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MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE ACTIVITIES (JULY 2024)

**CLAREMONT POLYCHEMICAL
OPERABLE UNIT 5 GROUND
WATER TREATMENT
SYSTEM, OLD BETHPAGE, NY**

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ACTIVITIES (JULY 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 July 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, July 1, 2024, through approximately 0800 hours, August 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 31 days in this reporting period during which the treatment system experienced 35 minutes of downtime. The system experienced high wet vault levels on July 23, 2024 due to PF-2 pump malfunction. 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 July. However, RW-4 remained offline for the entire period to accommodate granular activated carbon (GAC) treatment system operational limitations (pressure and optimal flow rate). Additionally, RW-5 was intermediately turned off due to pump control issues.

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 (July 24 Database.xlsx)
- NYSDC 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 July activities is further provided in the plant operator's daily logbook.

Maintenance and project activities undertaken during the July 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.
- The GAC treatment system was put into operation on April 25, 2024 at limited flow.
- The influent and effluent (pre-GAC) wet vaults were power washed on June 4, 2024.

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.
- On July 22, 2024 Andrew Leitzinger (Ramboll) was on site for the United States Environmental Protection Agency (USEPA) Five Year Review site inspection visit.

2.2 NYSDEC Personnel, Sub - contractors, and Other Visitors

- On July 22, 2024 Payson Long and Jeffrey Dyber (NYSDEC) were on site for the USEPA) Five Year Review site inspection visit.
- On July 22, 2024 Julie McPherson and Maria Jon (USEPA) were on site for the Five Year Review site inspection visit.

2.3 Deliveries

- On July 26, 2024 Pace delivered coolers for the system sampling event.

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.
- Routine monitoring of GAC treatment system
- 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 July 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 July 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 July 2024, recovery well RW-3 has 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 remained offline during this period to accommodate GAC treatment system operational limitations (pressure and optimal flow rate).

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 PF-2 transfer pump, which caused insufficient transfer flow rates.

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

The total volume of treated water discharged from ~0800 hours July 1, 2024 to ~0800 hours August 1, 2024 was approximately 19,485,000 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 July 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 July 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 July 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 July 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 of 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 July 9, 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 July 22, 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 3rd Q 2024.

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).

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.

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 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 installed a central monitoring and an alarm system on the sprinkler system at OU4 in the past, the system is no 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 3rd Q 2024.

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 June 2024 PFAS and 1,4-dioxane influent and effluent results can be found in **Table 7** following the text of this report. Monthly system sampling analytical results are provided in **Attachment 1**.

The July sampling activities included:

- Monthly system sampling was completed on July 9, 2024.
- Mid-month system sampling was completed on July 22, 2024.
- Waste characterization sampling of GAC and air stripper media at OU-4 was completed on August 1, 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 July 2024 can be found in **Table 8** following the text of this report.

The July 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 July 2024 readings from the AS tower are provided in **Table 10**.

Other routine data collected in July 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. As of April 25, 2024, the GAC system has been online and operational.

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)

13.4 PD Process

- The plant discharge flow was directed intermittently to Recharge Basin 1 and Recharge Basin 33 based on 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 is pending electrical troubleshooting.
- 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

