L	10.00		94.9	70-130			
Dichlorodifluoromethane (Freon 12)	10.1	2.0	µg/L	10.00		101	40-160			†
1,1-Dichloroethane	9.86	1.0	µg/L	10.00		98.6	70-130			
1,2-Dichloroethane	11.2	1.0	µg/L	10.00		112	70-130			
1,1-Dichloroethylene	9.89	1.0	µg/L	10.00		98.9	70-130			
cis-1,2-Dichloroethylene	9.87	1.0	µg/L	10.00		98.7	70-130			
trans-1,2-Dichloroethylene	9.78	1.0	µg/L	10.00		97.8	70-130			
1,2-Dichloropropane	10.6	1.0	µg/L	10.00		106	70-130			
cis-1,3-Dichloropropene	10.4	0.50	µg/L	10.00		104	70-130			
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.00		102	70-130			
Ethylbenzene	10.6	1.0	µg/L	10.00		106	70-130			
2-Hexanone (MBK)	106	10	µg/L	100.0		106	70-160			†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.00		103	70-130			
p-Isopropyltoluene (p-Cymene)	9.06	1.0	µg/L	10.00		90.6	70-130			
Methyl Acetate	15.5	1.0	µg/L	10.00		155	* 70-130			
Methyl tert-Butyl Ether (MTBE)	9.71	1.0	µg/L	10.00		97.1	70-130			

L-02

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385261 - SW-846 5030B
LCS (B385261-BS1)

Prepared: 09/06/24 Analyzed: 09/09/24

Methyl Cyclohexane	11.3	1.0	µg/L	10.00		113	70-130			
Methylene Chloride	9.35	5.0	µg/L	10.00		93.5	70-130			
4-Methyl-2-pentanone (MIBK)	109	10	µg/L	100.0		109	70-160			†
Naphthalene	8.13	2.0	µg/L	10.00		81.3	40-130			V-05 †
n-Propylbenzene	10.4	1.0	µg/L	10.00		104	70-130			
Styrene	10.4	1.0	µg/L	10.00		104	70-130			
1,1,2,2-Tetrachloroethane	11.7	0.50	µg/L	10.00		117	70-130			
Tetrachloroethylene	11.7	1.0	µg/L	10.00		117	70-130			
Toluene	10.5	1.0	µg/L	10.00		105	70-130			
1,2,3-Trichlorobenzene	8.85	5.0	µg/L	10.00		88.5	70-130			
1,2,4-Trichlorobenzene	9.36	1.0	µg/L	10.00		93.6	70-130			
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.00		104	70-130			
1,1,2-Trichloroethane	11.3	1.0	µg/L	10.00		113	70-130			
Trichloroethylene	11.1	1.0	µg/L	10.00		111	70-130			
Trichlorofluoromethane (Freon 11)	11.1	2.0	µg/L	10.00		111	70-130			
1,2,3-Trichloropropane	11.7	2.0	µg/L	10.00		117	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.1	1.0	µg/L	10.00		121	70-130			
1,2,4-Trimethylbenzene	9.42	1.0	µg/L	10.00		94.2	70-130			
1,3,5-Trimethylbenzene	10.8	1.0	µg/L	10.00		108	70-130			
Vinyl Chloride	9.68	2.0	µg/L	10.00		96.8	40-160			†
m+p Xylene	20.6	2.0	µg/L	20.00		103	70-130			
o-Xylene	10.1	1.0	µg/L	10.00		101	70-130			
Xylenes (total)	30.7	1.0	µg/L	30.00		102	0-200			
Surrogate: 1,2-Dichloroethane-d4	23.0		µg/L	25.00		91.9	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.00		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	26.1		µg/L	25.00		104	70-130			

LCS Dup (B385261-BSD1)

Prepared: 09/06/24 Analyzed: 09/09/24

Acetone	105	50	µg/L	100.0		105	70-160	1.50	25	†
Benzene	10.3	1.0	µg/L	10.00		103	70-130	0.0974	25	
Bromochloromethane	10.7	1.0	µg/L	10.00		107	70-130	1.41	25	
Bromodichloromethane	10.3	0.50	µg/L	10.00		103	70-130	4.85	25	
Bromoform	9.95	1.0	µg/L	10.00		99.5	70-130	0.601	25	
Bromomethane	9.03	2.0	µg/L	10.00		90.3	40-160	3.27	25	†
2-Butanone (MEK)	102	20	µg/L	100.0		102	40-160	2.42	25	†
n-Butylbenzene	9.42	1.0	µg/L	10.00		94.2	70-130	0.426	25	
sec-Butylbenzene	9.19	1.0	µg/L	10.00		91.9	70-130	1.87	25	
tert-Butylbenzene	9.22	1.0	µg/L	10.00		92.2	70-130	2.30	25	
Carbon Disulfide	112	5.0	µg/L	100.0		112	70-130	0.841	25	
Carbon Tetrachloride	9.93	5.0	µg/L	10.00		99.3	70-130	1.62	25	
Chlorobenzene	10.4	1.0	µg/L	10.00		104	70-130	1.25	25	
Chlorodibromomethane	10.1	0.50	µg/L	10.00		101	70-130	4.92	25	
Chloroethane	10.9	2.0	µg/L	10.00		109	70-130	0.368	25	
Chloroform	10.6	2.0	µg/L	10.00		106	70-130	1.04	25	
Chloromethane	8.78	2.0	µg/L	10.00		87.8	40-160	5.38	25	†
Cyclohexane	9.63	5.0	µg/L	10.00		96.3	70-130	0.730	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.06	5.0	µg/L	10.00		80.6	70-130	2.21	25	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.00		110	70-130	4.61	25	
1,2-Dichlorobenzene	9.53	1.0	µg/L	10.00		95.3	70-130	0.419	25	
1,3-Dichlorobenzene	9.64	1.0	µg/L	10.00		96.4	70-130	0.104	25	
1,4-Dichlorobenzene	9.49	1.0	µg/L	10.00		94.9	70-130	0.00	25	
Dichlorodifluoromethane (Freon 12)	9.87	2.0	µg/L	10.00		98.7	40-160	1.91	25	†

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385261 - SW-846 5030B
LCS Dup (B385261-BS01)

Prepared: 09/06/24 Analyzed: 09/09/24

1,1-Dichloroethane	10.1	1.0	µg/L	10.00		101	70-130	2.31	25	
1,2-Dichloroethane	10.9	1.0	µg/L	10.00		109	70-130	3.44	25	
1,1-Dichloroethylene	10.1	1.0	µg/L	10.00		101	70-130	2.20	25	
cis-1,2-Dichloroethylene	10.0	1.0	µg/L	10.00		100	70-130	1.31	25	
trans-1,2-Dichloroethylene	9.95	1.0	µg/L	10.00		99.5	70-130	1.72	25	
1,2-Dichloropropane	10.3	1.0	µg/L	10.00		103	70-130	2.78	25	
cis-1,3-Dichloropropene	10.0	0.50	µg/L	10.00		100	70-130	3.53	25	
trans-1,3-Dichloropropene	9.88	0.50	µg/L	10.00		98.8	70-130	3.38	25	
Ethylbenzene	10.6	1.0	µg/L	10.00		106	70-130	0.00	25	
2-Hexanone (MBK)	101	10	µg/L	100.0		101	70-160	4.67	25	†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.00		103	70-130	0.194	25	
p-Isopropyltoluene (p-Cymene)	9.20	1.0	µg/L	10.00		92.0	70-130	1.53	25	
Methyl Acetate	15.6	1.0	µg/L	10.00		156	* 70-130	0.578	25	L-02
Methyl tert-Butyl Ether (MTBE)	9.53	1.0	µg/L	10.00		95.3	70-130	1.87	25	
Methyl Cyclohexane	11.0	1.0	µg/L	10.00		110	70-130	3.23	25	
Methylene Chloride	9.46	5.0	µg/L	10.00		94.6	70-130	1.17	25	
4-Methyl-2-pentanone (MIBK)	105	10	µg/L	100.0		105	70-160	3.85	25	†
Naphthalene	7.91	2.0	µg/L	10.00		79.1	40-130	2.74	25	V-05 †
n-Propylbenzene	10.2	1.0	µg/L	10.00		102	70-130	1.64	25	
Styrene	10.3	1.0	µg/L	10.00		103	70-130	1.16	25	
1,1,2,2-Tetrachloroethane	11.2	0.50	µg/L	10.00		112	70-130	4.80	25	
Tetrachloroethylene	11.8	1.0	µg/L	10.00		118	70-130	1.02	25	
Toluene	10.5	1.0	µg/L	10.00		105	70-130	0.762	25	
1,2,3-Trichlorobenzene	8.49	5.0	µg/L	10.00		84.9	70-130	4.15	25	
1,2,4-Trichlorobenzene	9.10	1.0	µg/L	10.00		91.0	70-130	2.82	25	
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.00		108	70-130	3.58	25	
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.00		110	70-130	2.97	25	
Trichloroethylene	10.8	1.0	µg/L	10.00		108	70-130	2.82	25	
Trichlorofluoromethane (Freon 11)	11.3	2.0	µg/L	10.00		113	70-130	1.78	25	
1,2,3-Trichloropropane	11.6	2.0	µg/L	10.00		116	70-130	0.343	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.9	1.0	µg/L	10.00		119	70-130	1.59	25	
1,2,4-Trimethylbenzene	9.43	1.0	µg/L	10.00		94.3	70-130	0.106	25	
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.00		106	70-130	1.40	25	
Vinyl Chloride	9.81	2.0	µg/L	10.00		98.1	40-160	1.33	25	†
m+p Xylene	20.4	2.0	µg/L	20.00		102	70-130	0.732	25	
o-Xylene	10.1	1.0	µg/L	10.00		101	70-130	0.297	25	
Xylenes (total)	30.5	1.0	µg/L	30.00		102	0-200	0.588		
Surrogate: 1,2-Dichloroethane-d4	23.1		µg/L	25.00		92.2	70-130			
Surrogate: Toluene-d8	24.5		µg/L	25.00		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.00		103	70-130			

Matrix Spike (B385261-MS1)
Source: 2410588-03

Prepared: 09/06/24 Analyzed: 09/09/24

Acetone	97.4	50	µg/L	100.0	ND	97.4	70-130			
Benzene	10.4	1.0	µg/L	10.00	ND	104	70-130			
Bromochloromethane	11.2	1.0	µg/L	10.00	ND	112	70-130			
Bromodichloromethane	10.5	0.50	µg/L	10.00	ND	105	70-130			
Bromoform	9.93	1.0	µg/L	10.00	ND	99.3	70-130			
Bromomethane	10.4	2.0	µg/L	10.00	ND	104	70-130			
2-Butanone (MEK)	92.0	20	µg/L	100.0	ND	92.0	70-130			
n-Butylbenzene	9.46	1.0	µg/L	10.00	ND	94.6	70-130			
sec-Butylbenzene	9.27	1.0	µg/L	10.00	ND	92.7	70-130			
tert-Butylbenzene	9.46	1.0	µg/L	10.00	ND	94.6	70-130			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385261 - SW-846 5030B										
Matrix Spike (B385261-MS1)	Source: 2410588-03			Prepared: 09/06/24 Analyzed: 09/09/24						
Carbon Disulfide	114	5.0	µg/L	100.0	ND	114	70-130			
Carbon Tetrachloride	10.8	5.0	µg/L	10.00	ND	108	70-130			
Chlorobenzene	10.6	1.0	µg/L	10.00	ND	106	70-130			
Chlorodibromomethane	10.4	0.50	µg/L	10.00	ND	104	70-130			
Chloroethane	10.8	2.0	µg/L	10.00	ND	108	70-130			
Chloroform	11.2	2.0	µg/L	10.00	ND	112	70-130			
Chloromethane	8.26	2.0	µg/L	10.00	ND	82.6	70-130			
Cyclohexane	9.80	5.0	µg/L	10.00	ND	98.0	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.34	5.0	µg/L	10.00	ND	73.4	70-130			
1,2-Dibromoethane (EDB)	10.9	0.50	µg/L	10.00	ND	109	70-130			
1,2-Dichlorobenzene	9.62	1.0	µg/L	10.00	ND	96.2	70-130			
1,3-Dichlorobenzene	9.59	1.0	µg/L	10.00	ND	95.9	70-130			
1,4-Dichlorobenzene	9.49	1.0	µg/L	10.00	ND	94.9	70-130			
Dichlorodifluoromethane (Freon 12)	10.6	2.0	µg/L	10.00	ND	106	70-130			
1,1-Dichloroethane	10.2	1.0	µg/L	10.00	ND	102	70-130			
1,2-Dichloroethane	11.4	1.0	µg/L	10.00	ND	114	70-130			
1,1-Dichloroethylene	10.7	1.0	µg/L	10.00	ND	107	70-130			
cis-1,2-Dichloroethylene	10.1	1.0	µg/L	10.00	ND	101	70-130			
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.00	ND	102	70-130			
1,2-Dichloropropane	10.1	1.0	µg/L	10.00	ND	101	70-130			
cis-1,3-Dichloropropene	9.56	0.50	µg/L	10.00	ND	95.6	70-130			
trans-1,3-Dichloropropene	9.77	0.50	µg/L	10.00	ND	97.7	70-130			
Ethylbenzene	10.9	1.0	µg/L	10.00	ND	109	70-130			
2-Hexanone (MBK)	91.7	10	µg/L	100.0	ND	91.7	70-130			
Isopropylbenzene (Cumene)	10.7	1.0	µg/L	10.00	ND	107	70-130			
p-Isopropyltoluene (p-Cymene)	9.33	1.0	µg/L	10.00	ND	93.3	70-130			
Methyl Acetate	12.7	1.0	µg/L	10.00	ND	127	70-130			
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	µg/L	10.00	ND	100	70-130			
Methyl Cyclohexane	11.4	1.0	µg/L	10.00	ND	114	70-130			
Methylene Chloride	8.94	5.0	µg/L	10.00	ND	89.4	70-130			
4-Methyl-2-pentanone (MIBK)	95.0	10	µg/L	100.0	ND	95.0	70-130			
Naphthalene	7.69	2.0	µg/L	10.00	ND	76.9	70-130			
n-Propylbenzene	10.6	1.0	µg/L	10.00	ND	106	70-130			
Styrene	10.3	1.0	µg/L	10.00	ND	103	70-130			
1,1,1,2-Tetrachloroethane	10.8	0.50	µg/L	10.00	ND	108	70-130			
Tetrachloroethylene	12.3	1.0	µg/L	10.00	ND	123	70-130			
Toluene	10.5	1.0	µg/L	10.00	ND	105	70-130			
1,2,3-Trichlorobenzene	7.73	5.0	µg/L	10.00	ND	77.3	70-130			
1,2,4-Trichlorobenzene	8.85	1.0	µg/L	10.00	ND	88.5	70-130			
1,1,1-Trichloroethane	11.3	1.0	µg/L	10.00	ND	113	70-130			
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.00	ND	109	70-130			
Trichloroethylene	11.2	1.0	µg/L	10.00	ND	112	70-130			
Trichlorofluoromethane (Freon 11)	11.9	2.0	µg/L	10.00	ND	119	70-130			
1,2,3-Trichloropropane	11.4	2.0	µg/L	10.00	ND	114	70-130			
1,1,1,2,2,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.6	1.0	µg/L	10.00	ND	126	70-130			
1,2,4-Trimethylbenzene	9.68	1.0	µg/L	10.00	ND	96.8	70-130			
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.00	ND	112	70-130			
Vinyl Chloride	9.95	2.0	µg/L	10.00	ND	99.5	70-130			
m+p Xylene	21.2	2.0	µg/L	20.00	ND	106	70-130			
o-Xylene	10.4	1.0	µg/L	10.00	ND	104	70-130			
Xylenes (total)	31.6	1.0	µg/L	30.00	ND	105	0-200			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385261 - SW-846 5030B										
Matrix Spike (B385261-MS1)	Source: 2410588-03			Prepared: 09/06/24 Analyzed: 09/09/24						
Surrogate: 1,2-Dichloroethane-d4	23.9		µg/L	25.00		95.6	70-130			
Surrogate: Toluene-d8	24.1		µg/L	25.00		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	26.4		µg/L	25.00		106	70-130			
Matrix Spike Dup (B385261-MSD1)	Source: 2410588-03			Prepared: 09/06/24 Analyzed: 09/09/24						
Acetone	98.7	50	µg/L	100.0	ND	98.7	70-130	1.24	30	
Benzene	10.5	1.0	µg/L	10.00	ND	105	70-130	1.05	30	
Bromochloromethane	11.1	1.0	µg/L	10.00	ND	111	70-130	0.628	30	
Bromodichloromethane	10.8	0.50	µg/L	10.00	ND	108	70-130	3.56	30	
Bromoform	10.0	1.0	µg/L	10.00	ND	100	70-130	0.702	30	
Bromomethane	10.8	2.0	µg/L	10.00	ND	108	70-130	3.95	30	
2-Butanone (MEK)	93.2	20	µg/L	100.0	ND	93.2	70-130	1.24	30	
n-Butylbenzene	9.37	1.0	µg/L	10.00	ND	93.7	70-130	0.956	30	
sec-Butylbenzene	9.37	1.0	µg/L	10.00	ND	93.7	70-130	1.07	30	
tert-Butylbenzene	9.56	1.0	µg/L	10.00	ND	95.6	70-130	1.05	30	
Carbon Disulfide	116	5.0	µg/L	100.0	ND	116	70-130	1.56	30	
Carbon Tetrachloride	10.8	5.0	µg/L	10.00	ND	108	70-130	0.00	30	
Chlorobenzene	10.8	1.0	µg/L	10.00	ND	108	70-130	2.71	30	
Chlorodibromomethane	10.4	0.50	µg/L	10.00	ND	104	70-130	0.0960	30	
Chloroethane	11.4	2.0	µg/L	10.00	ND	114	70-130	4.69	30	
Chloroform	11.0	2.0	µg/L	10.00	ND	110	70-130	1.53	30	
Chloromethane	8.37	2.0	µg/L	10.00	ND	83.7	70-130	1.32	30	
Cyclohexane	9.86	5.0	µg/L	10.00	ND	98.6	70-130	0.610	30	
1,2-Dibromo-3-chloropropane (DBCP)	7.94	5.0	µg/L	10.00	ND	79.4	70-130	7.85	30	
1,2-Dibromoethane (EDB)	11.1	0.50	µg/L	10.00	ND	111	70-130	1.64	30	
1,2-Dichlorobenzene	9.57	1.0	µg/L	10.00	ND	95.7	70-130	0.521	30	
1,3-Dichlorobenzene	9.77	1.0	µg/L	10.00	ND	97.7	70-130	1.86	30	
1,4-Dichlorobenzene	9.69	1.0	µg/L	10.00	ND	96.9	70-130	2.09	30	
Dichlorodifluoromethane (Freon 12)	10.7	2.0	µg/L	10.00	ND	107	70-130	1.04	30	
1,1-Dichloroethane	10.4	1.0	µg/L	10.00	ND	104	70-130	1.75	30	
1,2-Dichloroethane	11.6	1.0	µg/L	10.00	ND	116	70-130	1.31	30	
1,1-Dichloroethylene	10.8	1.0	µg/L	10.00	ND	108	70-130	0.372	30	
cis-1,2-Dichloroethylene	10.2	1.0	µg/L	10.00	ND	102	70-130	1.48	30	
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.00	ND	102	70-130	0.0983	30	
1,2-Dichloropropane	10.5	1.0	µg/L	10.00	ND	105	70-130	4.09	30	
cis-1,3-Dichloropropene	9.74	0.50	µg/L	10.00	ND	97.4	70-130	1.87	30	
trans-1,3-Dichloropropene	9.72	0.50	µg/L	10.00	ND	97.2	70-130	0.513	30	
Ethylbenzene	11.0	1.0	µg/L	10.00	ND	110	70-130	0.825	30	
2-Hexanone (MBK)	92.2	10	µg/L	100.0	ND	92.2	70-130	0.500	30	
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.00	ND	108	70-130	0.835	30	
p-Isopropyltoluene (p-Cymene)	9.42	1.0	µg/L	10.00	ND	94.2	70-130	0.960	30	
Methyl Acetate	13.1	1.0	µg/L	10.00	ND	131	* 70-130	3.10	30	MS-22
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.00	ND	101	70-130	1.19	30	
Methyl Cyclohexane	11.6	1.0	µg/L	10.00	ND	116	70-130	1.22	30	
Methylene Chloride	9.29	5.0	µg/L	10.00	ND	92.9	70-130	3.84	30	
4-Methyl-2-pentanone (MIBK)	95.4	10	µg/L	100.0	ND	95.4	70-130	0.452	30	
Naphthalene	7.93	2.0	µg/L	10.00	ND	79.3	70-130	3.07	30	
n-Propylbenzene	10.8	1.0	µg/L	10.00	ND	108	70-130	1.59	30	
Styrene	10.6	1.0	µg/L	10.00	ND	106	70-130	2.68	30	
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.00	ND	110	70-130	1.56	30	
Tetrachloroethylene	12.7	1.0	µg/L	10.00	ND	127	70-130	3.76	30	
Toluene	10.7	1.0	µg/L	10.00	ND	107	70-130	1.60	30	

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385261 - SW-846 5030B
Matrix Spike Dup (B385261-MSD1)
Source: 2410588-03

Prepared: 09/06/24 Analyzed: 09/09/24

1,2,3-Trichlorobenzene	8.32	5.0	µg/L	10.00	ND	83.2	70-130	7.35	30	
1,2,4-Trichlorobenzene	9.37	1.0	µg/L	10.00	ND	93.7	70-130	5.71	30	
1,1,1-Trichloroethane	11.4	1.0	µg/L	10.00	ND	114	70-130	0.792	30	
1,1,2-Trichloroethane	11.2	1.0	µg/L	10.00	ND	112	70-130	3.17	30	
Trichloroethylene	11.5	1.0	µg/L	10.00	ND	115	70-130	2.73	30	
Trichlorofluoromethane (Freon 11)	12.8	2.0	µg/L	10.00	ND	128	70-130	7.23	30	
1,2,3-Trichloropropane	11.5	2.0	µg/L	10.00	ND	115	70-130	0.350	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.9	1.0	µg/L	10.00	ND	129	70-130	2.12	30	
1,2,4-Trimethylbenzene	9.63	1.0	µg/L	10.00	ND	96.3	70-130	0.518	30	
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.00	ND	112	70-130	0.626	30	
Vinyl Chloride	10.1	2.0	µg/L	10.00	ND	101	70-130	1.69	30	
m+p Xylene	21.4	2.0	µg/L	20.00	ND	107	70-130	1.03	20	
o-Xylene	10.5	1.0	µg/L	10.00	ND	105	70-130	1.24	30	
Xylenes (total)	32.0	1.0	µg/L	30.00	ND	107	0-200	1.10		
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.00		94.6	70-130			
Surrogate: Toluene-d8	24.3		µg/L	25.00		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	26.2		µg/L	25.00		105	70-130			

Batch B385502 - SW-846 5030B
Blank (B385502-BLK1)

Prepared & Analyzed: 09/10/24

Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385502 - SW-846 5030B
Blank (B385502-BLK1)

Prepared & Analyzed: 09/10/24

trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							V-05
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.0		µg/L	25.00		92.0	70-130			
Surrogate: Toluene-d8	24.2		µg/L	25.00		96.8	70-130			
Surrogate: 4-Bromofluorobenzene	25.6		µg/L	25.00		103	70-130			

LCS (B385502-BS1)

Prepared & Analyzed: 09/10/24

Acetone	109	50	µg/L	100.0		109	70-160			†
Benzene	10.7	1.0	µg/L	10.00		107	70-130			
Bromochloromethane	11.2	1.0	µg/L	10.00		112	70-130			
Bromodichloromethane	11.0	0.50	µg/L	10.00		110	70-130			
Bromoform	10.2	1.0	µg/L	10.00		102	70-130			
Bromomethane	11.4	2.0	µg/L	10.00		114	40-160			†
2-Butanone (MEK)	105	20	µg/L	100.0		105	40-160			†
n-Butylbenzene	9.27	1.0	µg/L	10.00		92.7	70-130			
sec-Butylbenzene	8.94	1.0	µg/L	10.00		89.4	70-130			
tert-Butylbenzene	9.02	1.0	µg/L	10.00		90.2	70-130			
Carbon Disulfide	125	5.0	µg/L	100.0		125	70-130			
Carbon Tetrachloride	10.2	5.0	µg/L	10.00		102	70-130			
Chlorobenzene	10.8	1.0	µg/L	10.00		108	70-130			
Chlorodibromomethane	10.8	0.50	µg/L	10.00		108	70-130			
Chloroethane	11.2	2.0	µg/L	10.00		112	70-130			
Chloroform	11.2	2.0	µg/L	10.00		112	70-130			
Chloromethane	9.37	2.0	µg/L	10.00		93.7	40-160			†