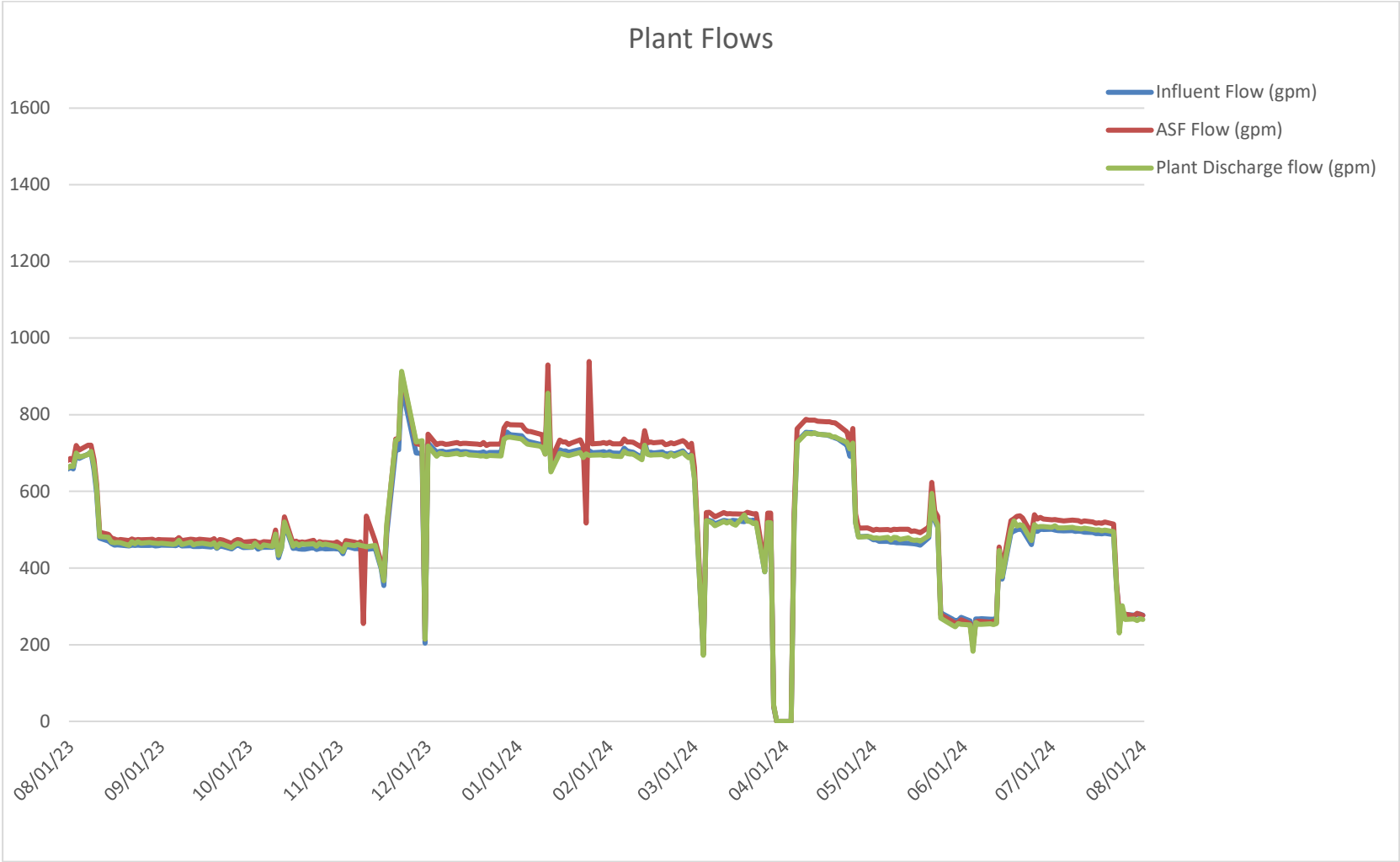
- Well field, and recharge basin inspections continue. Quarterly groundskeeping activities are performed to clear vegetation and poison ivy from around all well fields in anticipation of quarterly groundwater sampling events. In addition, the entrance to Recharge Basin 33 is maintained for ease of access.

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. <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 is operating at elevated backpressure and requires blowback due to sediment accumulation.	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
July 2024	437	628,548	19,485,000	35	44,605

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

July 2024 Flows						
Plant Influent			Plant Discharge		RW Discharge	
Date	Volume	Avg. Flow	Volume	Avg. Flow	Volume	Avg. Flow
07/01/24	-	528	-	508	-	500
07/02/24	757,000	526	729,000	506	722,000	501
07/03/24	758,000	526	735,000	510	719,000	499
07/05/24	1,512,000	525	1,454,000	505	1,433,000	498
07/08/24	2,260,000	523	2,180,000	505	2,148,000	497
07/09/24	756,000	525	729,000	506	717,000	498
07/10/24	755,000	524	726,000	504	714,000	496
07/11/24	754,000	524	725,000	503	715,000	497
07/12/24	749,000	520	723,000	502	714,000	496
07/15/24	2,259,000	523	2,176,000	504	2,133,000	494
07/16/24	749,000	520	721,000	501	710,000	493
07/17/24	744,000	517	719,000	499	706,000	490
07/18/24	746,000	518	720,000	500	706,000	490
07/19/24	744,000	517	716,000	497	705,000	490
07/22/24	2,248,000	520	2,156,000	499	2,120,000	491
07/23/24	741,000	515	713,000	495	701,000	487
07/24/24	513,000	365	498,000	354	503,000	358
07/25/24	402,000	279	332,000	231	405,000	281
07/26/24	401,000	278	434,000	301	403,000	280
07/29/24	1,209,000	280	1,149,000	266	1,205,000	279
07/30/24	396,000	275	385,000	267	399,000	277
07/31/24	406,000	282	379,000	263	402,000	279
08/01/24	402,000	279	386,000	268	403,000	280
July Total Plant Influent (Gal)			20,261,000			
July Total Plant Effluent (Gal)			19,485,000			
July Total RW Discharge (Gal)			19,383,000			

Acronyms: gal - gallons

gpm – gallons per minute

Table 4
Pump System Flow Readings

July	On-Time Minutes (actual)	Avg. Flow (gpm)	Avg. Flow (gpd)	Total Flow (gal)
RW-1*	5	NR	0	~750
RW-2*	5	NR	0	~1,045
RW-3	44,605	267	383,774	11,897,000
RW-4	0	0	0	0
RW-5	33,550	237	256,419	7,949,000
RW Totals	44,605	435	625,258	19,383,000
Plant Influent	44,605	454	653,581	20,261,000
Plant Effluent	44,605	437	628,548	19,485,000

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

The treatment process was online 31 days during this period with 35 minutes of downtime. System was down on July 23, 2024 due to PFF wet vault high level condition due to PF-2 pump malfunction.

The system was temporarily shut down on June 24, 2024 for control float adjustment in the influent wet vault.

RW-4 has shut down on May 21, 2024 due to electrical overloads at the pump. Pump was tested to be operational, but will remain offline until further electrical testing can be conducted.

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.

* 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
July 9, 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	NS
Arsenic, Total recoverable	50	ug/l	NS
Barium, Total recoverable	2000	ug/l	NS
Chromium, Hexavalent	100	ug/l	NS
Lead, Total recoverable	50	ug/l	NS
Iron, Total recoverable	600	ug/l	NS
Manganese, Total recoverable	600	ug/l	NS
Mercury	Not indicated	ug/l	NS
Zinc	Not indicated	mg/l	NS
Nitrogen, Total (as N)	10	mg/l	NS
Selenium, Total recoverable	40	ug/l	NS
Solids, Total Dissolved	1000	mg/l	NS
Chloride Ion	NL	mg/l	NS
Cyanide	Not indicated	ug/l	NS
Fluoride Ion	NL	mg/l	NS

Parameters	Discharge Limitations (SPDES)	Units	Results
Sulfate Ion	NL	mg/l	NS
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
July 9 and July 22, 2024

Parameters	Guidance Values	Units	Influent / Pre-GAC Results	Mid-GAC Results	Effluent / Post-GAC Results
July 9, 2024 Sampling					
PFOA	6.7 ¹	ng/l	43 / 43	7.5	U / U
PFOS	2.7 ¹	ng/l	19 / 18	1.3	U / U
1,4-Dioxane	0.35 ¹	ug/l	18 / 18	19	19 / 19
July 22, 2024 Sampling					
PFOA	6.7 ¹	ng/l	14	U	U
PFOS	2.7 ¹	ng/l	3.3	U	U

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

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)
07/03/2024	6.99	18.6
07/10/2024	6.99	19.5
07/15/2024	7.67	17.9
07/24/2024	7.38	20.5
7/31/2024	7.01	19.9
July Average	7.21 su	19.3 °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