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385502 - SW-846 5030B										
LCS (B385502-BS1)										
Prepared & Analyzed: 09/10/24										
Cyclohexane	10.0	5.0	µg/L	10.00		100	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.74	5.0	µg/L	10.00		77.4	70-130			V-05
1,2-Dibromoethane (EDB)	12.0	0.50	µg/L	10.00		120	70-130			
1,2-Dichlorobenzene	9.55	1.0	µg/L	10.00		95.5	70-130			
1,3-Dichlorobenzene	9.68	1.0	µg/L	10.00		96.8	70-130			
1,4-Dichlorobenzene	9.54	1.0	µg/L	10.00		95.4	70-130			
Dichlorodifluoromethane (Freon 12)	10.9	2.0	µg/L	10.00		109	40-160			†
1,1-Dichloroethane	10.4	1.0	µg/L	10.00		104	70-130			
1,2-Dichloroethane	11.8	1.0	µg/L	10.00		118	70-130			
1,1-Dichloroethylene	10.6	1.0	µg/L	10.00		106	70-130			
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.00		106	70-130			
trans-1,2-Dichloroethylene	10.4	1.0	µg/L	10.00		104	70-130			
1,2-Dichloropropane	10.8	1.0	µg/L	10.00		108	70-130			
cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.00		105	70-130			
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.00		106	70-130			
Ethylbenzene	10.8	1.0	µg/L	10.00		108	70-130			
2-Hexanone (MBK)	106	10	µg/L	100.0		106	70-160			†
Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.00		105	70-130			
p-Isopropyltoluene (p-Cymene)	9.04	1.0	µg/L	10.00		90.4	70-130			
Methyl Acetate	16.0	1.0	µg/L	10.00		160 *	70-130			L-02
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.00		102	70-130			
Methyl Cyclohexane	11.8	1.0	µg/L	10.00		118	70-130			
Methylene Chloride	10.0	5.0	µg/L	10.00		100	70-130			
4-Methyl-2-pentanone (MIBK)	109	10	µg/L	100.0		109	70-160			†
Naphthalene	7.86	2.0	µg/L	10.00		78.6	40-130			V-05 †
n-Propylbenzene	10.6	1.0	µg/L	10.00		106	70-130			
Styrene	10.7	1.0	µg/L	10.00		107	70-130			
1,1,2,2-Tetrachloroethane	11.7	0.50	µg/L	10.00		117	70-130			
Tetrachloroethylene	12.3	1.0	µg/L	10.00		123	70-130			V-06
Toluene	11.1	1.0	µg/L	10.00		111	70-130			
1,2,3-Trichlorobenzene	8.55	5.0	µg/L	10.00		85.5	70-130			V-05
1,2,4-Trichlorobenzene	9.24	1.0	µg/L	10.00		92.4	70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.00		110	70-130			
1,1,2-Trichloroethane	11.8	1.0	µg/L	10.00		118	70-130			
Trichloroethylene	11.4	1.0	µg/L	10.00		114	70-130			
Trichlorofluoromethane (Freon 11)	11.4	2.0	µg/L	10.00		114	70-130			
1,2,3-Trichloropropane	12.0	2.0	µg/L	10.00		120	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.6	1.0	µg/L	10.00		126	70-130			
1,2,4-Trimethylbenzene	9.41	1.0	µg/L	10.00		94.1	70-130			
1,3,5-Trimethylbenzene	10.9	1.0	µg/L	10.00		109	70-130			
Vinyl Chloride	10.4	2.0	µg/L	10.00		104	40-160			†
m+p Xylene	21.0	2.0	µg/L	20.00		105	70-130			
o-Xylene	10.5	1.0	µg/L	10.00		105	70-130			
Xylenes (total)	31.5	1.0	µg/L	30.00		105	0-200			
Surrogate: 1,2-Dichloroethane-d4	22.8		µg/L	25.00		91.0	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.00		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	26.1		µg/L	25.00		104	70-130			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385502 - SW-846 5030B										
LCS Dup (B385502-BSD1)										
Prepared & Analyzed: 09/10/24										
Acetone	110	50	µg/L	100.0		110	70-160	0.860	25	†
Benzene	10.8	1.0	µg/L	10.00		108	70-130	1.49	25	
Bromochloromethane	11.7	1.0	µg/L	10.00		117	70-130	4.19	25	
Bromodichloromethane	11.1	0.50	µg/L	10.00		111	70-130	1.18	25	
Bromoform	10.2	1.0	µg/L	10.00		102	70-130	0.980	25	
Bromomethane	11.1	2.0	µg/L	10.00		111	40-160	2.93	25	†
2-Butanone (MEK)	106	20	µg/L	100.0		106	40-160	0.985	25	†
n-Butylbenzene	9.39	1.0	µg/L	10.00		93.9	70-130	1.29	25	
sec-Butylbenzene	9.14	1.0	µg/L	10.00		91.4	70-130	2.21	25	
tert-Butylbenzene	9.23	1.0	µg/L	10.00		92.3	70-130	2.30	25	
Carbon Disulfide	129	5.0	µg/L	100.0		129	70-130	3.00	25	
Carbon Tetrachloride	10.4	5.0	µg/L	10.00		104	70-130	1.85	25	
Chlorobenzene	11.0	1.0	µg/L	10.00		110	70-130	1.38	25	
Chlorodibromomethane	11.0	0.50	µg/L	10.00		110	70-130	1.19	25	
Chloroethane	11.2	2.0	µg/L	10.00		112	70-130	0.357	25	
Chloroform	11.5	2.0	µg/L	10.00		115	70-130	2.47	25	
Chloromethane	9.78	2.0	µg/L	10.00		97.8	40-160	4.28	25	†
Cyclohexane	10.3	5.0	µg/L	10.00		103	70-130	3.15	25	
1,2-Dibromo-3-chloropropane (DBCP)	7.86	5.0	µg/L	10.00		78.6	70-130	1.54	25	V-05
1,2-Dibromoethane (EDB)	12.0	0.50	µg/L	10.00		120	70-130	0.667	25	
1,2-Dichlorobenzene	9.62	1.0	µg/L	10.00		96.2	70-130	0.730	25	
1,3-Dichlorobenzene	9.87	1.0	µg/L	10.00		98.7	70-130	1.94	25	
1,4-Dichlorobenzene	9.70	1.0	µg/L	10.00		97.0	70-130	1.66	25	
Dichlorodifluoromethane (Freon 12)	11.1	2.0	µg/L	10.00		111	40-160	1.37	25	†
1,1-Dichloroethane	10.7	1.0	µg/L	10.00		107	70-130	3.04	25	
1,2-Dichloroethane	12.0	1.0	µg/L	10.00		120	70-130	1.51	25	
1,1-Dichloroethylene	10.9	1.0	µg/L	10.00		109	70-130	2.33	25	
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.00		106	70-130	0.566	25	
trans-1,2-Dichloroethylene	10.7	1.0	µg/L	10.00		107	70-130	2.66	25	
1,2-Dichloropropane	11.1	1.0	µg/L	10.00		111	70-130	2.92	25	
cis-1,3-Dichloropropene	10.7	0.50	µg/L	10.00		107	70-130	1.89	25	
trans-1,3-Dichloropropene	10.5	0.50	µg/L	10.00		105	70-130	0.951	25	
Ethylbenzene	11.0	1.0	µg/L	10.00		110	70-130	1.56	25	
2-Hexanone (MBK)	107	10	µg/L	100.0		107	70-160	1.14	25	†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.00		108	70-130	2.82	25	
p-Isopropyltoluene (p-Cymene)	9.24	1.0	µg/L	10.00		92.4	70-130	2.19	25	
Methyl Acetate	16.2	1.0	µg/L	10.00		162	* 70-130	1.68	25	L-02
Methyl tert-Butyl Ether (MTBE)	10.3	1.0	µg/L	10.00		103	70-130	1.27	25	
Methyl Cyclohexane	12.0	1.0	µg/L	10.00		120	70-130	2.01	25	
Methylene Chloride	10.1	5.0	µg/L	10.00		101	70-130	0.696	25	
4-Methyl-2-pentanone (MIBK)	110	10	µg/L	100.0		110	70-160	1.26	25	†
Naphthalene	8.03	2.0	µg/L	10.00		80.3	40-130	2.14	25	V-05
n-Propylbenzene	10.8	1.0	µg/L	10.00		108	70-130	1.40	25	
Styrene	10.9	1.0	µg/L	10.00		109	70-130	2.31	25	
1,1,2,2-Tetrachloroethane	12.0	0.50	µg/L	10.00		120	70-130	2.87	25	
Tetrachloroethylene	12.8	1.0	µg/L	10.00		128	70-130	3.35	25	V-06
Toluene	11.2	1.0	µg/L	10.00		112	70-130	0.448	25	
1,2,3-Trichlorobenzene	8.50	5.0	µg/L	10.00		85.0	70-130	0.587	25	V-05
1,2,4-Trichlorobenzene	9.33	1.0	µg/L	10.00		93.3	70-130	0.969	25	
1,1,1-Trichloroethane	11.2	1.0	µg/L	10.00		112	70-130	1.35	25	
1,1,2-Trichloroethane	11.9	1.0	µg/L	10.00		119	70-130	1.10	25	
Trichloroethylene	11.6	1.0	µg/L	10.00		116	70-130	1.65	25	

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385502 - SW-846 5030B
LCS Dup (B385502-BSD1)

Prepared & Analyzed: 09/10/24

Trichlorofluoromethane (Freon 11)	12.3	2.0	µg/L	10.00		123	70-130	6.92	25	
1,2,3-Trichloropropane	12.0	2.0	µg/L	10.00		120	70-130	0.00	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.9	1.0	µg/L	10.00		129	70-130	2.82	25	
1,2,4-Trimethylbenzene	9.59	1.0	µg/L	10.00		95.9	70-130	1.89	25	
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.00		112	70-130	2.36	25	
Vinyl Chloride	10.8	2.0	µg/L	10.00		108	40-160	4.44	25	†
m+p Xylene	21.3	2.0	µg/L	20.00		107	70-130	1.32	25	
o-Xylene	10.6	1.0	µg/L	10.00		106	70-130	1.04	25	
Xylenes (total)	31.9	1.0	µg/L	30.00		106	0-200	1.23		
Surrogate: 1,2-Dichloroethane-d4	22.7		µg/L	25.00		90.8	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.00		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	26.4		µg/L	25.00		105	70-130			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**QUALITY CONTROL****Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385261 - SW-846 5030B**Blank (B385261-BLK1)**

Prepared: 09/06/24 Analyzed: 09/09/24

No TICs Found	0.0		µg/L
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Batch B385502 - SW-846 5030B**Blank (B385502-BLK1)**

Prepared & Analyzed: 09/10/24

No TICs Found	0.0		µg/L
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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch B385151 - SW-846 3510C										
Blank (B385151-BLK1)				Prepared: 09/05/24 Analyzed: 09/10/24						
2,3,4,6-Tetrachlorophenol	ND	20	µg/L							
Atrazine	ND	20	µg/L							
Benzaldehyde	ND	10	µg/L							R-05
Biphenyl	ND	20	µg/L							
Caprolactam	ND	10	µg/L							L-04
Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	20	µg/L							V-05
Anthracene	ND	5.0	µg/L							
Benzo(a)anthracene	ND	5.0	µg/L							
Benzo(a)pyrene	ND	5.0	µg/L							
Benzo(b)fluoranthene	ND	5.0	µg/L							
Benzo(g,h,i)perylene	ND	5.0	µg/L							
Benzo(k)fluoranthene	ND	5.0	µg/L							
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
2,2'-oxybis(1-Chloropropane)	ND	10	µg/L							
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L							
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
Carbazole	ND	10	µg/L							
4-Chloroaniline	ND	10	µg/L							
4-Chloro-3-methylphenol	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
4-Chlorophenylphenylether	ND	10	µg/L							
Chrysene	ND	5.0	µg/L							
Dibenz(a,h)anthracene	ND	5.0	µg/L							
Dibenzofuran	ND	5.0	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	20	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							V-04, V-20
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							V-04, V-20
Fluoranthene	ND	5.0	µg/L							
Fluorene	ND	5.0	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							
Hexachlorocyclopentadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L							
Isophorone	ND	10	µg/L							
1-Methylnaphthalene	ND	5.0	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							
2-Methylphenol	ND	10	µg/L							

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385151 - SW-846 3510C										
Blank (B385151-BLK1)										
Prepared: 09/05/24 Analyzed: 09/10/24										
3/4-Methylphenol	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
2-Nitroaniline	ND	10	µg/L							
3-Nitroaniline	ND	10	µg/L							V-20
4-Nitroaniline	ND	10	µg/L							
Nitrobenzene	ND	10	µg/L							
2-Nitrophenol	ND	10	µg/L							
4-Nitrophenol	ND	10	µg/L							
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
Pentachlorophenol	ND	10	µg/L							
Phenanthrene	ND	5.0	µg/L							
Phenol	ND	10	µg/L							
Pyrene	ND	5.0	µg/L							
Pyridine	ND	20	µg/L							V-34
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	88.6		µg/L	400.0		22.2	15-110			
Surrogate: Phenol-d6	58.6		µg/L	400.0		14.6	* 15-110			S-07
Surrogate: Nitrobenzene-d5	70.4		µg/L	200.0		35.2	30-130			
Surrogate: 2-Fluorobiphenyl	62.3		µg/L	200.0		31.2	30-130			
Surrogate: 2,4,6-Tribromophenol	146		µg/L	400.0		36.6	15-110			
Surrogate: p-Terphenyl-d14	67.6		µg/L	200.0		33.8	30-130			
LCS (B385151-BS1)										
Prepared: 09/05/24 Analyzed: 09/09/24										
2,3,4,6-Tetrachlorophenol	87.5	20	µg/L	100.0		87.5	40-140			
Atrazine	97.0	20	µg/L	100.0		97.0	40-140			
Benzaldehyde	73.6	10	µg/L	100.0		73.6	40-140			R-05
Biphenyl	77.1	20	µg/L	100.0		77.1	40-140			
Caprolactam	31.4	10	µg/L	100.0		31.4	* 40-140			L-04
Acenaphthene	75.5	5.0	µg/L	100.0		75.5	40-140			
Acenaphthylene	80.3	5.0	µg/L	100.0		80.3	40-140			
Acetophenone	70.5	10	µg/L	100.0		70.5	40-140			
Aniline	51.6	20	µg/L	100.0		51.6	40-140			V-05
Anthracene	82.1	5.0	µg/L	100.0		82.1	40-140			
Benzo(a)anthracene	83.6	5.0	µg/L	100.0		83.6	40-140			
Benzo(a)pyrene	85.8	5.0	µg/L	100.0		85.8	40-140			
Benzo(b)fluoranthene	83.6	5.0	µg/L	100.0		83.6	40-140			
Benzo(g,h,i)perylene	93.1	5.0	µg/L	100.0		93.1	40-140			
Benzo(k)fluoranthene	85.8	5.0	µg/L	100.0		85.8	40-140			
Bis(2-chloroethoxy)methane	75.9	10	µg/L	100.0		75.9	40-140			
Bis(2-chloroethyl)ether	69.6	10	µg/L	100.0		69.6	40-140			R-05
2,2'-oxybis(1-Chloropropane)	71.8	10	µg/L	100.0		71.8	40-140			
Bis(2-Ethylhexyl)phthalate	82.4	10	µg/L	100.0		82.4	40-140			
4-Bromophenylphenylether	83.5	10	µg/L	100.0		83.5	40-140			
Butylbenzylphthalate	84.2	10	µg/L	100.0		84.2	40-140			V-05
Carbazole	83.9	10	µg/L	100.0		83.9	40-140			
4-Chloroaniline	79.6	10	µg/L	100.0		79.6	40-140			
4-Chloro-3-methylphenol	68.0	10	µg/L	100.0		68.0	30-130			
2-Chloronaphthalene	72.7	10	µg/L	100.0		72.7	40-140			
2-Chlorophenol	59.6	10	µg/L	100.0		59.6	30-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385151 - SW-846 3510C										
LCS (B385151-BS1)										
Prepared: 09/05/24 Analyzed: 09/09/24										
4-Chlorophenylphenylether	78.6	10	µg/L	100.0		78.6	40-140			
Chrysene	79.2	5.0	µg/L	100.0		79.2	40-140			
Dibenz(a,h)anthracene	91.4	5.0	µg/L	100.0		91.4	40-140			
Dibenzofuran	80.4	5.0	µg/L	100.0		80.4	40-140			
Di-n-butylphthalate	84.5	10	µg/L	100.0		84.5	40-140			
3,3-Dichlorobenzidine	91.4	10	µg/L	100.0		91.4	40-140			
2,4-Dichlorophenol	66.0	10	µg/L	100.0		66.0	30-130			
Diethylphthalate	79.6	10	µg/L	100.0		79.6	40-140			
2,4-Dimethylphenol	66.9	10	µg/L	100.0		66.9	30-130			R-05
Dimethylphthalate	79.9	10	µg/L	100.0		79.9	40-140			
4,6-Dinitro-2-methylphenol	62.2	20	µg/L	100.0		62.2	30-130			
2,4-Dinitrophenol	48.6	10	µg/L	100.0		48.6	30-130			V-04
2,4-Dinitrotoluene	76.7	10	µg/L	100.0		76.7	40-140			
2,6-Dinitrotoluene	88.7	10	µg/L	100.0		88.7	40-140			
Di-n-octylphthalate	92.1	10	µg/L	100.0		92.1	40-140			V-04
Fluoranthene	85.3	5.0	µg/L	100.0		85.3	40-140			
Fluorene	80.6	5.0	µg/L	100.0		80.6	40-140			
Hexachlorobenzene	86.8	10	µg/L	100.0		86.8	40-140			
Hexachlorobutadiene	69.5	10	µg/L	100.0		69.5	40-140			R-05
Hexachlorocyclopentadiene	76.7	10	µg/L	100.0		76.7	30-140			†
Hexachloroethane	59.1	10	µg/L	100.0		59.1	40-140			
Indeno(1,2,3-cd)pyrene	99.8	5.0	µg/L	100.0		99.8	40-140			
Isophorone	81.3	10	µg/L	100.0		81.3	40-140			
1-Methylnaphthalene	71.8	5.0	µg/L	100.0		71.8	40-140			
2-Methylnaphthalene	77.8	5.0	µg/L	100.0		77.8	40-140			
2-Methylphenol	60.0	10	µg/L	100.0		60.0	30-130			
3/4-Methylphenol	58.3	10	µg/L	100.0		58.3	30-130			
Naphthalene	71.8	5.0	µg/L	100.0		71.8	40-140			R-05
2-Nitroaniline	91.3	10	µg/L	100.0		91.3	40-140			
3-Nitroaniline	88.0	10	µg/L	100.0		88.0	40-140			
4-Nitroaniline	81.8	10	µg/L	100.0		81.8	40-140			
Nitrobenzene	73.4	10	µg/L	100.0		73.4	40-140			R-05
2-Nitrophenol	63.9	10	µg/L	100.0		63.9	30-130			
4-Nitrophenol	33.2	10	µg/L	100.0		33.2	10-130			V-05 †
N-Nitrosodiphenylamine/Diphenylamine	83.2	10	µg/L	100.0		83.2	40-140			
N-Nitrosodi-n-propylamine	70.9	10	µg/L	100.0		70.9	40-140			
Pentachlorophenol	64.3	10	µg/L	100.0		64.3	30-130			
Phenanthrene	81.0	5.0	µg/L	100.0		81.0	40-140			
Phenol	33.1	10	µg/L	100.0		33.1	20-130			†
Pyrene	79.9	5.0	µg/L	100.0		79.9	40-140			
Pyridine	20.4	20	µg/L	100.0		20.4	10-140			R-05, V-34 †
1,2,4,5-Tetrachlorobenzene	77.4	10	µg/L	100.0		77.4	40-140			R-05
2,4,5-Trichlorophenol	69.4	10	µg/L	100.0		69.4	30-130			
2,4,6-Trichlorophenol	68.8	10	µg/L	100.0		68.8	30-130			
Surrogate: 2-Fluorophenol	187		µg/L	400.0		46.8	15-110			
Surrogate: Phenol-d6	144		µg/L	400.0		35.9	15-110			
Surrogate: Nitrobenzene-d5	163		µg/L	200.0		81.7	30-130			
Surrogate: 2-Fluorobiphenyl	166		µg/L	200.0		83.1	30-130			
Surrogate: 2,4,6-Tribromophenol	358		µg/L	400.0		89.4	15-110			
Surrogate: p-Terphenyl-d14	178		µg/L	200.0		89.2	30-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385151 - SW-846 3510C										
LCS Dup (B385151-BSD1)										
Prepared: 09/05/24 Analyzed: 09/09/24										
2,3,4,6-Tetrachlorophenol	103	20	µg/L	100.0		103	40-140	16.0	20	
Atrazine	106	20	µg/L	100.0		106	40-140	9.30	20	
Benzaldehyde	58.0	10	µg/L	100.0		58.0	40-140	23.7 *	20	R-05
Biphenyl	67.2	20	µg/L	100.0		67.2	40-140	13.7	20	
Caprolactam	37.6	10	µg/L	100.0		37.6 *	40-140	17.9	20	L-04
Acenaphthene	71.9	5.0	µg/L	100.0		71.9	40-140	4.90	20	
Acenaphthylene	73.0	5.0	µg/L	100.0		73.0	40-140	9.52	20	
Acetophenone	60.7	10	µg/L	100.0		60.7	40-140	14.9	20	
Aniline	37.3	20	µg/L	100.0		37.3 *	40-140	32.3	50	V-05 ‡
Anthracene	78.2	5.0	µg/L	100.0		78.2	40-140	4.87	20	
Benzo(a)anthracene	79.1	5.0	µg/L	100.0		79.1	40-140	5.54	20	
Benzo(a)pyrene	81.3	5.0	µg/L	100.0		81.3	40-140	5.39	20	
Benzo(b)fluoranthene	80.4	5.0	µg/L	100.0		80.4	40-140	3.90	20	
Benzo(g,h,i)perylene	83.0	5.0	µg/L	100.0		83.0	40-140	11.4	20	
Benzo(k)fluoranthene	81.0	5.0	µg/L	100.0		81.0	40-140	5.67	20	
Bis(2-chloroethoxy)methane	66.8	10	µg/L	100.0		66.8	40-140	12.8	20	
Bis(2-chloroethyl)ether	56.6	10	µg/L	100.0		56.6	40-140	20.6 *	20	R-05
2,2'-oxybis(1-Chloropropane)	59.8	10	µg/L	100.0		59.8	40-140	18.4	20	
Bis(2-Ethylhexyl)phthalate	85.7	10	µg/L	100.0		85.7	40-140	3.89	20	
4-Bromophenylphenylether	76.7	10	µg/L	100.0		76.7	40-140	8.53	20	
Butylbenzylphthalate	84.1	10	µg/L	100.0		84.1	40-140	0.0713	20	V-05
Carbazole	83.7	10	µg/L	100.0		83.7	40-140	0.203	20	
4-Chloroaniline	70.0	10	µg/L	100.0		70.0	40-140	12.7	20	
4-Chloro-3-methylphenol	74.8	10	µg/L	100.0		74.8	30-130	9.58	20	
2-Chloronaphthalene	60.6	10	µg/L	100.0		60.6	40-140	18.1	20	
2-Chlorophenol	52.8	10	µg/L	100.0		52.8	30-130	12.0	20	
4-Chlorophenylphenylether	77.0	10	µg/L	100.0		77.0	40-140	2.02	20	
Chrysene	73.8	5.0	µg/L	100.0		73.8	40-140	7.10	20	
Dibenz(a,h)anthracene	84.3	5.0	µg/L	100.0		84.3	40-140	8.05	20	
Dibenzofuran	76.6	5.0	µg/L	100.0		76.6	40-140	4.78	20	
Di-n-butylphthalate	90.8	10	µg/L	100.0		90.8	40-140	7.21	20	
3,3-Dichlorobenzidine	90.2	10	µg/L	100.0		90.2	40-140	1.35	20	
2,4-Dichlorophenol	65.2	10	µg/L	100.0		65.2	30-130	1.28	20	
Diethylphthalate	83.2	10	µg/L	100.0		83.2	40-140	4.36	20	
2,4-Dimethylphenol	54.8	10	µg/L	100.0		54.8	30-130	20.0	20	R-05
Dimethylphthalate	80.6	10	µg/L	100.0		80.6	40-140	0.848	50	‡
4,6-Dinitro-2-methylphenol	76.3	20	µg/L	100.0		76.3	30-130	20.5	50	‡
2,4-Dinitrophenol	77.4	10	µg/L	100.0		77.4	30-130	45.7	50	V-04 ‡
2,4-Dinitrotoluene	84.3	10	µg/L	100.0		84.3	40-140	9.53	20	
2,6-Dinitrotoluene	93.6	10	µg/L	100.0		93.6	40-140	5.28	20	
Di-n-octylphthalate	99.4	10	µg/L	100.0		99.4	40-140	7.61	20	V-04
Fluoranthene	87.5	5.0	µg/L	100.0		87.5	40-140	2.58	20	
Fluorene	79.8	5.0	µg/L	100.0		79.8	40-140	0.998	20	
Hexachlorobenzene	79.6	10	µg/L	100.0		79.6	40-140	8.61	20	
Hexachlorobutadiene	52.3	10	µg/L	100.0		52.3	40-140	28.2 *	20	R-05
Hexachlorocyclopentadiene	59.5	10	µg/L	100.0		59.5	30-140	25.3	50	† ‡
Hexachloroethane	46.6	10	µg/L	100.0		46.6	40-140	23.7	50	‡
Indeno(1,2,3-cd)pyrene	91.3	5.0	µg/L	100.0		91.3	40-140	8.95	50	‡
Isophorone	73.8	10	µg/L	100.0		73.8	40-140	9.66	20	
1-Methylnaphthalene	64.1	5.0	µg/L	100.0		64.1	40-140	11.3	20	
2-Methylnaphthalene	68.5	5.0	µg/L	100.0		68.5	40-140	12.6	20	
2-Methylphenol	53.4	10	µg/L	100.0		53.4	30-130	11.6	20	

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QUALITY CONTROL
Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385151 - SW-846 3510C										
LCS Dup (B385151-BSD1)										
Prepared: 09/05/24 Analyzed: 09/09/24										
3/4-Methylphenol	55.0	10	µg/L	100.0		55.0	30-130	5.79	20	
Naphthalene	57.0	5.0	µg/L	100.0		57.0	40-140	22.9 *	20	R-05
2-Nitroaniline	93.0	10	µg/L	100.0		93.0	40-140	1.82	20	
3-Nitroaniline	90.2	10	µg/L	100.0		90.2	40-140	2.47	20	
4-Nitroaniline	90.9	10	µg/L	100.0		90.9	40-140	10.5	20	
Nitrobenzene	59.2	10	µg/L	100.0		59.2	40-140	21.5 *	20	R-05
2-Nitrophenol	60.5	10	µg/L	100.0		60.5	30-130	5.42	20	
4-Nitrophenol	42.3	10	µg/L	100.0		42.3	10-130	24.2	50	V-05 † ‡
N-Nitrosodiphenylamine/Diphenylamine	76.6	10	µg/L	100.0		76.6	40-140	8.22	20	
N-Nitrosodi-n-propylamine	63.5	10	µg/L	100.0		63.5	40-140	10.9	20	
Pentachlorophenol	73.5	10	µg/L	100.0		73.5	30-130	13.4	50	‡
Phenanthrene	76.0	5.0	µg/L	100.0		76.0	40-140	6.38	20	
Phenol	29.0	10	µg/L	100.0		29.0	20-130	13.3	20	†
Pyrene	69.4	5.0	µg/L	100.0		69.4	40-140	14.0	20	
Pyridine	9.84	20	µg/L	100.0		9.84 *	10-140	70.1 *	50	L-07A, V-34 † ‡
1,2,4,5-Tetrachlorobenzene	61.5	10	µg/L	100.0		61.5	40-140	22.8 *	20	R-05
2,4,5-Trichlorophenol	76.7	10	µg/L	100.0		76.7	30-130	10.0	20	
2,4,6-Trichlorophenol	72.9	10	µg/L	100.0		72.9	30-130	5.84	50	‡
Surrogate: 2-Fluorophenol	151		µg/L	400.0		37.8	15-110			
Surrogate: Phenol-d6	119		µg/L	400.0		29.8	15-110			
Surrogate: Nitrobenzene-d5	123		µg/L	200.0		61.6	30-130			
Surrogate: 2-Fluorobiphenyl	131		µg/L	200.0		65.3	30-130			
Surrogate: 2,4,6-Tribromophenol	394		µg/L	400.0		98.5	15-110			
Surrogate: p-Terphenyl-d14	146		µg/L	200.0		73.1	30-130			

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QUALITY CONTROL
1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Batch B385540 - SW-846 3510C								
Blank (B385540-BLK1)								
Prepared: 09/10/24 Analyzed: 09/16/24								
1,4-Dioxane	ND	0.20	µg/L					
Surrogate: 1,4-Dioxane-d8	2.63		µg/L	10.00		26.3	15-110	
LCS (B385540-BS1)								
Prepared: 09/10/24 Analyzed: 09/16/24								
1,4-Dioxane	8.54	0.20	µg/L	10.00		85.4	40-140	
Surrogate: 1,4-Dioxane-d8	3.09		µg/L	10.00		30.9	15-110	
LCS Dup (B385540-BSD1)								
Prepared: 09/10/24 Analyzed: 09/16/24								
1,4-Dioxane	8.55	0.20	µg/L	10.00		85.5	40-140	0.117 30
Surrogate: 1,4-Dioxane-d8	2.57		µg/L	10.00		25.7	15-110	

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386975 - Draft Method 1633										
Blank (B386975-BLK1)										
				Prepared: 09/26/24 Analyzed: 09/28/24						
Perfluorobutanoic acid (PFBA)	ND	4.0	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.99	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.99	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.99	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.99	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.99	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.99	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.99	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.99	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.99	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.99	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.99	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.99	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.99	ng/L							
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.9	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	4.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	4.0	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	88.4		ng/L	99.21		89.1	10-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386975 - Draft Method 1633
Blank (B386975-BLK1)

Prepared: 09/26/24 Analyzed: 09/28/24

Surrogate: 13C5-PFPeA	51.1		ng/L	49.61		103	35-150			
Surrogate: 13C5-PFHxA	21.4		ng/L	24.80		86.3	55-150			
Surrogate: 13C4-PFHpA	20.3		ng/L	24.80		82.0	55-150			
Surrogate: 13C8-PFOA	21.8		ng/L	24.80		88.0	60-140			
Surrogate: 13C9-PFNA	11.1		ng/L	12.40		89.4	55-140			
Surrogate: 13C6-PFDA	11.4		ng/L	12.40		91.8	50-140			
Surrogate: 13C7-PFUnA	11.5		ng/L	12.40		92.6	30-140			
Surrogate: 13C2-PFDoA	10.1		ng/L	12.40		81.4	10-150			
Surrogate: 13C2-PFTeDA	9.48		ng/L	12.40		76.4	10-130			
Surrogate: 13C3-PFBS	22.7		ng/L	24.80		91.6	55-150			
Surrogate: 13C3-PFHxS	21.9		ng/L	24.80		88.5	55-150			
Surrogate: 13C8-PFOS	22.0		ng/L	24.80		88.5	45-140			
Surrogate: 13C2-4:2FTS	41.0		ng/L	49.61		82.6	60-200			
Surrogate: 13C2-6:2FTS	44.5		ng/L	49.61		89.7	60-200			
Surrogate: 13C2-8:2FTS	42.9		ng/L	49.61		86.5	50-200			
Surrogate: 13C8-PFOA	19.1		ng/L	24.80		77.0	30-130			
Surrogate: D3-NMeFOSA	13.4		ng/L	24.80		54.1	15-130			
Surrogate: D5-NEtFOSA	13.9		ng/L	24.80		56.0	10-130			
Surrogate: D3-NMeFOSAA	42.6		ng/L	49.61		85.8	45-200			
Surrogate: D5-NEtFOSAA	53.9		ng/L	49.61		109	10-200			
Surrogate: D7-NMeFOSE	171		ng/L	248.0		69.1	10-150			
Surrogate: D9-NEtFOSE	165		ng/L	248.0		66.5	10-150			
Surrogate: 13C3-HFPO-DA	82.1		ng/L	99.21		82.8	25-160			

LCS (B386975-BS1)

Prepared: 09/26/24 Analyzed: 09/28/24

Perfluorobutanoic acid (PFBA)	98.0	4.0	ng/L	95.05		103	58-148			
Perfluoropentanoic acid (PFPeA)	51.5	2.0	ng/L	47.52		108	54-152			
Perfluorohexanoic acid (PFHxA)	24.6	0.99	ng/L	23.76		104	55-152			
Perfluoroheptanoic acid (PFHpA)	23.6	0.99	ng/L	23.76		99.2	54-154			
Perfluorooctanoic acid (PFOA)	23.9	0.99	ng/L	23.76		101	52-161			
Perfluorononanoic acid (PFNA)	25.9	0.99	ng/L	23.76		109	59-149			
Perfluorodecanoic acid (PFDA)	25.6	0.99	ng/L	23.76		108	52-147			
Perfluoroundecanoic acid (PFUnA)	23.8	0.99	ng/L	23.76		100	48-159			
Perfluorododecanoic acid (PFDoA)	24.6	0.99	ng/L	23.76		104	64-142			
Perfluorotridecanoic acid (PFTTrDA)	25.7	0.99	ng/L	23.76		108	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.3	0.99	ng/L	23.76		106	47-161			
Perfluorobutanesulfonic acid (PFBS)	20.9	0.99	ng/L	21.09		99.3	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.5	0.99	ng/L	22.34		105	59-151			
Perfluorohexanesulfonic acid (PFHxS)	20.6	0.99	ng/L	21.74		94.8	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.4	0.99	ng/L	22.63		103	55-152			
Perfluorooctanesulfonic acid (PFOS)	21.8	0.99	ng/L	22.04		99.1	58-149			
Perfluorononanesulfonic acid (PFNS)	22.4	0.99	ng/L	22.87		97.8	52-148			
Perfluorodecanesulfonic acid (PFDS)	21.4	0.99	ng/L	22.93		93.3	51-147			
Perfluorododecanesulfonic acid (PFDoS)	20.1	0.99	ng/L	23.05		87.2	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	99.0	4.0	ng/L	89.11		111	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	98.1	4.0	ng/L	90.30		109	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	97.0	4.0	ng/L	91.49		106	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.8	0.99	ng/L	23.76		104	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	25.9	0.99	ng/L	23.76		109	63-145			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386975 - Draft Method 1633
LCS (B386975-BS1)

Prepared: 09/26/24 Analyzed: 09/28/24

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	26.4	0.99	ng/L	23.76		111	65-139			
N-MeFOSAA (NMeFOSAA)	25.6	0.99	ng/L	23.76		108	58-144			
N-EtFOSAA (NEtFOSAA)	21.2	0.99	ng/L	23.76		89.0	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	250	9.9	ng/L	237.6		105	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	247	9.9	ng/L	237.6		104	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	104	4.0	ng/L	95.05		110	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	105	4.0	ng/L	89.70		117	68-146			
9Cl-PF3ONS (F53B Minor)	97.9	4.0	ng/L	89.11		110	56-156			
11Cl-PF3OUDS (F53B Major)	93.5	4.0	ng/L	89.70		104	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	200	9.9	ng/L	237.6		84.2	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1190	50	ng/L	1188		100	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1160	50	ng/L	1188		97.9	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	54.6	2.0	ng/L	42.30		129	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	44.0	2.0	ng/L	47.52		92.5	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	51.0	2.0	ng/L	47.52		107	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	52.9	2.0	ng/L	47.52		111	48-161			
Surrogate: 13C4-PFBA	81.3		ng/L	99.01		82.1	10-130			
Surrogate: 13C5-PFPeA	46.8		ng/L	49.50		94.5	35-150			
Surrogate: 13C5-PFHxA	19.8		ng/L	24.75		79.9	55-150			
Surrogate: 13C4-PFHpA	19.0		ng/L	24.75		76.6	55-150			
Surrogate: 13C8-PFOA	20.2		ng/L	24.75		81.4	60-140			
Surrogate: 13C9-PFNA	10.1		ng/L	12.38		81.5	55-140			
Surrogate: 13C6-PFDA	9.93		ng/L	12.38		80.2	50-140			
Surrogate: 13C7-PFUnA	10.0		ng/L	12.38		81.2	30-140			
Surrogate: 13C2-PFDoA	9.03		ng/L	12.38		73.0	10-150			
Surrogate: 13C2-PFTeDA	8.01		ng/L	12.38		64.7	10-130			
Surrogate: 13C3-PFBS	19.9		ng/L	24.75		80.4	55-150			
Surrogate: 13C3-PFHxS	19.8		ng/L	24.75		79.9	55-150			
Surrogate: 13C8-PFOS	20.5		ng/L	24.75		83.0	45-140			
Surrogate: 13C2-4:2FTS	38.1		ng/L	49.50		77.0	60-200			
Surrogate: 13C2-6:2FTS	39.2		ng/L	49.50		79.2	60-200			
Surrogate: 13C2-8:2FTS	39.4		ng/L	49.50		79.6	50-200			
Surrogate: 13C8-PFOSA	16.7		ng/L	24.75		67.5	30-130			
Surrogate: D3-NMeFOSA	13.4		ng/L	24.75		54.2	15-130			
Surrogate: D5-NEtFOSA	13.8		ng/L	24.75		55.7	10-130			
Surrogate: D3-NMeFOSAA	38.9		ng/L	49.50		78.5	45-200			
Surrogate: D5-NEtFOSAA	45.9		ng/L	49.50		92.7	10-200			
Surrogate: D7-NMeFOSE	156		ng/L	247.5		62.8	10-150			
Surrogate: D9-NEtFOSE	151		ng/L	247.5		60.9	10-150			
Surrogate: 13C3-HFPO-DA	73.0		ng/L	99.01		73.7	25-160			

MRL Check (B386975-MRL1)

Prepared: 09/26/24 Analyzed: 09/28/24

Perfluorobutanoic acid (PFBA)	8.42	3.9	ng/L	7.791		108	44-157			
Perfluoropentanoic acid (PFPeA)	4.40	1.9	ng/L	3.895		113	57-148			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386975 - Draft Method 1633										
MRL Check (B386975-MRL1)				Prepared: 09/26/24 Analyzed: 09/28/24						
Perfluorohexanoic acid (PFHxA)	2.06	0.97	ng/L	1.948		106	62-149			
Perfluoroheptanoic acid (PFHpA)	2.03	0.97	ng/L	1.948		104	56-150			
Perfluorooctanoic acid (PFOA)	1.91	0.97	ng/L	1.948		97.9	57-161			
Perfluorononanoic acid (PFNA)	2.10	0.97	ng/L	1.948		108	53-157			
Perfluorodecanoic acid (PFDA)	2.16	0.97	ng/L	1.948		111	43-158			
Perfluoroundecanoic acid (PFUnA)	2.11	0.97	ng/L	1.948		109	50-155			
Perfluorododecanoic acid (PFDoA)	2.06	0.97	ng/L	1.948		106	60-141			
Perfluorotridecanoic acid (PFTrDA)	2.19	0.97	ng/L	1.948		113	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.12	0.97	ng/L	1.948		109	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.83	0.97	ng/L	1.729		106	63-145			
Perfluoropentanesulfonic acid (PFPeS)	2.17	0.97	ng/L	1.831		118	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.86	0.97	ng/L	1.782		104	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.14	0.97	ng/L	1.855		115	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.30	0.97	ng/L	1.806		128	43-162			
Perfluorononanesulfonic acid (PFNS)	1.92	0.97	ng/L	1.875		102	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.82	0.97	ng/L	1.879		97.0	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.84	0.97	ng/L	1.889		97.5	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.13	3.9	ng/L	7.304		111	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	8.25	3.9	ng/L	7.401		111	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.76	3.9	ng/L	7.498		117	46-165			
Perfluorooctanesulfonamide (PFOSA)	2.07	0.97	ng/L	1.948		106	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.36	0.97	ng/L	1.948		121	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.23	0.97	ng/L	1.948		114	49-156			
N-MeFOSAA (NMeFOSAA)	1.70	0.97	ng/L	1.948		87.4	32-160			
N-EtFOSAA (NEtFOSAA)	1.92	0.97	ng/L	1.948		98.5	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	20.9	9.7	ng/L	19.48		107	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	21.3	9.7	ng/L	19.48		109	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.09	3.9	ng/L	7.791		104	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.24	3.9	ng/L	7.352		112	61-148			
9Cl-PF3ONS (F53B Minor)	7.83	3.9	ng/L	7.304		107	44-167			
11Cl-PF3OUDS (F53B Major)	6.95	3.9	ng/L	7.352		94.5	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	15.8	9.7	ng/L	19.48		81.1	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	95.4	49	ng/L	97.38		97.9	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	87.7	49	ng/L	97.38		90.1	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.94	1.9	ng/L	3.467		114	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.47	1.9	ng/L	3.895		89.2	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.87	1.9	ng/L	3.895		99.4	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.14	1.9	ng/L	3.895		106	47-160			
Surrogate: 13C4-PFBA	77.1		ng/L	97.38		79.1	10-130			
Surrogate: 13C5-PFPeA	44.7		ng/L	48.69		91.9	35-150			
Surrogate: 13C5-PFHxA	18.9		ng/L	24.35		77.6	55-150			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386975 - Draft Method 1633
MRL Check (B386975-MRL1)

Prepared: 09/26/24 Analyzed: 09/28/24

Surrogate: 13C4-PFHpA	17.8		ng/L	24.35		73.0	55-150			
Surrogate: 13C8-PFOA	19.6		ng/L	24.35		80.3	60-140			
Surrogate: 13C9-PFNA	9.71		ng/L	12.17		79.8	55-140			
Surrogate: 13C6-PFDA	9.58		ng/L	12.17		78.7	50-140			
Surrogate: 13C7-PFUnA	9.33		ng/L	12.17		76.7	30-140			
Surrogate: 13C2-PFDoA	8.74		ng/L	12.17		71.8	10-150			
Surrogate: 13C2-PFTeDA	7.63		ng/L	12.17		62.7	10-130			
Surrogate: 13C3-PFBS	19.9		ng/L	24.35		81.7	55-150			
Surrogate: 13C3-PFHxS	19.5		ng/L	24.35		80.2	55-150			
Surrogate: 13C8-PFOS	18.7		ng/L	24.35		77.0	45-140			
Surrogate: 13C2-4:2FTS	34.8		ng/L	48.69		71.4	60-200			
Surrogate: 13C2-6:2FTS	38.0		ng/L	48.69		78.1	60-200			
Surrogate: 13C2-8:2FTS	37.5		ng/L	48.69		77.0	50-200			
Surrogate: 13C8-PFOSA	16.2		ng/L	24.35		66.6	30-130			
Surrogate: D3-NMeFOSA	11.2		ng/L	24.35		46.1	15-130			
Surrogate: D5-NEtFOSA	12.1		ng/L	24.35		49.7	10-130			
Surrogate: D3-NMeFOSAA	36.7		ng/L	48.69		75.3	45-200			
Surrogate: D5-NEtFOSAA	44.9		ng/L	48.69		92.2	10-200			
Surrogate: D7-NMeFOSE	144		ng/L	243.5		59.1	10-150			
Surrogate: D9-NEtFOSE	146		ng/L	243.5		60.0	10-150			
Surrogate: 13C3-HFPO-DA	72.0		ng/L	97.38		73.9	25-160			

Matrix Spike (B386975-MS1)

Source: 2410588-03

Prepared: 09/26/24 Analyzed: 09/28/24

Perfluorobutanoic acid (PFBA)	141	3.7	ng/L	88.45	48.1	106	58-148			
Perfluoropentanoic acid (PFPeA)	54.7	1.8	ng/L	44.23	7.25	107	54-152			
Perfluorohexanoic acid (PFHxA)	24.3	0.92	ng/L	22.11	1.28	104	55-152			
Perfluoroheptanoic acid (PFHpA)	22.9	0.92	ng/L	22.11	ND	104	54-154			
Perfluorooctanoic acid (PFOA)	23.1	0.92	ng/L	22.11	ND	104	52-161			
Perfluorononanoic acid (PFNA)	22.5	0.92	ng/L	22.11	ND	102	59-149			
Perfluorodecanoic acid (PFDA)	23.1	0.92	ng/L	22.11	ND	104	52-147			
Perfluoroundecanoic acid (PFUnA)	21.8	0.92	ng/L	22.11	ND	98.4	48-159			
Perfluorododecanoic acid (PFDoA)	22.7	0.92	ng/L	22.11	ND	103	64-142			
Perfluorotridecanoic acid (PFTTrDA)	22.4	0.92	ng/L	22.11	ND	101	49-148			
Perfluorotetradecanoic acid (PFTeDA)	22.5	0.92	ng/L	22.11	ND	102	47-161			
Perfluorobutanesulfonic acid (PFBS)	19.6	0.92	ng/L	19.63	ND	99.8	62-144			
Perfluoropentanesulfonic acid (PFPeS)	21.1	0.92	ng/L	20.79	ND	101	59-151			
Perfluorohexanesulfonic acid (PFHxS)	19.2	0.92	ng/L	20.23	ND	94.9	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	21.4	0.92	ng/L	21.06	ND	102	55-152			
Perfluorooctanesulfonic acid (PFOS)	20.1	0.92	ng/L	20.51	ND	97.8	58-149			
Perfluorononanesulfonic acid (PFNS)	18.8	0.92	ng/L	21.28	ND	88.3	52-148			
Perfluorodecanesulfonic acid (PFDS)	16.2	0.92	ng/L	21.34	ND	76.1	51-147			
Perfluorododecanesulfonic acid (PFDoS)	16.4	0.92	ng/L	21.45	ND	76.3	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	90.9	3.7	ng/L	82.93	ND	110	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	93.6	3.7	ng/L	84.03	ND	111	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	88.8	3.7	ng/L	85.14	ND	104	63-152			
Perfluorooctanesulfonamide (PFOSA)	21.9	0.92	ng/L	22.11	ND	98.9	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	24.3	0.92	ng/L	22.11	ND	110	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.4	0.92	ng/L	22.11	ND	110	65-139			
N-MeFOSAA (NMeFOSAA)	24.4	0.92	ng/L	22.11	ND	110	58-144			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386975 - Draft Method 1633

Matrix Spike (B386975-MS1)		Source: 2410588-03			Prepared: 09/26/24 Analyzed: 09/28/24					
N-EtFOSAA (NEtFOSAA)	18.6	0.92	ng/L	22.11	ND	84.2	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	230	9.2	ng/L	221.1	ND	104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	227	9.2	ng/L	221.1	ND	103	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	97.1	3.7	ng/L	88.45	ND	110	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	92.9	3.7	ng/L	83.48	ND	111	68-146			
9Cl-PF3ONS (F53B Minor)	81.3	3.7	ng/L	82.93	ND	98.0	56-156			
11Cl-PF3OUdS (F53B Major)	60.6	3.7	ng/L	83.48	ND	72.6	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	187	9.2	ng/L	221.1	ND	84.5	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA) (5:3FTCA)	1170	46	ng/L	1106	ND	106	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1100	46	ng/L	1106	ND	99.8	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	51.7	1.8	ng/L	39.36	ND	131	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	42.5	1.8	ng/L	44.23	ND	96.1	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	47.1	1.8	ng/L	44.23	ND	107	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	50.9	1.8	ng/L	44.23	ND	115	48-161			
Surrogate: 13C4-PFBA	74.2		ng/L	92.14		80.6	10-130			
Surrogate: 13C5-PFPeA	42.8		ng/L	46.07		93.0	35-150			
Surrogate: 13C5-PFHxA	17.6		ng/L	23.04		76.6	55-150			
Surrogate: 13C4-PFHpA	16.8		ng/L	23.04		73.0	55-150			
Surrogate: 13C8-PFOA	18.1		ng/L	23.04		78.6	60-140			
Surrogate: 13C9-PFNA	9.18		ng/L	11.52		79.7	55-140			
Surrogate: 13C6-PFDA	8.57		ng/L	11.52		74.4	50-140			
Surrogate: 13C7-PFUnA	7.97		ng/L	11.52		69.2	30-140			
Surrogate: 13C2-PFDoA	6.72		ng/L	11.52		58.3	10-150			
Surrogate: 13C2-PFTeDA	6.27		ng/L	11.52		54.4	10-130			
Surrogate: 13C3-PFBS	18.6		ng/L	23.04		81.0	55-150			
Surrogate: 13C3-PFHxS	18.7		ng/L	23.04		81.3	55-150			
Surrogate: 13C8-PFOS	18.1		ng/L	23.04		78.5	45-140			
Surrogate: 13C2-4:2FTS	34.7		ng/L	46.07		75.3	60-200			
Surrogate: 13C2-6:2FTS	36.5		ng/L	46.07		79.2	60-200			
Surrogate: 13C2-8:2FTS	33.2		ng/L	46.07		72.1	50-200			
Surrogate: 13C8-PFOA	15.4		ng/L	23.04		67.1	30-130			
Surrogate: D3-NMeFOSA	10.2		ng/L	23.04		44.2	15-130			
Surrogate: D5-NEtFOSA	10.5		ng/L	23.04		45.6	10-130			
Surrogate: D3-NMeFOSAA	30.5		ng/L	46.07		66.3	45-200			
Surrogate: D5-NEtFOSAA	34.4		ng/L	46.07		74.7	10-200			
Surrogate: D7-NMeFOSE	106		ng/L	230.4		46.1	10-150			
Surrogate: D9-NEtFOSE	104		ng/L	230.4		45.1	10-150			
Surrogate: 13C3-HFPO-DA	70.2		ng/L	92.14		76.2	25-160			