Plant Discharge Monthly Average pH Reading

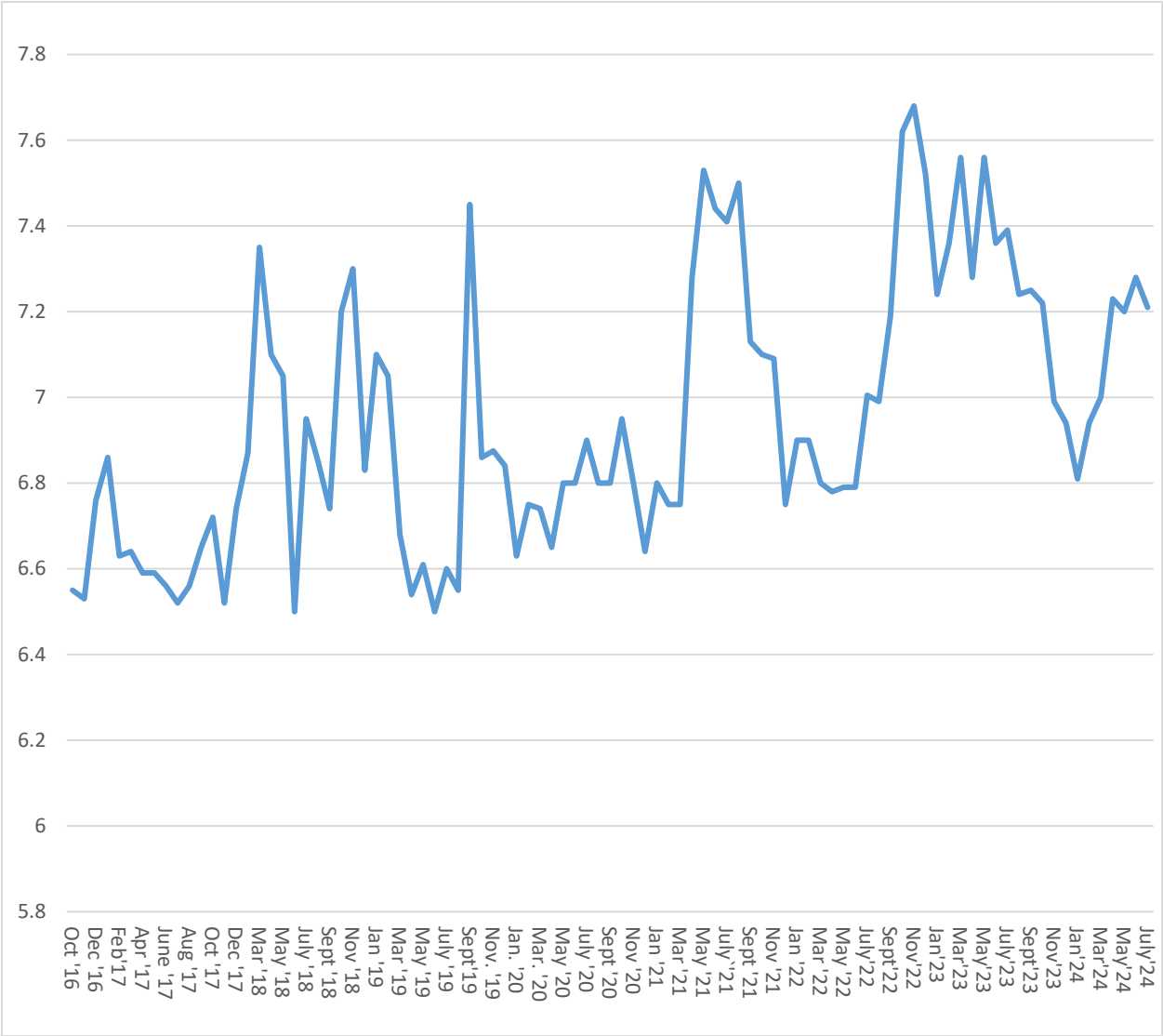


Table 10
AS Tower Air Monitoring Readings

Recorded Date	Port B (ppm)
07/03/24	0.1
07/11/24	0.0
07/15/24	0.1
07/25/24	0.0

ATTACHMENT 1
MONTHLY O&M SAMPLING ANALYTICAL RESULTS –JULY 9, 2024

July 30, 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: 24G1263

Enclosed are results of analyses for samples as received by the laboratory on July 10, 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: 7/30/2024