Matrix Spike Dup (B386975-MSD1)		Source: 2410588-03			Prepared: 09/26/24 Analyzed: 09/28/24					
Perfluorobutanoic acid (PFBA)	150	3.9	ng/L	92.97	48.1	110	58-148	5.82	20	
Perfluoropentanoic acid (PFPeA)	59.6	1.9	ng/L	46.49	7.25	113	54-152	8.60	20	
Perfluorohexanoic acid (PFHxA)	26.2	0.97	ng/L	23.24	1.28	107	55-152	7.49	25	
Perfluoroheptanoic acid (PFHpA)	24.4	0.97	ng/L	23.24	ND	105	54-154	6.23	25	
Perfluorooctanoic acid (PFOA)	25.1	0.97	ng/L	23.24	ND	108	52-161	8.45	25	

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386975 - Draft Method 1633										
Matrix Spike Dup (B386975-MSD1)	Source: 2410588-03			Prepared: 09/26/24 Analyzed: 09/28/24						
Perfluorononanoic acid (PFNA)	24.8	0.97	ng/L	23.24	ND	107	59-149	10.0	25	
Perfluorodecanoic acid (PFDA)	24.6	0.97	ng/L	23.24	ND	106	52-147	6.54	25	
Perfluoroundecanoic acid (PFUnA)	24.6	0.97	ng/L	23.24	ND	106	48-159	12.2	30	
Perfluorododecanoic acid (PFDoA)	23.8	0.97	ng/L	23.24	ND	102	64-142	4.65	25	
Perfluorotridecanoic acid (PFTrDA)	24.2	0.97	ng/L	23.24	ND	104	49-148	7.81	25	
Perfluorotetradecanoic acid (PFTeDA)	24.2	0.97	ng/L	23.24	ND	104	47-161	7.30	25	
Perfluorobutanesulfonic acid (PFBS)	21.2	0.97	ng/L	20.63	ND	103	62-144	8.08	20	
Perfluoropentanesulfonic acid (PFPeS)	23.9	0.97	ng/L	21.85	ND	109	59-151	12.4	25	
Perfluorohexanesulfonic acid (PFHxS)	21.2	0.97	ng/L	21.27	ND	99.7	57-146	9.95	25	
Perfluoroheptanesulfonic acid (PFHpS)	26.1	0.97	ng/L	22.14	ND	118	55-152	19.7	25	
Perfluorooctanesulfonic acid (PFOS)	22.0	0.97	ng/L	21.56	ND	102	58-149	9.34	20	
Perfluorononanesulfonic acid (PFNS)	19.1	0.97	ng/L	22.37	ND	85.4	52-148	1.60	25	
Perfluorodecanesulfonic acid (PFDS)	18.0	0.97	ng/L	22.43	ND	80.4	51-147	10.5	25	
Perfluorododecanesulfonic acid (PFDoS)	17.6	0.97	ng/L	22.55	ND	78.2	36-145	7.39	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	96.2	3.9	ng/L	87.16	ND	110	67-146	5.58	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	99.8	3.9	ng/L	88.32	ND	113	61-151	6.41	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	102	3.9	ng/L	89.49	ND	114	63-152	14.1	30	
Perfluorooctanesulfonamide (PFOSA)	24.0	0.97	ng/L	23.24	ND	103	61-148	9.14	20	
N-methyl perfluorooctanesulfonamide (NMeFOSA)	26.5	0.97	ng/L	23.24	ND	114	63-145	8.74	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	27.7	0.97	ng/L	23.24	ND	119	65-139	12.6	25	
N-MeFOSAA (NMeFOSAA)	25.4	0.97	ng/L	23.24	ND	109	58-144	4.02	25	
N-EtFOSAA (NEtFOSAA)	21.2	0.97	ng/L	23.24	ND	91.1	59-146	12.8	25	
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	246	9.7	ng/L	232.4	ND	106	71-136	6.69	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	244	9.7	ng/L	232.4	ND	105	69-137	7.34	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	102	3.9	ng/L	92.97	ND	110	63-144	4.82	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	99.7	3.9	ng/L	87.74	ND	114	68-146	7.05	20	
9Cl-PF3ONS (F53B Minor)	80.8	3.9	ng/L	87.16	ND	92.7	56-156	0.595	30	
11Cl-PF3OUDS (F53B Major)	63.7	3.9	ng/L	87.74	ND	72.6	46-156	4.96	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	197	9.7	ng/L	232.4	ND	84.6	62-129	5.13	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1200	48	ng/L	1162	ND	103	63-134	2.17	20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1170	48	ng/L	1162	ND	101	50-138	5.95	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	52.6	1.9	ng/L	41.37	ND	127	56-151	1.59	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	44.7	1.9	ng/L	46.49	ND	96.1	51-145	4.95	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	49.9	1.9	ng/L	46.49	ND	107	55-148	5.67	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	53.6	1.9	ng/L	46.49	ND	115	48-161	5.08	35	
Surrogate: 13C4-PFBA	79.7		ng/L	96.85		82.3	10-130			
Surrogate: 13C5-PFPeA	46.8		ng/L	48.42		96.6	35-150			
Surrogate: 13C5-PFHxA	19.5		ng/L	24.21		80.7	55-150			
Surrogate: 13C4-PFHpA	18.7		ng/L	24.21		77.1	55-150			
Surrogate: 13C8-PFOA	19.0		ng/L	24.21		78.5	60-140			
Surrogate: 13C9-PFNA	10.2		ng/L	12.11		83.8	55-140			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386975 - Draft Method 1633
Matrix Spike Dup (B386975-MSD1)
Source: 2410588-03

Prepared: 09/26/24 Analyzed: 09/28/24

Surrogate: 13C6-PFDA	8.80		ng/L	12.11		72.7	50-140			
Surrogate: 13C7-PFUnA	7.96		ng/L	12.11		65.8	30-140			
Surrogate: 13C2-PFDoA	7.42		ng/L	12.11		61.3	10-150			
Surrogate: 13C2-PFTeDA	7.01		ng/L	12.11		57.9	10-130			
Surrogate: 13C3-PFBS	20.8		ng/L	24.21		86.1	55-150			
Surrogate: 13C3-PFHxS	20.0		ng/L	24.21		82.5	55-150			
Surrogate: 13C8-PFOS	19.1		ng/L	24.21		79.0	45-140			
Surrogate: 13C2-4:2FTS	39.7		ng/L	48.42		81.9	60-200			
Surrogate: 13C2-6:2FTS	40.1		ng/L	48.42		82.9	60-200			
Surrogate: 13C2-8:2FTS	33.1		ng/L	48.42		68.4	50-200			
Surrogate: 13C8-PFOSA	16.2		ng/L	24.21		67.0	30-130			
Surrogate: D3-NMeFOSA	11.5		ng/L	24.21		47.5	15-130			
Surrogate: D5-NEtFOSA	11.2		ng/L	24.21		46.1	10-130			
Surrogate: D3-NMeFOSAA	32.4		ng/L	48.42		66.9	45-200			
Surrogate: D5-NEtFOSAA	32.6		ng/L	48.42		67.4	10-200			
Surrogate: D7-NMeFOSE	118		ng/L	242.1		48.8	10-150			
Surrogate: D9-NEtFOSE	113		ng/L	242.1		46.8	10-150			
Surrogate: 13C3-HFPO-DA	76.8		ng/L	96.85		79.3	25-160			

Batch B388184 - Draft Method 1633
Blank (B388184-BLK1)

Prepared: 10/08/24 Analyzed: 10/10/24

Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.98	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.98	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.98	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.98	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.98	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.98	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.98	ng/L							
Perfluorotridecanoic acid (PFTTrDA)	ND	0.98	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.98	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.98	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.98	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.98	ng/L							

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388184 - Draft Method 1633
Blank (B388184-BLK1)

Prepared: 10/08/24 Analyzed: 10/10/24

N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.8	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	3.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	3.9	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA) (5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	79.8		ng/L	98.38		81.1	10-130			
Surrogate: 13C5-PFPeA	35.1		ng/L	49.19		71.4	35-150			
Surrogate: 13C5-PFHxA	19.2		ng/L	24.60		78.0	55-150			
Surrogate: 13C4-PFHpA	18.8		ng/L	24.60		76.5	55-150			
Surrogate: 13C8-PFOA	20.1		ng/L	24.60		81.9	60-140			
Surrogate: 13C9-PFNA	9.85		ng/L	12.30		80.1	55-140			
Surrogate: 13C6-PFDA	9.50		ng/L	12.30		77.3	50-140			
Surrogate: 13C7-PFUnA	10.2		ng/L	12.30		83.0	30-140			
Surrogate: 13C2-PFDoA	9.61		ng/L	12.30		78.2	10-150			
Surrogate: 13C2-PFTeDA	9.06		ng/L	12.30		73.7	10-130			
Surrogate: 13C3-PFBS	18.2		ng/L	24.60		74.1	55-150			
Surrogate: 13C3-PFHxS	20.1		ng/L	24.60		81.6	55-150			
Surrogate: 13C8-PFOS	19.2		ng/L	24.60		78.0	45-140			
Surrogate: 13C2-4:2FTS	31.8		ng/L	49.19		64.6	60-200			
Surrogate: 13C2-6:2FTS	37.9		ng/L	49.19		77.0	60-200			
Surrogate: 13C2-8:2FTS	42.8		ng/L	49.19		86.9	50-200			
Surrogate: 13C8-PFOSA	21.3		ng/L	24.60		86.5	30-130			
Surrogate: D3-NMeFOSA	15.9		ng/L	24.60		64.5	15-130			
Surrogate: D5-NEtFOSA	15.3		ng/L	24.60		62.3	10-130			
Surrogate: D3-NMeFOSAA	36.4		ng/L	49.19		74.0	45-200			
Surrogate: D5-NEtFOSAA	37.0		ng/L	49.19		75.2	10-200			
Surrogate: D7-NMeFOSE	219		ng/L	246.0		89.0	10-150			
Surrogate: D9-NEtFOSE	206		ng/L	246.0		83.9	10-150			
Surrogate: 13C3-HFPO-DA	68.2		ng/L	98.38		69.3	25-160			

LCS (B388184-BS1)

Prepared: 10/08/24 Analyzed: 10/10/24

Perfluorobutanoic acid (PFBA)	96.5	3.9	ng/L	94.51		102	58-148			
Perfluoropentanoic acid (PFPeA)	49.9	2.0	ng/L	47.25		106	54-152			
Perfluorohexanoic acid (PFHxA)	25.0	0.98	ng/L	23.63		106	55-152			
Perfluoroheptanoic acid (PFHpA)	23.7	0.98	ng/L	23.63		100	54-154			
Perfluorooctanoic acid (PFOA)	23.4	0.98	ng/L	23.63		98.9	52-161			
Perfluorononanoic acid (PFNA)	24.6	0.98	ng/L	23.63		104	59-149			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B388184 - Draft Method 1633										
LCS (B388184-BS1)										
Prepared: 10/08/24 Analyzed: 10/10/24										
Perfluorodecanoic acid (PFDA)	24.6	0.98	ng/L	23.63		104	52-147			
Perfluoroundecanoic acid (PFUnA)	24.2	0.98	ng/L	23.63		102	48-159			
Perfluorododecanoic acid (PFDoA)	24.6	0.98	ng/L	23.63		104	64-142			
Perfluorotridecanoic acid (PFTrDA)	25.8	0.98	ng/L	23.63		109	49-148			
Perfluorotetradecanoic acid (PFTeDA)	24.6	0.98	ng/L	23.63		104	47-161			
Perfluorobutanesulfonic acid (PFBS)	20.3	0.98	ng/L	20.97		97.0	62-144			
Perfluoropentanesulfonic acid (PFPeS)	22.2	0.98	ng/L	22.21		99.7	59-151			
Perfluorohexanesulfonic acid (PFHxS)	19.9	0.98	ng/L	21.62		92.0	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	22.8	0.98	ng/L	22.50		101	55-152			
Perfluorooctanesulfonic acid (PFOS)	20.5	0.98	ng/L	21.91		93.6	58-149			
Perfluorononanesulfonic acid (PFNS)	21.7	0.98	ng/L	22.74		95.3	52-148			
Perfluorodecanesulfonic acid (PFDS)	21.5	0.98	ng/L	22.80		94.2	51-147			
Perfluorododecanesulfonic acid (PFDoS)	20.1	0.98	ng/L	22.92		87.9	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	95.2	3.9	ng/L	88.60		107	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	99.3	3.9	ng/L	89.78		111	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	102	3.9	ng/L	90.96		112	63-152			
Perfluorooctanesulfonamide (PFOSA)	23.1	0.98	ng/L	23.63		97.9	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	25.7	0.98	ng/L	23.63		109	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	26.5	0.98	ng/L	23.63		112	65-139			
N-MeFOSAA (NMeFOSAA)	26.0	0.98	ng/L	23.63		110	58-144			
N-EtFOSAA (NEtFOSAA)	20.7	0.98	ng/L	23.63		87.6	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	248	9.8	ng/L	236.3		105	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	245	9.8	ng/L	236.3		104	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	103	3.9	ng/L	94.51		109	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	106	3.9	ng/L	89.19		119	68-146			
9Cl-PF3ONS (F53B Minor)	101	3.9	ng/L	88.60		114	56-156			
11Cl-PF3OUdS (F53B Major)	94.0	3.9	ng/L	89.19		105	46-156			
3-Perfluoropropyl propanoic acid (FPPrA) (3:3FTCA)	214	9.8	ng/L	236.3		90.4	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	1280	49	ng/L	1181		109	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1200	49	ng/L	1181		101	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	48.8	2.0	ng/L	42.06		116	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	42.5	2.0	ng/L	47.25		90.0	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	48.3	2.0	ng/L	47.25		102	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	44.0	2.0	ng/L	47.25		93.0	48-161			
Surrogate: 13C4-PFBA	70.8		ng/L	98.45		71.9	10-130			
Surrogate: 13C5-PFPeA	40.5		ng/L	49.22		82.3	35-150			
Surrogate: 13C5-PFHxA	16.8		ng/L	24.61		68.4	55-150			
Surrogate: 13C4-PFHpA	16.2		ng/L	24.61		65.7	55-150			
Surrogate: 13C8-PFOA	17.7		ng/L	24.61		71.8	60-140			
Surrogate: 13C9-PFNA	8.53		ng/L	12.31		69.3	55-140			
Surrogate: 13C6-PFDA	8.55		ng/L	12.31		69.5	50-140			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388184 - Draft Method 1633
LCS (B388184-BS1)

Prepared: 10/08/24 Analyzed: 10/10/24

Surrogate: 13C7-PFUnA	8.75		ng/L	12.31		71.1	30-140			
Surrogate: 13C2-PFDoA	7.90		ng/L	12.31		64.2	10-150			
Surrogate: 13C2-PFTeDA	7.62		ng/L	12.31		61.9	10-130			
Surrogate: 13C3-PFBS	16.7		ng/L	24.61		67.7	55-150			
Surrogate: 13C3-PFHxS	17.3		ng/L	24.61		70.1	55-150			
Surrogate: 13C8-PFOS	18.2		ng/L	24.61		74.1	45-140			
Surrogate: 13C2-4:2FTS	32.6		ng/L	49.22		66.2	60-200			
Surrogate: 13C2-6:2FTS	32.0		ng/L	49.22		65.1	60-200			
Surrogate: 13C2-8:2FTS	32.9		ng/L	49.22		66.9	50-200			
Surrogate: 13C8-PFOA	16.2		ng/L	24.61		65.8	30-130			
Surrogate: D3-NMeFOSA	13.8		ng/L	24.61		56.0	15-130			
Surrogate: D5-NEtFOSA	13.9		ng/L	24.61		56.4	10-130			
Surrogate: D3-NMeFOSAA	34.2		ng/L	49.22		69.5	45-200			
Surrogate: D5-NEtFOSAA	34.6		ng/L	49.22		70.3	10-200			
Surrogate: D7-NMeFOSE	162		ng/L	246.1		65.8	10-150			
Surrogate: D9-NEtFOSE	166		ng/L	246.1		67.4	10-150			
Surrogate: 13C3-HFPO-DA	63.0		ng/L	98.45		64.0	25-160			

MRL Check (B388184-MRL1)

Prepared: 10/08/24 Analyzed: 10/10/24

Perfluorobutanoic acid (PFBA)	8.60	4.0	ng/L	7.904		109	44-157			
Perfluoropentanoic acid (PFPeA)	4.42	2.0	ng/L	3.952		112	57-148			
Perfluorohexanoic acid (PFHxA)	2.21	0.99	ng/L	1.976		112	62-149			
Perfluoroheptanoic acid (PFHpA)	2.08	0.99	ng/L	1.976		105	56-150			
Perfluorooctanoic acid (PFOA)	2.31	0.99	ng/L	1.976		117	57-161			
Perfluorononanoic acid (PFNA)	2.13	0.99	ng/L	1.976		108	53-157			
Perfluorodecanoic acid (PFDA)	2.22	0.99	ng/L	1.976		112	43-158			
Perfluoroundecanoic acid (PFUnA)	2.18	0.99	ng/L	1.976		110	50-155			
Perfluorododecanoic acid (PFDoA)	2.09	0.99	ng/L	1.976		106	60-141			
Perfluorotridecanoic acid (PFTTrDA)	2.33	0.99	ng/L	1.976		118	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.20	0.99	ng/L	1.976		111	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.94	0.99	ng/L	1.754		111	63-145			
Perfluoropentanesulfonic acid (PFPeS)	2.32	0.99	ng/L	1.858		125	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.73	0.99	ng/L	1.808		95.7	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.16	0.99	ng/L	1.882		115	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.16	0.99	ng/L	1.833		118	43-162			
Perfluorononanesulfonic acid (PFNS)	2.07	0.99	ng/L	1.902		109	46-151			
Perfluorodecanesulfonic acid (PFDS)	2.12	0.99	ng/L	1.907		111	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.98	0.99	ng/L	1.917		103	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.30	4.0	ng/L	7.410		112	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	8.99	4.0	ng/L	7.509		120	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.54	4.0	ng/L	7.608		112	46-165			
Perfluorooctanesulfonamide (PFOSA)	2.09	0.99	ng/L	1.976		106	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.20	0.99	ng/L	1.976		111	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.52	0.99	ng/L	1.976		128	49-156			
N-MeFOSAA (NMeFOSAA)	2.23	0.99	ng/L	1.976		113	32-160			
N-EtFOSAA (NEtFOSAA)	1.66	0.99	ng/L	1.976		84.1	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	21.5	9.9	ng/L	19.76		109	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	21.2	9.9	ng/L	19.76		107	60-147			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388184 - Draft Method 1633
MRL Check (B388184-MRL1)

Prepared: 10/08/24 Analyzed: 10/10/24

Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.57	4.0	ng/L	7.904		108	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.71	4.0	ng/L	7.460		117	61-148			
9Cl-PF3ONS (F53B Minor)	8.44	4.0	ng/L	7.410		114	44-167			
11Cl-PF3OUdS (F53B Major)	7.72	4.0	ng/L	7.460		103	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	20.0	9.9	ng/L	19.76		101	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	124	49	ng/L	98.80		125	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	114	49	ng/L	98.80		116	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	4.15	2.0	ng/L	3.517		118	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	2.0	ng/L	3.952		101	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.24	2.0	ng/L	3.952		107	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.77	2.0	ng/L	3.952		95.3	47-160			
Surrogate: 13C4-PFBA	69.5		ng/L	98.80		70.3	10-130			
Surrogate: 13C5-PFPeA	39.2		ng/L	49.40		79.3	35-150			
Surrogate: 13C5-PFHxA	16.9		ng/L	24.70		68.5	55-150			
Surrogate: 13C4-PFHpA	15.9		ng/L	24.70		64.5	55-150			
Surrogate: 13C8-PFOA	16.5		ng/L	24.70		66.7	60-140			
Surrogate: 13C9-PFNA	8.73		ng/L	12.35		70.7	55-140			
Surrogate: 13C6-PFDA	8.15		ng/L	12.35		66.0	50-140			
Surrogate: 13C7-PFUnA	8.19		ng/L	12.35		66.3	30-140			
Surrogate: 13C2-PFDoA	7.64		ng/L	12.35		61.9	10-150			
Surrogate: 13C2-PFTeDA	7.33		ng/L	12.35		59.4	10-130			
Surrogate: 13C3-PFBS	16.9		ng/L	24.70		68.4	55-150			
Surrogate: 13C3-PFHxS	16.9		ng/L	24.70		68.6	55-150			
Surrogate: 13C8-PFOS	16.3		ng/L	24.70		65.8	45-140			
Surrogate: 13C2-4:2FTS	29.3		ng/L	49.40		59.3	60-200	*		
Surrogate: 13C2-6:2FTS	30.4		ng/L	49.40		61.4	60-200			
Surrogate: 13C2-8:2FTS	27.6		ng/L	49.40		55.9	50-200			
Surrogate: 13C8-PFOSA	16.0		ng/L	24.70		65.0	30-130			
Surrogate: D3-NMeFOSA	12.8		ng/L	24.70		51.8	15-130			
Surrogate: D5-NEtFOSA	12.5		ng/L	24.70		50.4	10-130			
Surrogate: D3-NMeFOSAA	30.5		ng/L	49.40		61.6	45-200			
Surrogate: D5-NEtFOSAA	31.4		ng/L	49.40		63.5	10-200			
Surrogate: D7-NMeFOSE	159		ng/L	247.0		64.4	10-150			
Surrogate: D9-NEtFOSE	160		ng/L	247.0		64.8	10-150			
Surrogate: 13C3-HFPO-DA	61.0		ng/L	98.80		61.7	25-160			

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B385747 - SW-846 7470A Prep
Blank (B385747-BLK1)

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury ND 0.00020 mg/L

LCS (B385747-BS1)

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury 0.00399 0.00020 mg/L 0.004020 99.2 80-120

LCS Dup (B385747-BSD1)

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury 0.00409 0.00020 mg/L 0.004020 102 80-120 2.59 20

Matrix Spike (B385747-MS3)
Source: 2410588-01

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury 0.00422 0.00020 mg/L 0.004020 0.000129 102 75-125

Matrix Spike (B385747-MS4)
Source: 2410588-03

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury 0.00392 0.00020 mg/L 0.004020 ND 97.5 75-125

Matrix Spike Dup (B385747-MSD3)
Source: 2410588-01

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury 0.00454 0.00020 mg/L 0.004020 0.000129 110 75-125 7.12 20

Matrix Spike Dup (B385747-MSD4)
Source: 2410588-03

Prepared: 09/11/24 Analyzed: 09/12/24

Mercury 0.00428 0.00020 mg/L 0.004020 ND 106 75-125 8.79 20

Batch B386361 - SW-846 3005A
Blank (B386361-BLK1)

Prepared: 09/17/24 Analyzed: 09/18/24

Aluminum	ND	0.050	mg/L
Antimony	ND	0.050	mg/L
Barium	ND	0.050	mg/L
Beryllium	ND	0.0040	mg/L
Cadmium	ND	0.0040	mg/L
Calcium	ND	0.50	mg/L
Chromium	ND	0.010	mg/L
Cobalt	ND	0.010	mg/L
Iron	ND	0.050	mg/L
Magnesium	ND	0.050	mg/L
Manganese	ND	0.010	mg/L
Nickel	ND	0.010	mg/L
Selenium	ND	0.050	mg/L
Silver	ND	0.010	mg/L
Sodium	ND	2.0	mg/L
Thallium	ND	0.050	mg/L
Vanadium	ND	0.010	mg/L

Blank (B386361-BLK2)

Prepared: 09/17/24 Analyzed: 09/19/24

Arsenic	ND	0.010	mg/L
Potassium	ND	2.0	mg/L

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386361 - SW-846 3005A
Blank (B386361-BLK3)

Prepared: 09/17/24 Analyzed: 09/20/24

Copper	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Sodium	ND	2.0	mg/L							
Zinc	ND	0.010	mg/L							

LCS (B386361-BS1)

Prepared: 09/17/24 Analyzed: 09/18/24

Aluminum	0.470	0.050	mg/L	0.5000		94.1	80-120			
Antimony	0.502	0.050	mg/L	0.5000		100	80-120			
Barium	0.520	0.050	mg/L	0.5000		104	80-120			
Beryllium	0.508	0.0040	mg/L	0.5000		102	80-120			
Cadmium	0.541	0.0040	mg/L	0.5000		108	80-120			
Calcium	4.05	0.50	mg/L	4.000		101	80-120			
Chromium	0.520	0.010	mg/L	0.5000		104	80-120			
Cobalt	0.517	0.010	mg/L	0.5000		103	80-120			
Iron	4.02	0.050	mg/L	4.000		100	80-120			
Magnesium	3.70	0.050	mg/L	4.000		92.5	80-120			
Manganese	0.497	0.010	mg/L	0.5000		99.5	80-120			
Nickel	0.523	0.010	mg/L	0.5000		105	80-120			
Selenium	0.515	0.050	mg/L	0.5000		103	80-120			
Silver	0.586	0.010	mg/L	0.5000		117	80-120			
Sodium	3.72	2.0	mg/L	4.000		93.1	80-120			
Thallium	0.524	0.050	mg/L	0.5000		105	80-120			
Vanadium	0.515	0.010	mg/L	0.5000		103	80-120			

LCS (B386361-BS2)

Prepared: 09/17/24 Analyzed: 09/19/24

Arsenic	0.470	0.010	mg/L	0.5000		94.1	80-120			
Potassium	4.25	2.0	mg/L	4.000		106	80-120			

LCS (B386361-BS3)

Prepared: 09/17/24 Analyzed: 09/20/24

Copper	1.03	0.010	mg/L	1.000		103	80-120			
Lead	0.516	0.010	mg/L	0.5000		103	80-120			
Zinc	1.04	0.010	mg/L	1.000		104	80-120			

LCS Dup (B386361-BSD1)

Prepared: 09/17/24 Analyzed: 09/18/24

Aluminum	0.491	0.050	mg/L	0.5000		98.2	80-120	4.24	30	
Antimony	0.517	0.050	mg/L	0.5000		103	80-120	2.81	20	
Barium	0.513	0.050	mg/L	0.5000		103	80-120	1.25	20	
Beryllium	0.509	0.0040	mg/L	0.5000		102	80-120	0.202	20	
Cadmium	0.546	0.0040	mg/L	0.5000		109	80-120	0.899	20	
Calcium	4.02	0.50	mg/L	4.000		100	80-120	0.791	20	
Chromium	0.519	0.010	mg/L	0.5000		104	80-120	0.296	20	
Cobalt	0.520	0.010	mg/L	0.5000		104	80-120	0.541	20	
Iron	4.00	0.050	mg/L	4.000		100	80-120	0.396	20	
Magnesium	3.83	0.050	mg/L	4.000		95.8	80-120	3.53	20	
Manganese	0.494	0.010	mg/L	0.5000		98.9	80-120	0.626	20	
Nickel	0.524	0.010	mg/L	0.5000		105	80-120	0.228	30	
Selenium	0.517	0.050	mg/L	0.5000		103	80-120	0.451	20	
Silver	0.595	0.010	mg/L	0.5000		119	80-120	1.54	20	
Sodium	4.14	2.0	mg/L	4.000		104	80-120	10.7	20	
Thallium	0.541	0.050	mg/L	0.5000		108	80-120	3.07	20	
Vanadium	0.514	0.010	mg/L	0.5000		103	80-120	0.203	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386361 - SW-846 3005A										
LCS Dup (B386361-BSD2)				Prepared: 09/17/24 Analyzed: 09/19/24						
Arsenic	0.473	0.010	mg/L	0.5000		94.7	80-120	0.638	20	
Potassium	4.27	2.0	mg/L	4.000		107	80-120	0.556	20	
LCS Dup (B386361-BSD3)				Prepared: 09/17/24 Analyzed: 09/20/24						
Copper	1.03	0.010	mg/L	1.000		103	80-120	0.00983	20	
Lead	0.518	0.010	mg/L	0.5000		104	80-120	0.212	20	
Zinc	1.04	0.010	mg/L	1.000		104	80-120	0.542	20	
Matrix Spike (B386361-MS1)				Source: 2410588-03		Prepared: 09/17/24 Analyzed: 09/18/24				
Aluminum	0.503	0.050	mg/L	0.5000	ND	101	75-125			
Antimony	0.507	0.050	mg/L	0.5000	ND	101	75-125			
Barium	0.590	0.050	mg/L	0.5000	0.0572	106	75-125			
Beryllium	0.507	0.0040	mg/L	0.5000	ND	101	75-125			
Cadmium	0.543	0.0040	mg/L	0.5000	ND	109	75-125			
Calcium	12.6	0.50	mg/L	4.000	8.27	108	75-125			
Chromium	0.511	0.010	mg/L	0.5000	ND	102	75-125			
Cobalt	0.505	0.010	mg/L	0.5000	ND	101	75-125			
Iron	4.11	0.050	mg/L	4.000	ND	103	75-125			
Magnesium	9.47	0.050	mg/L	4.000	5.62	96.2	75-125			
Manganese	0.514	0.010	mg/L	0.5000	0.0145	99.9	75-125			
Nickel	0.515	0.010	mg/L	0.5000	0.00964	101	75-125			
Selenium	0.512	0.050	mg/L	0.5000	ND	102	75-125			
Silver	0.583	0.010	mg/L	0.5000	ND	117	75-125			
Sodium	92.2	2.0	mg/L	4.000	86.8	136	* 75-125			MS-19
Thallium	0.533	0.050	mg/L	0.5000	ND	107	75-125			
Vanadium	0.518	0.010	mg/L	0.5000	ND	104	75-125			
Matrix Spike (B386361-MS2)				Source: 2410588-03		Prepared: 09/17/24 Analyzed: 09/19/24				
Arsenic	0.476	0.010	mg/L	0.5000	ND	95.2	75-125			
Potassium	18.1	2.0	mg/L	4.000	14.0	102	75-125			
Matrix Spike (B386361-MS3)				Source: 2410588-03		Prepared: 09/17/24 Analyzed: 09/20/24				
Copper	1.09	0.010	mg/L	1.000	0.0294	106	75-125			
Lead	0.509	0.010	mg/L	0.5000	ND	102	75-125			
Zinc	1.06	0.010	mg/L	1.000	0.0214	104	75-125			
Matrix Spike Dup (B386361-MSD1)				Source: 2410588-03		Prepared: 09/17/24 Analyzed: 09/18/24				
Aluminum	0.488	0.050	mg/L	0.5000	ND	97.5	75-125	3.16	20	
Antimony	0.528	0.050	mg/L	0.5000	ND	106	75-125	4.05	20	
Barium	0.581	0.050	mg/L	0.5000	0.0572	105	75-125	1.43	20	
Beryllium	0.505	0.0040	mg/L	0.5000	ND	101	75-125	0.540	20	
Cadmium	0.555	0.0040	mg/L	0.5000	ND	111	75-125	2.19	20	
Calcium	12.6	0.50	mg/L	4.000	8.27	108	75-125	0.0486	20	
Chromium	0.519	0.010	mg/L	0.5000	ND	104	75-125	1.42	20	
Cobalt	0.518	0.010	mg/L	0.5000	ND	104	75-125	2.51	20	
Iron	4.10	0.050	mg/L	4.000	ND	103	75-125	0.0762	20	
Magnesium	9.25	0.050	mg/L	4.000	5.62	90.7	75-125	2.38	20	
Manganese	0.514	0.010	mg/L	0.5000	0.0145	99.8	75-125	0.0417	20	
Nickel	0.524	0.010	mg/L	0.5000	0.00964	103	75-125	1.81	20	
Selenium	0.523	0.050	mg/L	0.5000	ND	105	75-125	2.10	20	
Silver	0.598	0.010	mg/L	0.5000	ND	120	75-125	2.43	20	
Sodium	87.3	2.0	mg/L	4.000	86.8	12.3	* 75-125	5.50	20	MS-19
Thallium	0.546	0.050	mg/L	0.5000	ND	109	75-125	2.40	20	
Vanadium	0.523	0.010	mg/L	0.5000	ND	105	75-125	1.04	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386361 - SW-846 3005A
Matrix Spike Dup (B386361-MSD2)
Source: 2410588-03

Prepared: 09/17/24 Analyzed: 09/19/24

Arsenic	0.477	0.010	mg/L	0.5000	ND	95.4	75-125	0.152	20	
Potassium	18.0	2.0	mg/L	4.000	14.0	102	75-125	0.146	20	

Matrix Spike Dup (B386361-MSD3)
Source: 2410588-03

Prepared: 09/17/24 Analyzed: 09/20/24

Copper	1.08	0.010	mg/L	1.000	0.0294	105	75-125	0.757	20	
Lead	0.501	0.010	mg/L	0.5000	ND	100	75-125	1.57	20	
Zinc	1.06	0.010	mg/L	1.000	0.0214	104	75-125	0.304	20	

Post Spike (B386361-PS1)
Source: 2410588-03

Prepared: 09/17/24 Analyzed: 09/18/24

Aluminum	2.13		mg/L	2.000	0.00705	106	75-125			
Antimony	2.21		mg/L	2.000	0.000331	110	75-125			
Barium	2.38		mg/L	2.000	0.0560	116	75-125			
Beryllium	2.20		mg/L	2.000	0.000261	110	75-125			
Cadmium	2.36		mg/L	2.000	0.000165	118	75-125			
Calcium	26.5		mg/L	16.00	8.10	115	75-125			
Chromium	2.22		mg/L	2.000	0.00111	111	75-125			
Cobalt	2.18		mg/L	2.000	-0.000890	109	75-125			
Iron	17.7		mg/L	16.00	0.00899	111	75-125			
Magnesium	22.3		mg/L	16.00	5.51	105	75-125			
Manganese	2.18		mg/L	2.000	0.0142	108	75-125			
Nickel	2.19		mg/L	2.000	0.00945	109	75-125			
Selenium	2.17		mg/L	2.000	0.00558	108	75-125			
Silver	2.27		mg/L	2.000	0.000687	113	75-125			
Sodium	102		mg/L	16.00	85.0	105	75-125			
Thallium	2.37		mg/L	2.000	0.00120	118	75-125			
Vanadium	2.24		mg/L	2.000	0.00506	112	75-125			

Dilution Check (B386361-SRL1)
Source: 2410588-03

Prepared: 09/17/24 Analyzed: 09/18/24

Aluminum	ND	0.25	mg/L		ND				20	
Antimony	ND	0.25	mg/L		ND				20	
Barium	0.0563	0.25	mg/L		0.0572			1.59	20	
Beryllium	ND	0.020	mg/L		ND				20	
Cadmium	ND	0.020	mg/L		ND				20	
Calcium	8.00	2.5	mg/L		8.27			3.21	20	
Chromium	ND	0.050	mg/L		ND				20	
Cobalt	ND	0.050	mg/L		ND				20	
Iron	ND	0.25	mg/L		ND				20	
Magnesium	5.48	0.25	mg/L		5.62			2.60	20	
Manganese	0.0150	0.050	mg/L		0.0145			3.51	20	
Nickel	ND	0.050	mg/L		ND				20	
Selenium	ND	0.25	mg/L		ND				20	
Silver	ND	0.050	mg/L		ND				20	
Sodium	89.4	10	mg/L		86.8			3.03	20	
Thallium	ND	0.25	mg/L		ND				20	
Vanadium	ND	0.050	mg/L		ND				20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386381 - SW-846 7470A Prep										
Blank (B386381-BLK1)				Prepared: 09/17/24 Analyzed: 09/18/24						
Mercury	ND	0.00020	mg/L							
LCS (B386381-BS1)				Prepared: 09/17/24 Analyzed: 09/18/24						
Mercury	0.00410	0.00020	mg/L	0.004020		102	80-120			
LCS Dup (B386381-BSD1)				Prepared: 09/17/24 Analyzed: 09/18/24						
Mercury	0.00401	0.00020	mg/L	0.004020		99.8	80-120	2.26	20	
Duplicate (B386381-DUP1)				Source: 2410588-02		Prepared: 09/17/24 Analyzed: 09/18/24				
Mercury	ND	0.00020	mg/L		ND			NC	20	
Matrix Spike (B386381-MS1)				Source: 2410588-02		Prepared: 09/17/24 Analyzed: 09/18/24				
Mercury	0.00428	0.00020	mg/L	0.004020	ND	107	75-125			
Batch B386463 - SW-846 3005A										
Blank (B386463-BLK1)				Prepared: 09/18/24 Analyzed: 09/19/24						
Aluminum	ND	0.050	mg/L							
Antimony	ND	0.050	mg/L							
Arsenic	ND	0.010	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.50	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Blank (B386463-BLK2)				Prepared: 09/18/24 Analyzed: 09/21/24						
Copper	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	ND	0.010	mg/L							

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386463 - SW-846 3005A										
Blank (B386463-BLK3)										
Prepared: 09/18/24 Analyzed: 09/23/24										
Vanadium	ND	0.010	mg/L							
LCS (B386463-BS1)										
Prepared: 09/18/24 Analyzed: 09/19/24										
Aluminum	0.492	0.050	mg/L	0.5000		98.5	80-120			
Antimony	0.502	0.050	mg/L	0.5000		100	80-120			
Arsenic	0.467	0.010	mg/L	0.5000		93.5	80-120			
Barium	0.487	0.050	mg/L	0.5000		97.4	80-120			
Beryllium	0.496	0.0040	mg/L	0.5000		99.2	80-120			
Cadmium	0.493	0.0040	mg/L	0.5000		98.6	80-120			
Calcium	3.86	0.50	mg/L	4.000		96.5	80-120			
Chromium	0.488	0.010	mg/L	0.5000		97.7	80-120			
Cobalt	0.493	0.010	mg/L	0.5000		98.6	80-120			
Iron	3.99	0.050	mg/L	4.000		99.6	80-120			
Magnesium	3.88	0.050	mg/L	4.000		97.1	80-120			
Manganese	0.494	0.010	mg/L	0.5000		98.7	80-120			
Potassium	3.83	2.0	mg/L	4.000		95.7	80-120			
Selenium	0.490	0.050	mg/L	0.5000		98.0	80-120			
Silver	0.529	0.010	mg/L	0.5000		106	80-120			
Sodium	4.03	2.0	mg/L	4.000		101	80-120			
Thallium	0.492	0.050	mg/L	0.5000		98.4	80-120			
LCS (B386463-BS2)										
Prepared: 09/18/24 Analyzed: 09/21/24										
Copper	1.04	0.010	mg/L	1.000		104	80-120			
Lead	0.501	0.010	mg/L	0.5000		100	80-120			
Nickel	0.516	0.010	mg/L	0.5000		103	80-120			
Vanadium	0.512	0.010	mg/L	0.5000		102	80-120			
Zinc	0.999	0.010	mg/L	1.000		99.9	80-120			
LCS (B386463-BS3)										
Prepared: 09/18/24 Analyzed: 09/23/24										
Vanadium	0.537	0.010	mg/L	0.5000		107	80-120			
LCS Dup (B386463-BSD1)										
Prepared: 09/18/24 Analyzed: 09/19/24										
Aluminum	0.480	0.050	mg/L	0.5000		96.0	80-120	2.53	30	
Antimony	0.481	0.050	mg/L	0.5000		96.3	80-120	4.16	20	
Arsenic	0.448	0.010	mg/L	0.5000		89.5	80-120	4.32	20	
Barium	0.466	0.050	mg/L	0.5000		93.2	80-120	4.35	20	
Beryllium	0.480	0.0040	mg/L	0.5000		96.0	80-120	3.33	20	
Cadmium	0.472	0.0040	mg/L	0.5000		94.4	80-120	4.32	20	
Calcium	3.75	0.50	mg/L	4.000		93.7	80-120	2.93	20	
Chromium	0.467	0.010	mg/L	0.5000		93.4	80-120	4.46	20	
Cobalt	0.470	0.010	mg/L	0.5000		94.1	80-120	4.69	20	
Iron	3.88	0.050	mg/L	4.000		96.9	80-120	2.78	20	
Magnesium	3.76	0.050	mg/L	4.000		94.1	80-120	3.15	20	
Manganese	0.481	0.010	mg/L	0.5000		96.2	80-120	2.54	20	
Potassium	3.73	2.0	mg/L	4.000		93.2	80-120	2.63	20	
Selenium	0.469	0.050	mg/L	0.5000		93.8	80-120	4.33	20	
Silver	0.509	0.010	mg/L	0.5000		102	80-120	3.99	20	
Sodium	3.90	2.0	mg/L	4.000		97.6	80-120	3.10	20	
Thallium	0.464	0.050	mg/L	0.5000		92.9	80-120	5.72	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386463 - SW-846 3005A
LCS Dup (B386463-BSD2)

Prepared: 09/18/24 Analyzed: 09/21/24

Copper	1.02	0.010	mg/L	1.000		102	80-120	1.96	20	
Lead	0.494	0.010	mg/L	0.5000		98.8	80-120	1.38	20	
Nickel	0.506	0.010	mg/L	0.5000		101	80-120	2.01	30	
Vanadium	0.503	0.010	mg/L	0.5000		101	80-120	1.86	20	
Zinc	0.981	0.010	mg/L	1.000		98.1	80-120	1.84	20	

LCS Dup (B386463-BSD3)

Prepared: 09/18/24 Analyzed: 09/23/24

Vanadium	0.534	0.010	mg/L	0.5000		107	80-120	0.622	20	
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Matrix Spike (B386463-MS1)
Source: 24I0588-01

Prepared: 09/18/24 Analyzed: 09/19/24

Aluminum	0.504	0.050	mg/L	0.5000	ND	101	75-125			
Antimony	0.492	0.050	mg/L	0.5000	ND	98.5	75-125			
Arsenic	0.467	0.010	mg/L	0.5000	ND	93.4	75-125			
Barium	0.535	0.050	mg/L	0.5000	0.0506	96.8	75-125			
Beryllium	0.486	0.0040	mg/L	0.5000	ND	97.3	75-125			
Cadmium	0.483	0.0040	mg/L	0.5000	ND	96.5	75-125			
Calcium	11.4	0.50	mg/L	4.000	7.86	89.4	75-125			
Chromium	0.471	0.010	mg/L	0.5000	ND	94.3	75-125			
Cobalt	0.473	0.010	mg/L	0.5000	0.00481	93.6	75-125			
Iron	4.03	0.050	mg/L	4.000	0.0587	99.2	75-125			
Magnesium	9.40	0.050	mg/L	4.000	5.78	90.4	75-125			
Manganese	0.689	0.010	mg/L	0.5000	0.202	97.4	75-125			
Potassium	16.7	2.0	mg/L	4.000	13.3	84.7	75-125			
Selenium	0.474	0.050	mg/L	0.5000	ND	94.8	75-125			
Silver	0.518	0.010	mg/L	0.5000	ND	104	75-125			
Sodium	92.3	2.0	mg/L	4.000	90.9	34.5	* 75-125			MS-19
Thallium	0.483	0.050	mg/L	0.5000	ND	96.7	75-125			

Matrix Spike (B386463-MS2)
Source: 24I0588-01

Prepared: 09/18/24 Analyzed: 09/21/24

Copper	1.11	0.010	mg/L	1.000	ND	111	75-125			
Lead	0.489	0.010	mg/L	0.5000	0.00848	96.0	75-125			
Nickel	0.513	0.010	mg/L	0.5000	ND	103	75-125			
Vanadium	0.516	0.010	mg/L	0.5000	ND	103	75-125			
Zinc	1.01	0.010	mg/L	1.000	ND	101	75-125			

Matrix Spike (B386463-MS3)
Source: 24I0588-01

Prepared: 09/18/24 Analyzed: 09/23/24

Vanadium	0.537	0.010	mg/L	0.5000	ND	107	75-125			
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Matrix Spike Dup (B386463-MSD1)
Source: 24I0588-01

Prepared: 09/18/24 Analyzed: 09/19/24

Aluminum	0.530	0.050	mg/L	0.5000	ND	106	75-125	4.89	20	
Antimony	0.512	0.050	mg/L	0.5000	ND	102	75-125	3.96	20	
Arsenic	0.486	0.010	mg/L	0.5000	ND	97.3	75-125	4.07	20	
Barium	0.558	0.050	mg/L	0.5000	0.0506	102	75-125	4.36	20	
Beryllium	0.503	0.0040	mg/L	0.5000	ND	101	75-125	3.42	20	
Cadmium	0.504	0.0040	mg/L	0.5000	ND	101	75-125	4.36	20	
Calcium	11.8	0.50	mg/L	4.000	7.86	97.2	75-125	2.69	20	
Chromium	0.487	0.010	mg/L	0.5000	ND	97.3	75-125	3.20	20	
Cobalt	0.489	0.010	mg/L	0.5000	0.00481	96.8	75-125	3.33	20	
Iron	4.12	0.050	mg/L	4.000	0.0587	102	75-125	2.35	20	
Magnesium	9.72	0.050	mg/L	4.000	5.78	98.5	75-125	3.40	20	
Manganese	0.705	0.010	mg/L	0.5000	0.202	101	75-125	2.26	20	
Potassium	17.2	2.0	mg/L	4.000	13.3	97.5	75-125	3.03	20	
Selenium	0.495	0.050	mg/L	0.5000	ND	99.1	75-125	4.36	20	
Silver	0.530	0.010	mg/L	0.5000	ND	106	75-125	2.27	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386463 - SW-846 3005A										
Matrix Spike Dup (B386463-MSD1)		Source: 24I0588-01		Prepared: 09/18/24 Analyzed: 09/19/24						
Sodium	96.5	2.0	mg/L	4.000	90.9	139 *	75-125	4.42	20	MS-19
Thallium	0.505	0.050	mg/L	0.5000	ND	101	75-125	4.32	20	
Matrix Spike Dup (B386463-MSD2)		Source: 24I0588-01		Prepared: 09/18/24 Analyzed: 09/21/24						
Copper	1.10	0.010	mg/L	1.000	ND	110	75-125	1.32	20	
Lead	0.490	0.010	mg/L	0.5000	0.00848	96.4	75-125	0.337	20	
Nickel	0.509	0.010	mg/L	0.5000	ND	102	75-125	0.853	20	
Vanadium	0.508	0.010	mg/L	0.5000	ND	102	75-125	1.57	20	
Zinc	1.00	0.010	mg/L	1.000	ND	100	75-125	1.13	20	
Matrix Spike Dup (B386463-MSD3)		Source: 24I0588-01		Prepared: 09/18/24 Analyzed: 09/23/24						
Vanadium	0.532	0.010	mg/L	0.5000	ND	106	75-125	0.893	20	
Post Spike (B386463-PS1)		Source: 24I0588-01		Prepared: 09/18/24 Analyzed: 09/19/24						
Aluminum	2.03		mg/L	2.000	0.0127	101	75-125			
Antimony	2.01		mg/L	2.000	0.000808	100	75-125			
Arsenic	1.91		mg/L	2.000	-0.000505	95.5	75-125			
Barium	2.03		mg/L	2.000	0.0496	99.2	75-125			
Beryllium	1.98		mg/L	2.000	0.0000387	99.0	75-125			
Cadmium	1.98		mg/L	2.000	-0.000131	99.2	75-125			
Calcium	23.1		mg/L	16.00	7.71	96.3	75-125			
Chromium	1.93		mg/L	2.000	0.000881	96.3	75-125			
Cobalt	1.91		mg/L	2.000	0.00471	95.5	75-125			
Iron	16.0		mg/L	16.00	0.0575	99.5	75-125			
Magnesium	21.3		mg/L	16.00	5.67	97.5	75-125			
Manganese	2.18		mg/L	2.000	0.198	99.0	75-125			
Potassium	28.8		mg/L	16.00	13.1	98.5	75-125			
Selenium	1.95		mg/L	2.000	-0.00581	97.3	75-125			
Silver	2.01		mg/L	2.000	0.000470	100	75-125			
Sodium	106		mg/L	16.00	89.1	106	75-125			
Thallium	2.02		mg/L	2.000	0.00335	101	75-125			
Dilution Check (B386463-SRL1)		Source: 24I0588-01		Prepared: 09/18/24 Analyzed: 09/19/24						
Aluminum	ND	0.25	mg/L		ND				20	
Antimony	ND	0.25	mg/L		ND				20	
Arsenic	ND	0.050	mg/L		ND				20	
Barium	ND	0.25	mg/L		0.0506				20	
Beryllium	ND	0.020	mg/L		ND				20	
Cadmium	ND	0.020	mg/L		ND				20	
Calcium	7.76	2.5	mg/L		7.86			1.35	20	
Chromium	ND	0.050	mg/L		ND				20	
Cobalt	ND	0.050	mg/L		ND				20	
Iron	ND	0.25	mg/L		ND				20	
Magnesium	5.75	0.25	mg/L		5.78			0.506	20	
Manganese	0.203	0.050	mg/L		0.202			0.452	20	
Potassium	12.9	10	mg/L		13.3			3.06	20	
Selenium	ND	0.25	mg/L		ND				20	
Silver	ND	0.050	mg/L		ND				20	
Sodium	90.8	10	mg/L		90.9			0.0620	20	
Thallium	ND	0.25	mg/L		ND				20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B387599 - SW-846 3005A
Blank (B387599-BLK1)

Prepared: 09/27/24 Analyzed: 09/28/24

Antimony	ND	0.050	mg/L
Arsenic	ND	0.010	mg/L
Barium	ND	0.050	mg/L
Beryllium	ND	0.0040	mg/L
Cadmium	ND	0.0040	mg/L
Calcium	ND	0.50	mg/L
Chromium	ND	0.010	mg/L
Cobalt	ND	0.010	mg/L
Iron	ND	0.050	mg/L
Lead	ND	0.010	mg/L
Magnesium	ND	0.050	mg/L
Manganese	ND	0.010	mg/L
Nickel	ND	0.010	mg/L
Potassium	ND	2.0	mg/L
Selenium	ND	0.050	mg/L
Sodium	ND	2.0	mg/L
Vanadium	ND	0.010	mg/L

Blank (B387599-BLK2)

Prepared: 09/27/24 Analyzed: 09/30/24

Aluminum	0.061	0.050	mg/L	B-05, B-07
Thallium	ND	0.050	mg/L	
Zinc	ND	0.010	mg/L	

Blank (B387599-BLK3)

Prepared: 09/27/24 Analyzed: 10/01/24

Silver	ND	0.010	mg/L
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Blank (B387599-BLK4)