PURCHASE ORDER NUMBER: 151811

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24G1263

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
PD-CP-00-070924	24G1263-01	Ground Water		Draft Method 1633 SW-846 8260D SW-846 8270E	
PD-CP-01-070924	24G1263-02	Ground Water		Draft Method 1633 SW-846 8260D SW-846 8270E	
ASF-CP-00-070924	24G1263-03	Ground Water		Draft Method 1633 SW-846 8270E	
ASF-CP-01-070924	24G1263-04	Ground Water		Draft Method 1633 SW-846 8270E	
TB-070924	24G1263-05	Trip Blank Water		SW-846 8260D	
MIDGAC-CP-00-070924	24G1263-06	Ground Water		Draft Method 1633 SW-846 8270E	

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:****PF-17C**

Extracted internal standard is outside of control limits. Analyte is a known difficult compound.

Analyte & Samples(s) Qualified:**13C2-4:2FTS**

24G1263-02[PD-CP-01-070924]

13C2-6:2FTS

24G1263-02[PD-CP-01-070924]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)

24G1263-02[PD-CP-01-070924]

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)

24G1263-02[PD-CP-01-070924]

SW-846 8260D**Qualifications:****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:**Naphthalene**

24G1263-01[PD-CP-00-070924], 24G1263-02[PD-CP-01-070924], 24G1263-05[TB-070924], B380031-BLK1, B380031-BS1, B380031-BSD1, S107597-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:**Bromochloromethane**

B380031-BS1, B380031-BSD1, S107597-CCV1

Bromomethane

B380031-BS1, B380031-BSD1, S107597-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**

24G1263-01[PD-CP-00-070924], 24G1263-02[PD-CP-01-070924], B379652-BLK1, B379652-BS1, B379652-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

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

B379652-BSD1

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**

24G1263-01[PD-CP-00-070924], 24G1263-02[PD-CP-01-070924], B379652-BLK1, B379652-BS1, B379652-BSD1, S107291-CCV1

Di-n-octylphthalate

24G1263-01[PD-CP-00-070924], 24G1263-02[PD-CP-01-070924], B379652-BLK1, B379652-BS1, B379652-BSD1, S107291-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:**Aniline**

24G1263-01[PD-CP-00-070924], 24G1263-02[PD-CP-01-070924], B379652-BLK1, B379652-BS1, B379652-BSD1, S107291-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:**Aniline**

24G1263-01[PD-CP-00-070924], 24G1263-02[PD-CP-01-070924], B379652-BLK1, B379652-BS1, B379652-BSD1, S099947-ICV1, S107291-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.



Lisa A. Worthington
Technical Representative

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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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	7/15/24	7/18/24 1:04	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	7/15/24	7/18/24 1:04	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF

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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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	7/15/24	7/18/24 1:04	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:04	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	111	70-130							
Toluene-d8	102	70-130							
4-Bromofluorobenzene	89.5	70-130							