Prepared: 09/27/24 Analyzed: 10/01/24

Copper	ND	0.010	mg/L
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LCS (B387599-BS1)

Prepared: 09/27/24 Analyzed: 09/28/24

Antimony	0.499	0.050	mg/L	0.5000	99.8	80-120
Arsenic	0.481	0.010	mg/L	0.5000	96.3	80-120
Barium	0.508	0.050	mg/L	0.5000	102	80-120
Beryllium	0.528	0.0040	mg/L	0.5000	106	80-120
Cadmium	0.494	0.0040	mg/L	0.5000	98.8	80-120
Calcium	4.19	0.50	mg/L	4.000	105	80-120
Chromium	0.506	0.010	mg/L	0.5000	101	80-120
Cobalt	0.507	0.010	mg/L	0.5000	101	80-120
Iron	4.07	0.050	mg/L	4.000	102	80-120
Lead	0.511	0.010	mg/L	0.5000	102	80-120
Magnesium	4.00	0.050	mg/L	4.000	100	80-120
Manganese	0.495	0.010	mg/L	0.5000	99.0	80-120
Nickel	0.510	0.010	mg/L	0.5000	102	80-120
Potassium	4.02	2.0	mg/L	4.000	101	80-120
Selenium	0.521	0.050	mg/L	0.5000	104	80-120
Sodium	4.70	2.0	mg/L	4.000	118	80-120
Vanadium	0.496	0.010	mg/L	0.5000	99.3	80-120
Zinc	1.03	0.010	mg/L	1.000	103	80-120

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387599 - SW-846 3005A										
LCS (B387599-BS2)				Prepared: 09/27/24 Analyzed: 09/30/24						
Aluminum	0.529	0.050	mg/L	0.5000		106	80-120			B
Thallium	0.508	0.050	mg/L	0.5000		102	80-120			
LCS (B387599-BS3)				Prepared: 09/27/24 Analyzed: 10/01/24						
Silver	0.541	0.010	mg/L	0.5000		108	80-120			
LCS (B387599-BS4)				Prepared: 09/27/24 Analyzed: 10/01/24						
Copper	1.04	0.010	mg/L	1.000		104	80-120			
LCS Dup (B387599-BSD1)				Prepared: 09/27/24 Analyzed: 09/28/24						
Antimony	0.502	0.050	mg/L	0.5000		100	80-120	0.490	20	
Arsenic	0.486	0.010	mg/L	0.5000		97.1	80-120	0.902	20	
Barium	0.520	0.050	mg/L	0.5000		104	80-120	2.47	20	
Beryllium	0.520	0.0040	mg/L	0.5000		104	80-120	1.53	20	
Cadmium	0.505	0.0040	mg/L	0.5000		101	80-120	2.18	20	
Calcium	4.22	0.50	mg/L	4.000		105	80-120	0.641	20	
Chromium	0.517	0.010	mg/L	0.5000		103	80-120	2.16	20	
Cobalt	0.519	0.010	mg/L	0.5000		104	80-120	2.37	20	
Iron	4.05	0.050	mg/L	4.000		101	80-120	0.274	20	
Lead	0.514	0.010	mg/L	0.5000		103	80-120	0.744	20	
Magnesium	4.04	0.050	mg/L	4.000		101	80-120	0.893	20	
Manganese	0.503	0.010	mg/L	0.5000		101	80-120	1.61	20	
Nickel	0.522	0.010	mg/L	0.5000		104	80-120	2.39	30	
Potassium	3.92	2.0	mg/L	4.000		98.0	80-120	2.65	20	
Selenium	0.515	0.050	mg/L	0.5000		103	80-120	1.02	20	
Sodium	4.56	2.0	mg/L	4.000		114	80-120	3.08	20	
Vanadium	0.509	0.010	mg/L	0.5000		102	80-120	2.54	20	
Zinc	1.05	0.010	mg/L	1.000		105	80-120	2.61	20	
LCS Dup (B387599-BSD2)				Prepared: 09/27/24 Analyzed: 09/30/24						
Aluminum	0.522	0.050	mg/L	0.5000		104	80-120	1.16	30	B
Thallium	0.510	0.050	mg/L	0.5000		102	80-120	0.457	20	
LCS Dup (B387599-BSD3)				Prepared: 09/27/24 Analyzed: 10/01/24						
Silver	0.565	0.010	mg/L	0.5000		113	80-120	4.40	20	
LCS Dup (B387599-BSD4)				Prepared: 09/27/24 Analyzed: 10/01/24						
Copper	1.02	0.010	mg/L	1.000		102	80-120	1.51	20	
Dilution Check (B387599-SRL1)				Source: 24I0921-03		Prepared: 09/27/24 Analyzed: 09/28/24				
Antimony	ND	0.25	mg/L		ND				20	
Arsenic	ND	0.050	mg/L		ND				20	
Barium	0.0661	0.25	mg/L		0.0628			5.11	20	
Beryllium	ND	0.020	mg/L		ND				20	
Cadmium	ND	0.020	mg/L		ND				20	
Calcium	138	2.5	mg/L		135			2.03	20	
Chromium	ND	0.050	mg/L		ND				20	
Cobalt	ND	0.050	mg/L		ND				20	
Iron	2.25	0.25	mg/L		2.00			11.5	20	
Magnesium	44.2	0.25	mg/L		43.0			2.73	20	
Manganese	0.113	0.050	mg/L		0.107			5.21	20	
Nickel	ND	0.050	mg/L		ND				20	
Potassium	6.39	10	mg/L		5.83			9.27	20	
Selenium	ND	0.25	mg/L		ND				20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B387599 - SW-846 3005A
Dilution Check (B387599-SRL1)
Source: 2410921-03

Prepared: 09/27/24 Analyzed: 09/28/24

Silver	0.0240	0.050	mg/L		ND				20	
Sodium	114	10	mg/L		108			5.19	20	
Vanadium	ND	0.010	mg/L		ND				20	
Zinc	ND	0.010	mg/L		0.0161				20	

Batch B389062 - SW-846 3005A
Blank (B389062-BLK1)

Prepared: 10/11/24 Analyzed: 10/14/24

Aluminum	ND	0.050	mg/L							
Antimony	ND	0.050	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.50	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.010	mg/L							
Copper	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	ND	0.010	mg/L							

Blank (B389062-BLK3)

Prepared: 10/11/24 Analyzed: 10/16/24

Arsenic	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							

Blank (B389062-BLK4)

Prepared: 10/11/24 Analyzed: 10/16/24

Selenium	ND	0.050	mg/L							
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LCS (B389062-BS1)

Prepared: 10/11/24 Analyzed: 10/14/24

Aluminum	4.69	0.050	mg/L	4.500	104	80-120
Antimony	0.467	0.050	mg/L	0.5000	93.4	80-120
Barium	0.505	0.050	mg/L	0.5000	101	80-120
Beryllium	0.536	0.0040	mg/L	0.5000	107	80-120
Cadmium	0.492	0.0040	mg/L	0.5000	98.4	80-120
Calcium	4.29	0.50	mg/L	4.000	107	80-120
Chromium	0.501	0.010	mg/L	0.5000	100	80-120
Cobalt	0.505	0.010	mg/L	0.5000	101	80-120
Copper	0.475	0.010	mg/L	0.5000	94.9	80-120
Iron	4.69	0.050	mg/L	4.500	104	80-120
Magnesium	4.08	0.050	mg/L	4.000	102	80-120
Manganese	0.507	0.010	mg/L	0.5000	101	80-120
Nickel	0.518	0.010	mg/L	0.5000	104	80-120
Potassium	4.28	2.0	mg/L	4.000	107	80-120
Silver	0.522	0.010	mg/L	0.5000	104	80-120
Sodium	4.11	2.0	mg/L	4.000	103	80-120
Thallium	0.470	0.050	mg/L	0.5000	94.0	80-120
Vanadium	0.516	0.010	mg/L	0.5000	103	80-120

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B389062 - SW-846 3005A										
LCS (B389062-BS1)				Prepared: 10/11/24 Analyzed: 10/14/24						
Zinc	0.503	0.010	mg/L	0.5000		101	80-120			
LCS (B389062-BS3)				Prepared: 10/11/24 Analyzed: 10/16/24						
Arsenic	0.471	0.010	mg/L	0.5000		94.1	80-120			
Lead	0.490	0.010	mg/L	0.5000		98.0	80-120			
LCS (B389062-BS4)				Prepared: 10/11/24 Analyzed: 10/16/24						
Selenium	0.505	0.050	mg/L	0.5000		101	80-120			
LCS Dup (B389062-BSD1)				Prepared: 10/11/24 Analyzed: 10/14/24						
Aluminum	4.48	0.050	mg/L	4.500		99.5	80-120	4.54	30	
Antimony	0.467	0.050	mg/L	0.5000		93.5	80-120	0.0342	20	
Barium	0.499	0.050	mg/L	0.5000		99.8	80-120	1.22	20	
Beryllium	0.523	0.0040	mg/L	0.5000		105	80-120	2.43	20	
Cadmium	0.490	0.0040	mg/L	0.5000		97.9	80-120	0.470	20	
Calcium	4.18	0.50	mg/L	4.000		104	80-120	2.65	20	
Chromium	0.496	0.010	mg/L	0.5000		99.2	80-120	0.984	20	
Cobalt	0.500	0.010	mg/L	0.5000		100	80-120	0.917	20	
Copper	0.472	0.010	mg/L	0.5000		94.4	80-120	0.568	20	
Iron	4.57	0.050	mg/L	4.500		102	80-120	2.60	20	
Magnesium	4.00	0.050	mg/L	4.000		100	80-120	1.88	20	
Manganese	0.504	0.010	mg/L	0.5000		101	80-120	0.677	20	
Nickel	0.512	0.010	mg/L	0.5000		102	80-120	1.29	30	
Potassium	4.02	2.0	mg/L	4.000		100	80-120	6.31	20	
Silver	0.520	0.010	mg/L	0.5000		104	80-120	0.329	20	
Sodium	3.84	2.0	mg/L	4.000		96.1	80-120	6.73	20	
Thallium	0.462	0.050	mg/L	0.5000		92.3	80-120	1.75	20	
Vanadium	0.512	0.010	mg/L	0.5000		102	80-120	0.646	20	
Zinc	0.500	0.010	mg/L	0.5000		100	80-120	0.540	20	
LCS Dup (B389062-BSD3)				Prepared: 10/11/24 Analyzed: 10/16/24						
Arsenic	0.470	0.010	mg/L	0.5000		94.0	80-120	0.0813	20	
Lead	0.501	0.010	mg/L	0.5000		100	80-120	2.29	20	
LCS Dup (B389062-BSD4)				Prepared: 10/11/24 Analyzed: 10/16/24						
Selenium	0.503	0.050	mg/L	0.5000		101	80-120	0.261	20	
Duplicate (B389062-DUP1)				Source: 24I0588-07		Prepared: 10/11/24 Analyzed: 10/14/24				
Aluminum	ND	0.050	mg/L		ND			NC	20	
Antimony	ND	0.050	mg/L		ND			NC	20	
Barium	0.0572	0.050	mg/L		0.0577			0.958	20	
Beryllium	ND	0.0040	mg/L		ND			NC	20	
Cadmium	ND	0.0040	mg/L		ND			NC	20	
Calcium	11.1	0.50	mg/L		11.0			0.992	20	
Chromium	ND	0.010	mg/L		ND			NC	20	
Cobalt	ND	0.010	mg/L		ND			NC	20	
Copper	0.0169	0.010	mg/L		0.0170			0.501	20	
Iron	0.156	0.050	mg/L		0.151			3.73	20	
Magnesium	6.65	0.050	mg/L		6.63			0.341	20	
Manganese	0.129	0.010	mg/L		0.127			1.51	20	
Nickel	ND	0.010	mg/L		ND			NC	20	
Potassium	5.60	2.0	mg/L		5.60			0.0387	20	
Silver	ND	0.010	mg/L		ND			NC	20	
Sodium	49.8	2.0	mg/L		49.8			0.114	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B389062 - SW-846 3005A										
Duplicate (B389062-DUP1)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Thallium	ND	0.050	mg/L		ND			NC	20	
Vanadium	ND	0.010	mg/L		ND			NC	20	
Zinc	0.0149	0.010	mg/L		0.0198			28.5 *	20	R-03
Duplicate (B389062-DUP3)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/16/24						
Arsenic	ND	0.010	mg/L		ND			NC	20	
Lead	ND	0.010	mg/L		ND			NC	20	
Duplicate (B389062-DUP4)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/16/24						
Selenium	ND	0.050	mg/L		ND			NC	20	
Matrix Spike (B389062-MS1)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Aluminum	4.39	0.050	mg/L	4.500	ND	97.6	75-125			
Antimony	0.454	0.050	mg/L	0.5000	ND	90.9	75-125			
Barium	0.527	0.050	mg/L	0.5000	0.0577	93.9	75-125			
Beryllium	0.508	0.0040	mg/L	0.5000	ND	102	75-125			
Cadmium	0.467	0.0040	mg/L	0.5000	ND	93.4	75-125			
Calcium	14.7	0.50	mg/L	4.000	11.0	93.0	75-125			
Chromium	0.468	0.010	mg/L	0.5000	ND	93.6	75-125			
Cobalt	0.475	0.010	mg/L	0.5000	0.00411	94.2	75-125			
Copper	0.475	0.010	mg/L	0.5000	0.0170	91.5	75-125			
Iron	4.56	0.050	mg/L	4.500	0.151	98.0	75-125			
Magnesium	10.2	0.050	mg/L	4.000	6.63	88.6	75-125			
Manganese	0.596	0.010	mg/L	0.5000	0.127	93.8	75-125			
Nickel	0.486	0.010	mg/L	0.5000	ND	97.2	75-125			
Potassium	9.33	2.0	mg/L	4.000	5.60	93.1	75-125			
Silver	0.497	0.010	mg/L	0.5000	ND	99.3	75-125			
Sodium	51.8	2.0	mg/L	4.000	49.8	49.3 *	75-125			MS-19
Thallium	0.443	0.050	mg/L	0.5000	ND	88.7	75-125			
Vanadium	0.495	0.010	mg/L	0.5000	ND	98.9	75-125			
Zinc	0.485	0.010	mg/L	0.5000	0.0198	93.0	75-125			
Matrix Spike (B389062-MS3)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/16/24						
Arsenic	0.468	0.010	mg/L	0.5000	ND	93.5	75-125			
Lead	0.473	0.010	mg/L	0.5000	ND	94.6	75-125			
Matrix Spike (B389062-MS4)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/16/24						
Selenium	0.491	0.050	mg/L	0.5000	ND	98.2	75-125			
Post Spike (B389062-PS1)		Source: 2410588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Aluminum	18.2		mg/L	18.00	0.0140	101	75-125			
Antimony	1.67		mg/L	2.000	0.00187	83.4	75-125			
Barium	2.03		mg/L	2.000	0.0566	98.8	75-125			
Beryllium	2.15		mg/L	2.000	0.0000564	107	75-125			
Cadmium	1.96		mg/L	2.000	0.000314	98.1	75-125			
Calcium	27.1		mg/L	16.00	10.8	102	75-125			
Chromium	1.96		mg/L	2.000	0.000907	97.9	75-125			
Cobalt	1.96		mg/L	2.000	0.00403	97.7	75-125			
Copper	1.95		mg/L	2.000	0.0166	96.7	75-125			
Iron	18.2		mg/L	18.00	0.148	100	75-125			
Magnesium	22.1		mg/L	16.00	6.50	97.4	75-125			
Manganese	2.14		mg/L	2.000	0.124	101	75-125			
Nickel	1.99		mg/L	2.000	0.00242	99.4	75-125			
Potassium	21.7		mg/L	16.00	5.49	101	75-125			

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B389062 - SW-846 3005A

Post Spike (B389062-PS1)		Source: 24I0588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Silver	1.98		mg/L	2.000	0.00296	98.7	75-125			
Sodium	62.7		mg/L	16.00	48.8	86.5	75-125			
Thallium	1.93		mg/L	2.000	0.00336	96.5	75-125			
Vanadium	2.08		mg/L	2.000	0.00435	104	75-125			
Zinc	1.97		mg/L	2.000	0.0194	97.5	75-125			

Dilution Check (B389062-SRL1)		Source: 24I0588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Aluminum	ND	0.25	mg/L		ND				20	
Antimony	0.0751	0.25	mg/L		ND				20	
Barium	0.0565	0.25	mg/L		0.0577			2.22	20	
Beryllium	ND	0.020	mg/L		ND				20	
Cadmium	ND	0.020	mg/L		ND				20	
Calcium	11.2	2.5	mg/L		11.0			2.01	20	
Chromium	ND	0.050	mg/L		ND				20	
Cobalt	ND	0.050	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Iron	ND	0.25	mg/L		ND				20	
Magnesium	6.75	0.25	mg/L		6.63			1.82	20	
Manganese	0.130	0.050	mg/L		0.127			2.05	20	
Nickel	ND	0.050	mg/L		ND				20	
Potassium	5.77	10	mg/L		5.60			2.89	20	
Silver	0.0667	0.050	mg/L		ND				20	
Sodium	48.4	10	mg/L		49.8			2.90	20	
Thallium	ND	0.25	mg/L		ND				20	
Vanadium	ND	0.050	mg/L		ND				20	
Zinc	ND	0.050	mg/L		ND				20	

Batch B389125 - SW-846 7470A Prep

Blank (B389125-BLK1)		Prepared: 10/11/24 Analyzed: 10/14/24								
Mercury	ND	0.00020	mg/L							
LCS (B389125-BS1)		Prepared: 10/11/24 Analyzed: 10/14/24								
Mercury	0.00410	0.00020	mg/L	0.004020	102	80-120				
LCS Dup (B389125-BSD1)		Prepared: 10/11/24 Analyzed: 10/14/24								
Mercury	0.00430	0.00020	mg/L	0.004020	107	80-120	4.93	20		
Duplicate (B389125-DUP1)		Source: 24I0588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Mercury	ND	0.00020	mg/L		ND			NC	20	
Matrix Spike (B389125-MS1)		Source: 24I0588-07		Prepared: 10/11/24 Analyzed: 10/14/24						
Mercury	0.00454	0.00020	mg/L	0.004020	ND	113	75-125			

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385168 - SW-846 3060A										
Blank (B385168-BLK1)				Prepared & Analyzed: 09/05/24						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B385168-BS1)				Prepared & Analyzed: 09/05/24						
Hexavalent Chromium	0.10	0.0040	mg/L	0.1000		102	80-120			
LCS Dup (B385168-BSD1)				Prepared & Analyzed: 09/05/24						
Hexavalent Chromium	0.10	0.0040	mg/L	0.1000		101	80-120	1.25	20	
Matrix Spike (B385168-MS2)				Source: 2410588-03		Prepared & Analyzed: 09/05/24				
Hexavalent Chromium	0.10	0.0040	mg/L	0.1000	ND	99.6	85-115			H-03
Matrix Spike Dup (B385168-MSD2)				Source: 2410588-03		Prepared & Analyzed: 09/05/24				
Hexavalent Chromium	0.098	0.0040	mg/L	0.1000	ND	98.3	85-115	1.28	20	H-03
Batch B385362 - Draft Method 1633										
Blank (B385362-BLK1)				Prepared & Analyzed: 09/09/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B385362-BS1)				Prepared & Analyzed: 09/09/24						
Total Suspended Solids	216	5.0	mg/L	200.0		108	51.5-130			
Batch B385363 - Draft Method 1633										
Blank (B385363-BLK1)				Prepared & Analyzed: 09/09/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B385363-BS1)				Prepared & Analyzed: 09/09/24						
Total Suspended Solids	195	5.0	mg/L	200.0		97.5	51.5-130			
Batch B385527 - SM21-23 2540D										
Blank (B385527-BLK1)				Prepared & Analyzed: 09/10/24						
Total Suspended Solids	ND	2.5	mg/L							
LCS (B385527-BS1)				Prepared & Analyzed: 09/10/24						
Total Suspended Solids	229	25	mg/L	200.0		114	51.5-130			
Duplicate (B385527-DUP1)				Source: 2410588-01		Prepared & Analyzed: 09/10/24				
Total Suspended Solids	ND	5.0	mg/L		ND			NC	10	DL-16

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B386111 - EPA 300.0										
Blank (B386111-BLK1)				Prepared & Analyzed: 09/16/24						
Chloride	ND	1.0	mg/L							
LCS (B386111-BS1)				Prepared & Analyzed: 09/16/24						
Chloride	11	1.0	mg/L	10.00		111 *	90-110			L-06
LCS Dup (B386111-BSD1)				Prepared & Analyzed: 09/16/24						
Chloride	11	1.0	mg/L	10.00		111 *	90-110	0.455	20	L-06
Matrix Spike (B386111-MS1)				Source: 2410588-03		Prepared & Analyzed: 09/16/24				
Chloride	260	10	mg/L	100.0	150	105	80-120			V-06
Matrix Spike Dup (B386111-MSD1)				Source: 2410588-03		Prepared & Analyzed: 09/16/24				
Chloride	260	10	mg/L	100.0	150	106	80-120	0.108	20	V-06
Batch B386119 - SW-846 9010C										
Blank (B386119-BLK1)				Prepared: 09/15/24 Analyzed: 09/16/24						
Cyanide	ND	0.010	mg/L							
LCS (B386119-BS1)				Prepared: 09/15/24 Analyzed: 09/16/24						
Cyanide	0.27	0.010	mg/L	0.3003		90.9	80-120			
LCS Dup (B386119-BSD1)				Prepared: 09/15/24 Analyzed: 09/16/24						
Cyanide	0.29	0.010	mg/L	0.3003		97.0	80-120	6.50	20	
Batch B386592 - SM 21-23 5310B										
Blank (B386592-BLK1)				Prepared & Analyzed: 09/19/24						
Total Organic Carbon	ND	1.0	mg/L							
LCS (B386592-BS1)				Prepared & Analyzed: 09/19/24						
Total Organic Carbon	12.4	1.0	mg/L	12.76		97.1	90-110			
LCS Dup (B386592-BSD1)				Prepared & Analyzed: 09/19/24						
Total Organic Carbon	11.8	1.0	mg/L	12.76		92.5	90-110	4.82	15	
Matrix Spike (B386592-MS1)				Source: 2410588-01		Prepared & Analyzed: 09/19/24				
Total Organic Carbon	8.62	1.0	mg/L	5.000	3.05	111	85-115			
Matrix Spike Dup (B386592-MSD1)				Source: 2410588-01		Prepared & Analyzed: 09/19/24				
Total Organic Carbon	8.90	1.0	mg/L	5.000	3.05	117 *	85-115	3.28	15	MS-11

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387393 - SM4500 N Org B C										
Blank (B387393-BLK1)	Prepared: 09/27/24 Analyzed: 09/28/24									
Total Kjeldahl Nitrogen	ND	1.0	mg/L							
LCS (B387393-BS1)	Prepared: 09/27/24 Analyzed: 09/28/24									
Total Kjeldahl Nitrogen	21	1.0	mg/L	20.00		106	86.3-118			
Matrix Spike (B387393-MS1)	Source: 24I0588-03 Prepared: 09/27/24 Analyzed: 09/28/24									
Total Kjeldahl Nitrogen	30	1.0	mg/L	20.00	8.4	109	68.2-129			
Matrix Spike Dup (B387393-MSD1)	Source: 24I0588-03 Prepared: 09/27/24 Analyzed: 09/28/24									
Total Kjeldahl Nitrogen	28	1.0	mg/L	20.00	8.4	98.0	68.2-129	7.69	20	
Batch B387626 - EPA 300.0										
Blank (B387626-BLK1)	Prepared & Analyzed: 09/28/24									
Fluoride	ND	0.10	mg/L							
LCS (B387626-BS1)	Prepared & Analyzed: 09/28/24									
Fluoride	0.97	0.10	mg/L	1.000		97.0	90-110			
LCS Dup (B387626-BSD1)	Prepared & Analyzed: 09/28/24									
Fluoride	0.97	0.10	mg/L	1.000		97.3	90-110	0.278	20	
Matrix Spike (B387626-MS1)	Source: 24I0588-03 Prepared & Analyzed: 09/28/24									
Fluoride	0.98	0.10	mg/L	1.000	ND	98.5	80-120			
Matrix Spike Dup (B387626-MSD1)	Source: 24I0588-03 Prepared & Analyzed: 09/28/24									
Fluoride	1.0	0.10	mg/L	1.000	ND	103	80-120	4.92	20	
Batch B387627 - EPA 300.0										
Blank (B387627-BLK1)	Prepared & Analyzed: 09/28/24									
Sulfate	ND	1.0	mg/L							
LCS (B387627-BS1)	Prepared & Analyzed: 09/28/24									
Sulfate	9.7	1.0	mg/L	10.00		96.6	90-110			
LCS Dup (B387627-BSD1)	Prepared & Analyzed: 09/28/24									
Sulfate	9.8	1.0	mg/L	10.00		98.1	90-110	1.52	20	
Matrix Spike (B387627-MS1)	Source: 24I0588-03 Prepared & Analyzed: 09/28/24									
Sulfate	32	1.0	mg/L	10.00	25	72.5 *	80-120			MS-07A

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B387627 - EPA 300.0
Matrix Spike Dup (B387627-MSD1)
Source: 2410588-03

Prepared & Analyzed: 09/28/24

Sulfate	33	1.0	mg/L	10.00	25	78.1 *	80-120	1.74	20	MS-07A
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Batch B387959 - SM 21-23 5310B
Blank (B387959-BLK1)

Prepared & Analyzed: 10/02/24

Total Organic Carbon	ND	1.0	mg/L							
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LCS (B387959-BS1)

Prepared & Analyzed: 10/02/24

Total Organic Carbon	12.0	1.0	mg/L	12.76		94.1	90-110			
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LCS Dup (B387959-BSD1)

Prepared & Analyzed: 10/02/24

Total Organic Carbon	11.9	1.0	mg/L	12.76		93.1	90-110	1.02	15	
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Batch B388108 - Draft Method 1633
Blank (B388108-BLK1)

Prepared & Analyzed: 10/03/24

Total Suspended Solids	ND	5.0	mg/L							
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LCS (B388108-BS1)

Prepared & Analyzed: 10/03/24

Total Suspended Solids	174	5.0	mg/L	200.0		87.0	51.5-130			
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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B385497 - SM21-23 2540C										
Blank (B385497-BLK1)				Prepared & Analyzed: 09/10/24						
Total Dissolved Solids	ND	10	mg/L							
LCS (B385497-BS1)				Prepared & Analyzed: 09/10/24						
Total Dissolved Solids	270	10	mg/L	293.0		92.5	62.9-115			
Duplicate (B385497-DUP1)		Source: 24I0588-03		Prepared & Analyzed: 09/10/24						
Total Dissolved Solids	280	10	mg/L		290			2.09	10	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-05	Data is not affected by elevated level in laboratory blank since sample(s) result is "Not Detected".
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
D-04	Sample extracted at a dilution due to insufficient volume provided.
DL-16	Test results of sample did not achieve the method required minimum yield of 2.5mg of dried residue and for which less than 1L of sample was filtered.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
H-02	Gross violation of holding time. Analysis performed after 2X the allowable holding time.
H-03	Sample received after recommended holding time was exceeded.
H-10	Analysis was requested after the recommended holding time had passed.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-06	Laboratory fortified blank/laboratory control sample recovery and/or duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-11	Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
R-03	Duplicate RPD outside of control limits. Reduced precision is expected for values near the reporting limit.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
S-29	Extracted Internal Standard is outside of control limits.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>Draft Method 1633 in Water</i>	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT
<i>EPA 300.0 in Water</i>	
Chloride	NC,NY,MA,VA,ME,NH,CT,RI
Fluoride	NY,VA,ME,NH,CT
Sulfate	NC,NY,MA,VA,ME,NH,CT,RI
<i>SM 21-23 5310B in Water</i>	

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
SM 21-23 5310B in Water	
Total Organic Carbon	CT,NH,NY,RI,NC,MA,VA
SM19-23 4500-N Org B,C-NH3 C in Water	
Total Kjeldahl Nitrogen	CT,MA,NH,NY,RI,NC,ME,VA
SM21-23 2540C in Water	
Total Dissolved Solids	CT,MA,NH,NY,RI,NC,ME,VA
SM21-23 2540D in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
SW-846 6010D in Soil	
Arsenic	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
SW-846 6010D in Water	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7196A in Water	
Hexavalent Chromium	CT,NH,NY,NC,ME,VA
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
2-Butanone (MEK)	CT,ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY
SW-846 8270E in Water	
1,4-Dioxane	NY,NH
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Aniline	CT,NY,NC,ME,VA
Anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
2,2'-oxybis(1-Chloropropane)	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3'-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270E in Water</i>	
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
Pyridine	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC
<i>SW-846 9014 in Water</i>	
Cyanide	NY,CT,NH,NC,ME,VA

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2025
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2025

	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Log In Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Client: Rumboll
 Project: Claremont POY
 MCP/RCP Required: N/A
 Deliverable Package Requirement: N/A
 Location: Old Bethpage New York
 PWSID# (When Applicable): N/A
 Arrival Method:
 Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐
 Received By / Date / Time: LA 9/5/24 730
 Back-Sheet By / Date / Time: LA 9/5/24 1243
 Temperature Method: Gm # 6
 WV samples: Yes (see note*) / No (follow normal procedure)
 Temp: ✓ < 5° C Actual Temperature: 2.013.014813.7
 Rush Samples: Yes / No Notify _____
 Short Hold: Yes / No Notify _____

Notes regarding Samples/COC outside of SOP:

Original Chain not Received

CRW3-CP-00-090424) Added
as Sample 10

	True	False
Received on Ice	☒	☐
Received in Cooler	☐	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐
COC Included: (Check all included)		
Client ☒	Analysis ☒	Sampler Name ☒
Project ☒	IDs ☒	Collection Date/Time ☒
All Samples Proper pH: <u>N/A</u>	☐	☐

Additional Container Notes

*Note: West Virginia requires all samples to have their temperature taken. Note any outliers.



DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist

Effective Date: 06/11/2024

	Sample	Soils Jars				Ambers				Plastics										VOA Vials				Other / Fill in																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		(Circle Amb/Clear)				1 Liter		250ml		100ml	1 Liter		500ml		250ml																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	Ammonium Acetate	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact	125 ml plastic																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</

Chain of Custody / Analysis Report										Page 1 of 1
Sampler(s): (Signature) <i>Brian J. Dunn</i>		Contact: Michael G. Grifasi 333 West Washington Street Syracuse, New York 13221-4873 Phone: (315) 956-6100 E-mail: michael.grifasi@ramboll.com		Laboratory: Pace Analytical Services 39 Spruce St., East Longmeadow, MA 01028 Attn: Kyle Murray Phone: 413-525-2332		Project: NYSDCE Claremont Poly Site 2024 Q3 Sampling NYSDCE Standby Contract Location: Old Bethpage, New York		Analysis Required Preservatives: (see key at bottom) 1 0 2 0 0 0 3 10 0 4 0 0 0 DER TCL VOCs by 8260 DER TCL SVORVT by 8270 TAL 23 Metals by 6010/7470 TDS by 2540C TSS by 2540D Hexavalent Chromium by 7196 Nitrogen (TKN) by 4500 TOC by 5310B Anions (Cl, F, SO ₄) by 300 Cyanide by 9014 PFAS by 1633 TSS (PFAS 1633) 1,4-Dioxane by 8270 SIM		Lab Sample ID:
Sample Identification		Holding Time:		Number of Containers		Field Filtered? (Y/N)		Analysis Required		Lab Sample ID:
Unique Field Sample ID (sys_sample_code)	Sample Location	Date	Time	Sample Type (See Key)	Sample Matrix (See Key)	Grab (G) or Composite (C)	Field Filtered? (Y/N)	Preservatives: (see key at bottom)		
1 ASF-CP-00-090424	ASF	9/4/2024	07:00	N	WG	13 G	N	X	X	X
2 ASF-CP-01-090424	ASF	9/4/2024	07:00	FD	WG	7 G	N	X	X	X
3 ASF-CP-MS-090424	ASF	9/4/2024	07:00	MS	WG	2 G	N	X	X	X
4 ASF-CP-MSD-090424	ASF	9/4/2024	07:00	MSD	WG	2 G	N	X	X	X
5 PD-CP-00-090424	PD	9/4/2024	07:45	N	WG	21 G	N	X	X	X
6 PD-CP-01-090424	PD	9/4/2024	07:45	FD	WG	19 G	N	X	X	X
7 PD-CP-MS-090424	PD	9/4/2024	07:45	MS	WG	11 G	N	X	X	X
8 PD-CP-MSD-090424	PD	9/4/2024	07:45	MSD	WG	11 G	N	X	X	X
9 RW3-CP-00-090424	RW-3	9/4/2024	12:30	N	WG	5 G	N	X	X	X
10 RW3-CP-01-090424	RW-3	9/4/2024	12:30	FD	WG	1 G	N	X	X	X
11 RW4-CP-01-090424	RW-4	9/4/2024	12:50	N	WG	5 G	N	X	X	X
12 RW5-CP-01-090424	RW-5	9/4/2024	13:10	N	WG	5 G	N	X	X	X
13 TB-090424	-	8/30/2024	--	TB	WG	2 G	N	X	X	X
14 MIDGAC-CP-00-090424	GAC	9/4/2024	12:10	N	WG	3				X

Special Instructions: Quarterly System Sampling - September 2024

Relinquished by:		Date:		Condition:		Other comments or notes regarding condition of samples as received:	
Relinquished by: <i>Brian J. Dunn</i> GES		Date: 9/4/24 Time: 1410		Condition: <i>OK</i> Date: 9/4/24 Time: 1800		Other comments or notes regarding condition of samples as received:	
Relinquished by: <i>Anthony Green</i> FedEx		Date: 9/4/24 Time: 1410		Condition: <i>OK</i> Date: 9/4/24 Time: 1800		Other comments or notes regarding condition of samples as received:	
Relinquished by: <i>Anthony Green</i> FedEx		Date: 9/4/24 Time: 1410		Condition: <i>OK</i> Date: 9/4/24 Time: 1800		Other comments or notes regarding condition of samples as received:	

Sampler(s):

Brian J. Dunn

(Signature)

Contact: Michael G. Grifasi

Address: 333 West Washington Street

Syracuse, New York 13221-4873

Phone: (315) 956-6100

Email: michael.grifasi@ramboll.com

Project: NYSDC Claremont Poly Site 2024 Q3 Sampling

NYSDC Standby Contract

Location: Old Bethpage, New York

Laboratory:

Pace Analytical Services

39 Spruce St., East

Longmeadow, MA 01028

Attn: Kyle Murray

Phone: 413-525-2332

Package Requirement:

Level 2 and Level 3

EDD Format:

EQUS 4-file

Holding Time:

Sample Type

(See Key)

Sample Matrix

(See Key)

Time

Date

Sample Location

Unique Field Sample ID

(sys_sample_code)

Sample Location

Date

Time

Sample Type

(See Key)

Sample Matrix

(See Key)

Grab [G] or Composite [C]

Field Filtered? (Y / N)

Number of Containers

Analysis Required

Preservatives: (see key at bottom)

Job Number:

Laboratory ID:

Lab Sample ID:

Project Number:

Laboratory Use Only

Project Number:

Job Number:

Laboratory ID:

Lab Sample ID:

Project Number:

Laboratory Use Only

Project Number:

Job Number:

Laboratory ID:

Lab Sample ID:

Project Number:

Laboratory Use Only

Project Number:

Job Number:

Laboratory ID:

Lab Sample ID:

Project Number:

Laboratory Use Only

Project Number:

Condition:

Other comments or notes regarding condition of samples as received:

Custody Seals Intact? (if so, indicate the #, date, and time of the seal)

Cooler Temperature:

Other (Specify):

Courier Name:

MSMA(AN)

Date:

9/4/24

Time:

1410

Courier Name:

Anthony Green

Date:

SEP 04 2023

Time:

0230

Received By:

UMS

Date:

Relinquished by:

Brian J. Dunn

Date:

9/4/24

Time:

1410

Relinquished by:

MSMA(AN)

Date:

SEP 04 2023

Time:

0230

Received By:

UMS

Date:

[illegible]

Quarterly System Sampling - September 2024

Special Instructions:

Relinquished by: <u>Brian J Dunn</u> Date: <u>9/14/23</u> Time: <u>1410</u>		Courier Name: <u>MS MAC(ANL)</u> Tracking #: <u>Anthony Green</u> Date: <u>SEP 04 2023</u> Time: <u>0930</u>		Condition: Custody Seals Intact? (if so, indicate the #, date, and time of the seal) Cooler Temperature: <u>5.0</u>		Other comments or notes regarding condition of samples as received:
Relinquished by: <u>Anthony Green</u> Date: <u>9/14/23</u> Time: <u>14:16</u>		Received By: <u>MS MAC(ANL)</u> Tracking #: <u>Anthony Green</u> Date: <u>SEP 04 2023</u> Time: <u>0930</u>		Condition: Custody Seals Intact? (if so, indicate the #, date, and time of the seal) Cooler Temperature: <u>5.0</u>		

N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank
 SE = Sediment, SO = Soil, WQ = Groundwater, WW = Waste Water, WP = Potable Water, AA = Ambient Air, Other (Specify):
 Matrix: 1 = H₂O, 2 = H₂SO₄, 3 = H₂SO₄, 4 = NaOH, 5 = 2M Acetate, 6 = MeOH, 7 = NaHCO₃, 8 = Na₂PO₄, 9 = BenzalkoniumCl, 10 = other
 Matrix Codes: 0 = none, 1 = H₂O, 2 = H₂SO₄, 3 = H₂SO₄, 4 = NaOH, 5 = 2M Acetate, 6 = MeOH, 7 = NaHCO₃, 8 = Na₂PO₄, 9 = BenzalkoniumCl, 10 = other

Page 135 of 140

Confidential

3dF4 Coolers

2:015.0
2:4813.7

RAMBOLL

Sampler(s): Brian J. Dunn
(Signature)

Contact: Michael G. Grifasi

Address: 333 West Washington Street
Syracuse, New York 13221-4873

Phone: (315) 956-6100

E-mail: michael.grifasi@ramboll.com

Project: NYSDC Claremont Poly Site 2024 Q3 Sampling

YSDEC Standby Contract

Location: Old Bethpage, New York

Lab Sample ID:

Project Number:

Job Number:

Laboratory ID:

Analysis Required

Preservatives: (see key at bottom)

1	0	2	0	0	0	3	10	0	4	0	0	0
---	---	---	---	---	---	---	----	---	---	---	---	---

Holding Time:

Package Requirement:
(Level 2 and Level 3)

EDD Format:
EQUIS 4-file

Field Filtered? (Y / N)

Grab (G) or Composite (C)

Number of Containers

Sample Identification

Unique Field Sample ID (sys_sample_code)	Sample Location	Sample Type (See Key)	Time	Date
1 ASF-CP-00-090424	ASF	N	07:00	9/4/2024
2 ASF-CP-01-090424	ASF	FD	07:00	9/4/2024
3 ASF-CP-MS-090424	ASF	MS	07:00	9/4/2024
4 ASF-CP-MSD-090424	ASF	MSD	07:00	9/4/2024
5 PD-CP-00-090424	PD	N	07:45	9/4/2024
6 PD-CP-01-090424	PD	FD	07:45	9/4/2024
7 PD-CP-MS-090424	PD	MS	07:45	9/4/2024
8 PD-CP-MSD-090424	PD	MSD	07:45	9/4/2024
9 RW3-CP-00-090424	RW-3	N	12:30	9/4/2024
10 RW3-CP-01-090424	RW-3	FD	12:30	9/4/2024
11 RW4-CP-01-090424	RW-4	N	12:50	9/4/2024
12 RW5-CP-01-090424	RW-5	N	13:10	9/4/2024
13 TB-090424	-	TB	--	8/30/2024
14 MIDGAC-CP-00-090424	GAC	N	10:10	9/4/2024

Special Instructions: Quarterly System Sampling - September 2024

Use the top boxes if the samples are to be shipped via courier (e.g., Fed Ex)

Relinquished by: Brian J. Dunn
(Signature)

Date: 9/4/24

Time: 1410

Condition:

Courier Name: MS MA(AN)

Tracking #: 95830

Date: 9/4/2023

Time: 09:30

Other comments or notes regarding condition of samples as received:

Custody Seals intact? (if so, indicate the #, date, and time of the seal)

Cooler Temperature:

Relinquished by: MS MA(AN)

Date: 9/4/24

Time: 1410

Received By: Anthony Green

Date: 9/4/24

Time: 14:30

Signature: Anthony Green

Date: 9/4/24

Time: 14:30

Signature: Anthony Green

Date: 9/4/24

Time: 14:30

Signature: Anthony Green

Date: 9/4/24

Time: 14:30

Signature: Anthony Green

Date: 9/4/24

Time: 14:30

ATTACHMENT 2
MID-MONTH GAC TREATMENT SYSTEM PERFORMANCE ANALYTICAL RESULTS –
SEPTEMBER 16, 2024

October 16, 2024

Payson Long
NYDEC_Ramboll US Consulting, Inc. - Syracuse
333 West Washington Street, PO Box 4873
Syracuse, NY 13221

Project Location: Old Bethpage, NY
Client Job Number:
Project Number: 130015
Laboratory Work Order Number: 24I2618

Enclosed are results of analyses for samples as received by the laboratory on September 19, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332NYDEC_Ramboll US Consulting, Inc. - Syracuse
333 West Washington Street, PO Box 4873
Syracuse, NY 13221
ATTN: Payson Long

REPORT DATE: 10/16/2024

PURCHASE ORDER NUMBER: 151811

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24I2618

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Old Bethpage, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PREGAC-CP-00-091624	24I2618-01	Ground Water		Draft Method 1633 SW-846 8270E	
MIDGAC-CP-00-091624	24I2618-02	Ground Water		Draft Method 1633 SW-846 8270E	
POSTGAC-CP-00-091624	24I2618-03	Ground Water		Draft Method 1633 SW-846 8270E	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Draft Method 1633**Qualifications:****H-01**

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:**Total Suspended Solids**

24I2618-01[PREGAC-CP-00-091624], 24I2618-02[MIDGAC-CP-00-091624], 24I2618-03[POSTGAC-CP-00-091624]

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:**13C3-PFHxS**

24I2618-01[PREGAC-CP-00-091624]

13C4-PFHpA

24I2618-01[PREGAC-CP-00-091624]

13C5-PFHxA

24I2618-01[PREGAC-CP-00-091624]

13C5-PFPeA

S112167-CCV2

13C6-PFDA

24I2618-01[PREGAC-CP-00-091624]

13C8-PFOA

24I2618-01[PREGAC-CP-00-091624]

13C9-PFNA

24I2618-01[PREGAC-CP-00-091624]

2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FI

24I2618-01[PREGAC-CP-00-091624]

3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTC)

24I2618-01[PREGAC-CP-00-091624]

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

24I2618-01[PREGAC-CP-00-091624]

Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)

24I2618-01[PREGAC-CP-00-091624]

Perfluorodecanoic acid (PFDA)

24I2618-01[PREGAC-CP-00-091624]

Perfluoroheptanoic acid (PFHpA)

24I2618-01[PREGAC-CP-00-091624]

Perfluorohexanesulfonic acid (PFHxS)

24I2618-01[PREGAC-CP-00-091624]

Perfluorohexanoic acid (PFHxA)

24I2618-01[PREGAC-CP-00-091624], S112167-CCV2

Perfluorononanoic acid (PFNA)

24I2618-01[PREGAC-CP-00-091624]

Perfluorooctanoic acid (PFOA)

24I2618-01[PREGAC-CP-00-091624]

Perfluoropentanesulfonic acid (PFPeS)

24I2618-01[PREGAC-CP-00-091624]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: PREGAC-CP-00-091624

Sampled: 9/16/2024 10:20

Sample ID: 24I2618-01

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	28	0.19	µg/L	1		SW-846 8270E	9/21/24	9/25/24 11:01	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	21.8	15-110						9/25/24 11:01	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: PREGAC-CP-00-091624

Sampled: 9/16/2024 10:20

Sample ID: 24I2618-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	43	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoropentanoic acid (PFPeA)	26	1.7	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorohexanoic acid (PFHxA)	40	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoroheptanoic acid (PFHpA)	16	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorooctanoic acid (PFOA)	50	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorononanoic acid (PFNA)	13	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorodecanoic acid (PFDA)	ND	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorododecanoic acid (PFDoA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorobutanesulfonic acid (PFBS)	6.1	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoropentanesulfonic acid (PFPeS)	4.1	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorohexanesulfonic acid (PFHxS)	10	0.87	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorooctanesulfonic acid (PFOS)	19	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
N-MeFOSAA (NMeFOSAA)	ND	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
N-EtFOSAA (NEtFOSAA)	4.1	0.87	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	8.7	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	8.7	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
9Cl-PF3ONS (F53B Minor)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
11Cl-PF3OUs (F53B Major)	ND	3.5	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	8.7	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	43	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	43	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.7	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.7	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: PREGAC-CP-00-091624

Sampled: 9/16/2024 10:20

Sample ID: 24I2618-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.7	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:13	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.7	ng/L	1	S-29	Draft Method 1633	10/11/24	10/16/24 4:13	AB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
13C4-PFBA	61.0		10-130					10/16/24 4:13	
13C5-PFPeA	57.4		35-150					10/16/24 4:13	
13C5-PFHxA	51.9 *		55-150		S-29			10/16/24 4:13	
13C4-PFHpA	51.9 *		55-150		S-29			10/16/24 4:13	
13C8-PFOA	52.3 *		60-140		S-29			10/16/24 4:13	
13C9-PFNA	48.9 *		55-140		S-29			10/16/24 4:13	
13C6-PFDA	49.2 *		50-140		S-29			10/16/24 4:13	
13C7-PFUnA	50.2		30-140					10/16/24 4:13	
13C2-PFDoA	44.9		10-150					10/16/24 4:13	
13C2-PFTeDA	31.1		10-130					10/16/24 4:13	
13C3-PFBS	57.1		55-150					10/16/24 4:13	
13C3-PFHxS	53.5 *		55-150		S-29			10/16/24 4:13	
13C8-PFOS	51.6		45-140					10/16/24 4:13	
13C2-4:2FTS	103		60-200					10/16/24 4:13	
13C2-6:2FTS	86.8		60-200					10/16/24 4:13	
13C2-8:2FTS	57.3		50-200					10/16/24 4:13	
13C8-PFOA	43.6		30-130					10/16/24 4:13	
D3-NMeFOSA	31.3		15-130					10/16/24 4:13	
D5-NEtFOSA	29.7		10-130					10/16/24 4:13	
D3-NMeFOSAA	50.3		45-200					10/16/24 4:13	
D5-NEtFOSAA	51.4		10-200					10/16/24 4:13	
D7-NMeFOSE	33.4		10-150					10/16/24 4:13	
D9-NEtFOSE	30.0		10-150					10/16/24 4:13	
13C3-HFPO-DA	46.4		25-160					10/16/24 4:13	

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: PREGAC-CP-00-091624

Sampled: 9/16/2024 10:20

Sample ID: 24I2618-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1	H-01	Draft Method 1633	9/23/24	9/23/24 13:43	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: MIDGAC-CP-00-091624

Sampled: 9/16/2024 10:40

Sample ID: 24I2618-02

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	27	0.19	µg/L	1		SW-846 8270E	9/21/24	9/25/24 11:21	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	18.5	15-110						9/25/24 11:21	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: MIDGAC-CP-00-091624

Sampled: 9/16/2024 10:40

Sample ID: 24I2618-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	48	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoropentanoic acid (PFPeA)	28	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorohexanoic acid (PFHxA)	30	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoroheptanoic acid (PFHpA)	8.6	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorooctanoic acid (PFOA)	20	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorononanoic acid (PFNA)	4.5	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorodecanoic acid (PFDA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorododecanoic acid (PFDoA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorobutanesulfonic acid (PFBS)	3.7	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoropentanesulfonic acid (PFPeS)	1.9	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorohexanesulfonic acid (PFHxS)	3.6	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorooctanesulfonic acid (PFOS)	3.4	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
N-MeFOSAA (NMeFOSAA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
N-EtFOSAA (NEtFOSAA)	ND	0.90	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.0	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.0	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
9Cl-PF3ONS (F53B Minor)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
11Cl-PF3OUs (F53B Major)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.0	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	45	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	45	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: MIDGAC-CP-00-091624

Sampled: 9/16/2024 10:40

Sample ID: 24I2618-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:29	AB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	72.9	10-130						10/16/24 4:29	
13C5-PFPeA	81.8	35-150						10/16/24 4:29	
13C5-PFHxA	70.1	55-150						10/16/24 4:29	
13C4-PFHpA	72.7	55-150						10/16/24 4:29	
13C8-PFOA	74.6	60-140						10/16/24 4:29	
13C9-PFNA	70.8	55-140						10/16/24 4:29	
13C6-PFDA	73.9	50-140						10/16/24 4:29	
13C7-PFUnA	70.1	30-140						10/16/24 4:29	
13C2-PFDoA	60.9	10-150						10/16/24 4:29	
13C2-PFTeDA	53.1	10-130						10/16/24 4:29	
13C3-PFBS	73.8	55-150						10/16/24 4:29	
13C3-PFHxS	74.4	55-150						10/16/24 4:29	
13C8-PFOS	75.8	45-140						10/16/24 4:29	
13C2-4:2FTS	89.4	60-200						10/16/24 4:29	
13C2-6:2FTS	76.8	60-200						10/16/24 4:29	
13C2-8:2FTS	64.8	50-200						10/16/24 4:29	
13C8-PFOSA	64.1	30-130						10/16/24 4:29	
D3-NMeFOSA	44.7	15-130						10/16/24 4:29	
D5-NEtFOSA	45.4	10-130						10/16/24 4:29	
D3-NMeFOSAA	67.2	45-200						10/16/24 4:29	
D5-NEtFOSAA	68.9	10-200						10/16/24 4:29	
D7-NMeFOSE	52.4	10-150						10/16/24 4:29	
D9-NEtFOSE	51.7	10-150						10/16/24 4:29	
13C3-HFPO-DA	65.0	25-160						10/16/24 4:29	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: MIDGAC-CP-00-091624

Sampled: 9/16/2024 10:40

Sample ID: 24I2618-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1	H-01	Draft Method 1633	9/23/24	9/23/24 13:43	LL

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: POSTGAC-CP-00-091624

Sampled: 9/16/2024 11:00

Sample ID: 24I2618-03

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	28	0.19	µg/L	1		SW-846 8270E	9/21/24	9/25/24 11:41	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	20.9	15-110						9/25/24 11:41	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: POSTGAC-CP-00-091624

Sampled: 9/16/2024 11:00

Sample ID: 24I2618-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	58	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoropentanoic acid (PFPeA)	12	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorohexanoic acid (PFHxA)	2.7	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoroheptanoic acid (PFHpA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorooctanoic acid (PFOA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorononanoic acid (PFNA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorodecanoic acid (PFDA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorododecanoic acid (PFDoA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorobutanesulfonic acid (PFBS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorooctanesulfonic acid (PFOS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
N-MeFOSAA (NMeFOSAA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
N-EtFOSAA (NEtFOSAA)	ND	0.89	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	8.9	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	8.9	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
9Cl-PF3ONS (F53B Minor)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
11Cl-PF3OUs (F53B Major)	ND	3.6	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	8.9	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	44	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	44	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24I2618

Date Received: 9/19/2024

Field Sample #: POSTGAC-CP-00-091624

Sampled: 9/16/2024 11:00

Sample ID: 24I2618-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	10/11/24	10/16/24 4:45	AB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	68.2	10-130						10/16/24 4:45	
13C5-PFPeA	80.3	35-150						10/16/24 4:45	
13C5-PFHxA	65.9	55-150						10/16/24 4:45	
13C4-PFHpA	66.3	55-150						10/16/24 4:45	
13C8-PFOA	65.9	60-140						10/16/24 4:45	
13C9-PFNA	63.8	55-140						10/16/24 4:45	
13C6-PFDA	59.7	50-140						10/16/24 4:45	
13C7-PFUnA	55.4	30-140						10/16/24 4:45	
13C2-PFDoA	46.9	10-150						10/16/24 4:45	
13C2-PFTeDA	41.4	10-130						10/16/24 4:45	
13C3-PFBS	66.3	55-150						10/16/24 4:45	
13C3-PFHxS	67.6	55-150						10/16/24 4:45	
13C8-PFOS	59.5	45-140						10/16/24 4:45	
13C2-4:2FTS	61.1	60-200						10/16/24 4:45	
13C2-6:2FTS	69.1	60-200						10/16/24 4:45	
13C2-8:2FTS	52.6	50-200						10/16/24 4:45	
13C8-PFOSA	51.1	30-130						10/16/24 4:45	
D3-NMeFOSA	35.3	15-130						10/16/24 4:45	
D5-NEtFOSA	34.3	10-130						10/16/24 4:45	
D3-NMeFOSAA	55.6	45-200						10/16/24 4:45	
D5-NEtFOSAA	51.2	10-200						10/16/24 4:45	
D7-NMeFOSE	39.8	10-150						10/16/24 4:45	
D9-NEtFOSE	37.1	10-150						10/16/24 4:45	
13C3-HFPO-DA	63.8	25-160						10/16/24 4:45	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 2412618

Date Received: 9/19/2024

Field Sample #: POSTGAC-CP-00-091624

Sampled: 9/16/2024 11:00

Sample ID: 2412618-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1	H-01	Draft Method 1633	9/23/24	9/23/24 13:43	LL

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Sample Extraction Data**Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I2618-01 [PREGAC-CP-00-091624]	B386875	50.0	09/23/24
24I2618-02 [MIDGAC-CP-00-091624]	B386875	50.0	09/23/24
24I2618-03 [POSTGAC-CP-00-091624]	B386875	50.0	09/23/24

Prep Method:Draft Method 1633 **Analytical Method:**Draft Method 1633 **Leachates were extracted on 9/23/2024 per NO PREP in Batch B386875**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I2618-01 [PREGAC-CP-00-091624]	B388177	576	5.00	10/11/24
24I2618-02 [MIDGAC-CP-00-091624]	B388177	558	5.00	10/11/24
24I2618-03 [POSTGAC-CP-00-091624]	B388177	562	5.00	10/11/24

Prep Method:SW-846 3510C **Analytical Method:**SW-846 8270E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I2618-01 [PREGAC-CP-00-091624]	B386835	1050	1.00	09/21/24
24I2618-02 [MIDGAC-CP-00-091624]	B386835	1050	1.00	09/21/24
24I2618-03 [POSTGAC-CP-00-091624]	B386835	1050	1.00	09/21/24

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Batch B386835 - SW-846 3510C								
Blank (B386835-BLK1)				Prepared: 09/21/24 Analyzed: 09/24/24				
1,4-Dioxane	ND	0.20	µg/L					
Surrogate: 1,4-Dioxane-d8	2.37		µg/L	10.00		23.7	15-110	
LCS (B386835-BS1)				Prepared: 09/21/24 Analyzed: 09/24/24				
1,4-Dioxane	8.71	0.20	µg/L	10.00		87.1	40-140	
Surrogate: 1,4-Dioxane-d8	2.74		µg/L	10.00		27.4	15-110	
LCS Dup (B386835-BSD1)				Prepared: 09/21/24 Analyzed: 09/24/24				
1,4-Dioxane	9.46	0.20	µg/L	10.00		94.6	40-140	8.32 30
Surrogate: 1,4-Dioxane-d8	5.22		µg/L	20.00		26.1	15-110	

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B388177 - Draft Method 1633										
Blank (B388177-BLK1)				Prepared: 10/11/24 Analyzed: 10/14/24						
Perfluorobutanoic acid (PFBA)	ND	4.0	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.99	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.99	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.99	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.99	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.99	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.99	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.99	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.99	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.99	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.99	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.99	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.99	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.99	ng/L							
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.9	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	ng/L							
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	4.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	4.0	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	68.7		ng/L	99.37		69.1	10-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388177 - Draft Method 1633
Blank (B388177-BLK1)

Prepared: 10/11/24 Analyzed: 10/14/24

Surrogate: 13C5-PFPeA	39.4		ng/L	49.69		79.2	35-150			
Surrogate: 13C5-PFHxA	16.7		ng/L	24.84		67.1	55-150			
Surrogate: 13C4-PFHpA	16.2		ng/L	24.84		65.2	55-150			
Surrogate: 13C8-PFOA	17.4		ng/L	24.84		70.2	60-140			
Surrogate: 13C9-PFNA	7.87		ng/L	12.42		63.4	55-140			
Surrogate: 13C6-PFDA	8.51		ng/L	12.42		68.5	50-140			
Surrogate: 13C7-PFUnA	8.32		ng/L	12.42		67.0	30-140			
Surrogate: 13C2-PFDoA	7.52		ng/L	12.42		60.5	10-150			
Surrogate: 13C2-PFTeDA	7.07		ng/L	12.42		56.9	10-130			
Surrogate: 13C3-PFBS	16.5		ng/L	24.84		66.3	55-150			
Surrogate: 13C3-PFHxS	16.9		ng/L	24.84		67.9	55-150			
Surrogate: 13C8-PFOS	17.5		ng/L	24.84		70.6	45-140			
Surrogate: 13C2-4:2FTS	30.1		ng/L	49.69		60.5	60-200			
Surrogate: 13C2-6:2FTS	33.6		ng/L	49.69		67.5	60-200			
Surrogate: 13C2-8:2FTS	31.6		ng/L	49.69		63.6	50-200			
Surrogate: 13C8-PFOA	15.2		ng/L	24.84		61.2	30-130			
Surrogate: D3-NMeFOSA	11.7		ng/L	24.84		47.1	15-130			
Surrogate: D5-NEtFOSA	12.1		ng/L	24.84		48.8	10-130			
Surrogate: D3-NMeFOSAA	33.1		ng/L	49.69		66.7	45-200			
Surrogate: D5-NEtFOSAA	32.7		ng/L	49.69		65.7	10-200			
Surrogate: D7-NMeFOSE	149		ng/L	248.4		60.0	10-150			
Surrogate: D9-NEtFOSE	144		ng/L	248.4		58.1	10-150			
Surrogate: 13C3-HFPO-DA	62.7		ng/L	99.37		63.1	25-160			

LCS (B388177-BS1)

Prepared: 10/11/24 Analyzed: 10/14/24

Perfluorobutanoic acid (PFBA)	110	4.0	ng/L	95.28		116	58-148			
Perfluoropentanoic acid (PFPeA)	55.5	2.0	ng/L	47.64		116	54-152			
Perfluorohexanoic acid (PFHxA)	28.3	0.99	ng/L	23.82		119	55-152			
Perfluoroheptanoic acid (PFHpA)	25.8	0.99	ng/L	23.82		108	54-154			
Perfluorooctanoic acid (PFOA)	26.4	0.99	ng/L	23.82		111	52-161			
Perfluorononanoic acid (PFNA)	27.3	0.99	ng/L	23.82		115	59-149			
Perfluorodecanoic acid (PFDA)	28.1	0.99	ng/L	23.82		118	52-147			
Perfluoroundecanoic acid (PFUnA)	27.1	0.99	ng/L	23.82		114	48-159			
Perfluorododecanoic acid (PFDoA)	27.7	0.99	ng/L	23.82		116	64-142			
Perfluorotridecanoic acid (PFTTrDA)	28.9	0.99	ng/L	23.82		121	49-148			
Perfluorotetradecanoic acid (PFTeDA)	27.1	0.99	ng/L	23.82		114	47-161			
Perfluorobutanesulfonic acid (PFBS)	23.0	0.99	ng/L	21.14		109	62-144			
Perfluoropentanesulfonic acid (PFPeS)	25.4	0.99	ng/L	22.39		113	59-151			
Perfluorohexanesulfonic acid (PFHxS)	22.9	0.99	ng/L	21.79		105	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	25.6	0.99	ng/L	22.69		113	55-152			
Perfluorooctanesulfonic acid (PFOS)	24.6	0.99	ng/L	22.09		111	58-149			
Perfluorononanesulfonic acid (PFNS)	25.2	0.99	ng/L	22.93		110	52-148			
Perfluorodecanesulfonic acid (PFDS)	24.6	0.99	ng/L	22.99		107	51-147			
Perfluorododecanesulfonic acid (PFDoS)	23.4	0.99	ng/L	23.10		101	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	107	4.0	ng/L	89.32		120	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	110	4.0	ng/L	90.51		121	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	102	4.0	ng/L	91.70		112	63-152			
Perfluorooctanesulfonamide (PFOSA)	26.4	0.99	ng/L	23.82		111	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	29.6	0.99	ng/L	23.82		124	63-145			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388177 - Draft Method 1633
LCS (B388177-BS1)

Prepared: 10/11/24 Analyzed: 10/14/24

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	29.6	0.99	ng/L	23.82		124	65-139			
N-MeFOSAA (NMeFOSAA)	28.8	0.99	ng/L	23.82		121	58-144			
N-EtFOSAA (NEtFOSAA)	25.8	0.99	ng/L	23.82		108	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	282	9.9	ng/L	238.2		118	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	275	9.9	ng/L	238.2		116	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	107	4.0	ng/L	95.28		113	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	106	4.0	ng/L	89.92		118	68-146			
9Cl-PF3ONS (F53B Minor)	100	4.0	ng/L	89.32		112	56-156			
11Cl-PF3OUdS (F53B Major)	93.2	4.0	ng/L	89.92		104	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	200	9.9	ng/L	238.2		84.2	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1260	50	ng/L	1191		106	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1120	50	ng/L	1191		93.7	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	54.4	2.0	ng/L	42.40		128	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	47.5	2.0	ng/L	47.64		99.8	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	55.2	2.0	ng/L	47.64		116	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	49.8	2.0	ng/L	47.64		105	48-161			
Surrogate: 13C4-PFBA	68.3		ng/L	99.25		68.9	10-130			
Surrogate: 13C5-PFPeA	38.7		ng/L	49.62		77.9	35-150			
Surrogate: 13C5-PFHxA	16.1		ng/L	24.81		64.8	55-150			
Surrogate: 13C4-PFHpA	16.0		ng/L	24.81		64.6	55-150			
Surrogate: 13C8-PFOA	16.4		ng/L	24.81		66.3	60-140			
Surrogate: 13C9-PFNA	8.46		ng/L	12.41		68.2	55-140			
Surrogate: 13C6-PFDA	8.34		ng/L	12.41		67.3	50-140			
Surrogate: 13C7-PFUnA	8.43		ng/L	12.41		68.0	30-140			
Surrogate: 13C2-PFDoA	7.73		ng/L	12.41		62.3	10-150			
Surrogate: 13C2-PFTeDA	7.36		ng/L	12.41		59.3	10-130			
Surrogate: 13C3-PFBS	16.7		ng/L	24.81		67.2	55-150			
Surrogate: 13C3-PFHxS	17.1		ng/L	24.81		69.1	55-150			
Surrogate: 13C8-PFOS	17.3		ng/L	24.81		69.8	45-140			
Surrogate: 13C2-4:2FTS	34.1		ng/L	49.62		68.7	60-200			
Surrogate: 13C2-6:2FTS	35.6		ng/L	49.62		71.7	60-200			
Surrogate: 13C2-8:2FTS	33.6		ng/L	49.62		67.7	50-200			
Surrogate: 13C8-PFOSA	15.6		ng/L	24.81		62.8	30-130			
Surrogate: D3-NMeFOSA	12.2		ng/L	24.81		49.3	15-130			
Surrogate: D5-NEtFOSA	12.7		ng/L	24.81		51.3	10-130			
Surrogate: D3-NMeFOSAA	33.3		ng/L	49.62		67.0	45-200			
Surrogate: D5-NEtFOSAA	32.7		ng/L	49.62		65.9	10-200			
Surrogate: D7-NMeFOSE	145		ng/L	248.1		58.4	10-150			
Surrogate: D9-NEtFOSE	144		ng/L	248.1		58.0	10-150			
Surrogate: 13C3-HFPO-DA	62.3		ng/L	99.25		62.8	25-160			

MRL Check (B388177-MRL1)

Prepared: 10/11/24 Analyzed: 10/14/24

Perfluorobutanoic acid (PFBA)	8.29	3.9	ng/L	7.875		105	44-157			
Perfluoropentanoic acid (PFPeA)	4.14	2.0	ng/L	3.938		105	57-148			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388177 - Draft Method 1633
MRL Check (B388177-MRL1)

Prepared: 10/11/24 Analyzed: 10/14/24

Perfluorohexanoic acid (PFHxA)	2.13	0.98	ng/L	1.969		108	62-149			
Perfluoroheptanoic acid (PFHpA)	2.01	0.98	ng/L	1.969		102	56-150			
Perfluorooctanoic acid (PFOA)	1.95	0.98	ng/L	1.969		98.9	57-161			
Perfluorononanoic acid (PFNA)	2.08	0.98	ng/L	1.969		106	53-157			
Perfluorodecanoic acid (PFDA)	2.34	0.98	ng/L	1.969		119	43-158			
Perfluoroundecanoic acid (PFUnA)	1.98	0.98	ng/L	1.969		100	50-155			
Perfluorododecanoic acid (PFDoA)	2.06	0.98	ng/L	1.969		105	60-141			
Perfluorotridecanoic acid (PFTrDA)	2.11	0.98	ng/L	1.969		107	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.09	0.98	ng/L	1.969		106	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.66	0.98	ng/L	1.747		95.2	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.86	0.98	ng/L	1.851		101	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.74	0.98	ng/L	1.801		96.7	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.07	0.98	ng/L	1.875		110	51-150			
Perfluorooctanesulfonic acid (PFOS)	1.90	0.98	ng/L	1.826		104	43-162			
Perfluorononanesulfonic acid (PFNS)	1.83	0.98	ng/L	1.895		96.7	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.82	0.98	ng/L	1.900		96.0	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.71	0.98	ng/L	1.910		89.5	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.09	3.9	ng/L	7.383		110	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	8.95	3.9	ng/L	7.481		120	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.09	3.9	ng/L	7.580		107	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.94	0.98	ng/L	1.969		98.8	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.16	0.98	ng/L	1.969		109	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.02	0.98	ng/L	1.969		102	49-156			
N-MeFOSAA (NMeFOSAA)	2.29	0.98	ng/L	1.969		116	32-160			
N-EtFOSAA (NEtFOSAA)	2.02	0.98	ng/L	1.969		103	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	21.5	9.8	ng/L	19.69		109	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	20.5	9.8	ng/L	19.69		104	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.28	3.9	ng/L	7.875		105	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.86	3.9	ng/L	7.432		106	61-148			
9Cl-PF3ONS (F53B Minor)	7.47	3.9	ng/L	7.383		101	44-167			
11Cl-PF3OUDS (F53B Major)	6.89	3.9	ng/L	7.432		92.7	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	15.5	9.8	ng/L	19.69		78.7	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	95.7	49	ng/L	98.44		97.2	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	83.1	49	ng/L	98.44		84.4	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	3.85	2.0	ng/L	3.504		110	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.54	2.0	ng/L	3.938		89.9	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	2.0	ng/L	3.938		102	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.32	2.0	ng/L	3.938		110	47-160			
Surrogate: 13C4-PFBA	69.4		ng/L	98.44		70.5	10-130			
Surrogate: 13C5-PFPeA	40.0		ng/L	49.22		81.2	35-150			
Surrogate: 13C5-PFHxA	16.7		ng/L	24.61		67.9	55-150			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B388177 - Draft Method 1633
MRL Check (B388177-MRL1)

Prepared: 10/11/24 Analyzed: 10/14/24

Surrogate: 13C4-PFHpA	16.8		ng/L	24.61		68.3	55-150			
Surrogate: 13C8-PFOA	17.4		ng/L	24.61		70.6	60-140			
Surrogate: 13C9-PFNA	8.60		ng/L	12.31		69.9	55-140			
Surrogate: 13C6-PFDA	8.19		ng/L	12.31		66.6	50-140			
Surrogate: 13C7-PFUnA	8.71		ng/L	12.31		70.8	30-140			
Surrogate: 13C2-PFDoA	7.79		ng/L	12.31		63.3	10-150			
Surrogate: 13C2-PFTeDA	7.08		ng/L	12.31		57.5	10-130			
Surrogate: 13C3-PFBS	16.8		ng/L	24.61		68.4	55-150			
Surrogate: 13C3-PFHxS	17.6		ng/L	24.61		71.5	55-150			
Surrogate: 13C8-PFOS	17.3		ng/L	24.61		70.3	45-140			
Surrogate: 13C2-4:2FTS	31.4		ng/L	49.22		63.8	60-200			
Surrogate: 13C2-6:2FTS	34.2		ng/L	49.22		69.6	60-200			
Surrogate: 13C2-8:2FTS	32.3		ng/L	49.22		65.6	50-200			
Surrogate: 13C8-PFOSA	14.9		ng/L	24.61		60.4	30-130			
Surrogate: D3-NMeFOSA	10.8		ng/L	24.61		43.8	15-130			
Surrogate: D5-NEtFOSA	10.9		ng/L	24.61		44.4	10-130			
Surrogate: D3-NMeFOSAA	32.5		ng/L	49.22		66.0	45-200			
Surrogate: D5-NEtFOSAA	34.8		ng/L	49.22		70.6	10-200			
Surrogate: D7-NMeFOSE	141		ng/L	246.1		57.4	10-150			
Surrogate: D9-NEtFOSE	141		ng/L	246.1		57.3	10-150			
Surrogate: 13C3-HFPO-DA	65.8		ng/L	98.44		66.9	25-160			

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QUALITY CONTROL**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B386875 - Draft Method 1633**Blank (B386875-BLK1)**

Prepared & Analyzed: 09/23/24

Total Suspended Solids	ND	5.0	mg/L
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LCS (B386875-BS1)

Prepared & Analyzed: 09/23/24

Total Suspended Solids	197	5.0	mg/L	200.0	98.5	51.5-130
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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
S-29	Extracted Internal Standard is outside of control limits.

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>Draft Method 1633 in Water</i>	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT
<i>SW-846 8270E in Water</i>	
1,4-Dioxane	NY,NH

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Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2025
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2025

Chain of Custody / Analysis Report					
Sampler(s): Brigian J Dunn Signature		Laboratory: Pace Analytical Services 39 Spruce St., East Longmeadow, MA 01028		Project Number:	
Contact: Michael G. Grifasi	Address: 333 West Washington Street Syracuse, New York 13221-4873	Phone: (315) 956-6100	E-mail: michael.grifasi@ramboll.com	Job Number:	
Project: NYSDEC Claremont Poly Site 2024 Pilot Test Sampling	Attn: Kyle Murray	Phone: 413-525-2332	Analysis Required		
Location: Old Bethpage, New York	Package Requirement: Level 2 and Level 3			Preservatives: (see key at bottom)	
Sample Identification		Holding Time:			
Unique Field Sample ID (sys_sample_code)		Date	Time		
1 PREGAC-CP-00-091624	9/16/2024	1030	N	WG	5
2 MIDGAC-CP-00-091624	9/16/2024	1340	N	WG	5
3 POSTGAC-CP-00-091624	9/16/2024	1100	N	WG	5
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
Special Instructions:					
Use the top boxes if the samples are to be shipped via courier (e.g., Fed Ex)					
Relinquished by: Brian J Dunn		Courier Name: FedEx	Date: 9/16/24	Condition: 0.3°C @ Bubble	
of: GES		Tracking #: 1330	Time: 15:30	Custody Seals Intact? (If so, indicate the #, date, and time of the seal)	
Relinquished by: MSMA(ANL)		Courier Name: MSMA(ANL)	Date: 9/16	Cooler Temperature:	
Received By: Anthony Green		Tracking #: 2130	Time: 1900		
Date: 9/16/24		Received By: Anthony Green	Date: SEP 18 2024		
Time: 1330		Time: 2205			
Other comments or notes regarding condition of samples as received:					
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Analysis Report

Special Instructions:					
Please the top boxes if the samples are to be shipped via courier (e.g., Fed Ex)					
Relinquished by:	Date:	Courier Name:	FedEx	Date:	Condition:
Brian J Dunn <i>[Signature]</i>	9/16/24	Amy Buddin Pace		9/16/24	Bubble
f:	Time:	Tracking #:		Time:	
GES	1530	MSMA(AN)		1530	
Relinquished by:	Date:	Courier Name:	FedEx	Date:	Custody Seals Intact? (if so, indicate the #, date, and time of the seal)
Rambath es <i>[Signature]</i>		Anthony Green		SEP 18 2024	
	Time:	Received By:		Time:	Cooler Temperature:
		SEP 18		2153	
Lab Name:	FedEx	Date:	Time:		
MSMA(AN)		9/18	0130		
Lab #:					
Lab Type:					
N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank					
Lab Matrix:					
SE = Sediment, SO = Soil, WG = Groundwater, WQ = Water Quality, WS = Surface Water, WW = Waste Water, WP = Potable Water, AA = Ambient Air, Other (Specify):					
Lab Code:					
0 = none, 1 = HCL, 2 = HNO ₃ , 3 = H ₂ SO ₄ , 4 = NaOH, 5 = Zn Acetate, 6 = MeOH, 7 = Na-HSO ₄ , 8 = Na-PO ₄ , 9 = BenzalkoniumCl, 10 = other					
Lab Code:					
210324 0105					

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	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing
– Using Acceptance Policy) Any False statement will be
brought to the attention of the Client – True or False

Client Ramboll

Project NY DEC Claremont Poly Site, 2024 Pilot Test Sampling

MCP/RCP Required N/A

Deliverable Package Requirement N/A

Location Old Bethpage, NY

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time EVER 9-19-24 @ 8:30

Back-Sheet By / Date / Time Eli 9-20-24 @ 10:25

Temperature Method Gun # 6

WV samples: Yes (see note*) / No (follow normal procedure)

Temp < 6° C Actual Temperature 23

Rush Samples: Yes / ☒ No Notify

Short Hold: Yes / ☒ No Notify

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☒	☒
Trip Blanks	☒	☒
Lab to Filters	☐	☒
COC Legible	☒	☐
COC Included* (Check all included)		
Client ☒	Analysis ☒	Sampler Name ☒
Project ☒	IDs ☒	Collection Date/Time ☒
All Samples Proper pH: <u>N/A</u>	☐	☐

Additional Container Notes

*Note: West Virginia requires all samples to have their
temperature taken. Note any outliers.

Sample	Soils Jars (Circle Amb/Clear)				Ambers				Plastics						VOA Vials					Other / Fill in				
	16oz Amb/Clear 8oz Amb/Clear 4oz Amb/Clear 2oz Amb/Clear				1 Liter HCL Sulfuric Sulfuric Phosphoric HCl				100mL 250mL 1 Liter 500mL 250mL						Unpreserved HCl MeOH D.I. Water BiSulfate					Col/Bact 125mL Plastic				
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DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist	Effective Date: 06/11/2024
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