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sample ID: 24G1263-01

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/9/2024 09:00

Work Order: 24G1263

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	7/15/24	7/18/24 1:04	MF

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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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	7/10/24	7/11/24 12:32	BGL
Atrazine	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Benzaldehyde	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Biphenyl	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Caprolactam	ND	9.0	µg/L	1	L-04	SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Acenaphthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Acenaphthylene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Acetophenone	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Aniline	ND	18	µg/L	1	V-05, V-34	SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Anthracene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Benzo(a)anthracene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Benzo(a)pyrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Benzo(b)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Benzo(g,h,i)perylene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Benzo(k)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Bis(2-chloroethoxy)methane	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Bis(2-chloroethyl)ether	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Bis(2-chloroisopropyl)ether	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4-Bromophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Butylbenzylphthalate	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Carbazole	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4-Chloroaniline	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4-Chloro-3-methylphenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2-Chloronaphthalene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2-Chlorophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4-Chlorophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Chrysene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Dibenz(a,h)anthracene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Dibenzofuran	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Di-n-butylphthalate	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
3,3-Dichlorobenzidine	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,4-Dichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Diethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,4-Dimethylphenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Dimethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4,6-Dinitro-2-methylphenol	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,4-Dinitrophenol	ND	9.0	µg/L	1	V-04	SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,4-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,6-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Di-n-octylphthalate	ND	9.0	µg/L	1	V-04	SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Fluorene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Hexachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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	7/10/24	7/11/24 12:32	BGL
Hexachlorocyclopentadiene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Hexachloroethane	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Isophorone	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
1-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
3/4-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Naphthalene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
3-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Nitrobenzene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
4-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
N-Nitrosodi-n-propylamine	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Pentachlorophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Phenanthrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Phenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Pyrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
Pyridine	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,4,5-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL
2,4,6-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:32	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	40.7	15-110	7/11/24 12:32
Phenol-d6	24.9	15-110	7/11/24 12:32
Nitrobenzene-d5	45.5	30-130	7/11/24 12:32
2-Fluorobiphenyl	63.7	30-130	7/11/24 12:32
2,4,6-Tribromophenol	62.1	15-110	7/11/24 12:32
p-Terphenyl-d14	71.1	30-130	7/11/24 12:32

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sample ID: 24G1263-01

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/9/2024 09:00

Work Order: 24G1263

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	19	0.19	µg/L	1		SW-846 8270E	7/10/24	7/15/24 11:47	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	22.8	15-110						7/15/24 11:47	

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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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)	4.3	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorooctanoic acid (PFOA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorononanoic acid (PFNA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorodecanoic acid (PFDA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.92	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.2	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.2	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
11Cl-PF3OUs (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.2	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:35	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	66.1	10-130						7/29/24 18:35	
13C5-PFPeA	68.7	35-150						7/29/24 18:35	
13C5-PFHxA	65.5	55-150						7/29/24 18:35	
13C4-PFHpA	68.5	55-150						7/29/24 18:35	
13C8-PFOA	65.2	60-140						7/29/24 18:35	
13C9-PFNA	59.8	55-140						7/29/24 18:35	
13C6-PFDA	61.0	50-140						7/29/24 18:35	
13C7-PFUnA	56.3	30-140						7/29/24 18:35	
13C2-PFDoA	56.9	10-150						7/29/24 18:35	
13C2-PFTeDA	51.0	10-130						7/29/24 18:35	
13C3-PFBS	65.8	55-150						7/29/24 18:35	
13C3-PFHxS	61.8	55-150						7/29/24 18:35	
13C8-PFOS	57.8	45-140						7/29/24 18:35	
13C2-4:2FTS	60.5	60-200						7/29/24 18:35	
13C2-6:2FTS	61.0	60-200						7/29/24 18:35	
13C2-8:2FTS	57.1	50-200						7/29/24 18:35	
13C8-PFOSA	57.5	30-130						7/29/24 18:35	
D3-NMeFOSA	49.0	15-130						7/29/24 18:35	
D5-NEtFOSA	52.1	10-130						7/29/24 18:35	
D3-NMeFOSAA	58.5	45-200						7/29/24 18:35	
D5-NEtFOSAA	57.7	10-200						7/29/24 18:35	
D7-NMeFOSE	53.8	10-150						7/29/24 18:35	
D9-NEtFOSE	53.9	10-150						7/29/24 18:35	
13C3-HFPO-DA	63.4	25-160						7/29/24 18:35	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-00-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-01

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		Draft Method 1633	7/11/24	7/11/24 13:17	LL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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	7/15/24	7/18/24 1:30	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	7/15/24	7/18/24 1:30	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF

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: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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	7/15/24	7/18/24 1:30	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/18/24 1:30	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4	110		70-130				7/18/24 1:30		
Toluene-d8	102		70-130				7/18/24 1:30		
4-Bromofluorobenzene	88.6		70-130				7/18/24 1:30		

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sample ID: 24G1263-02

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/9/2024 09:00

Work Order: 24G1263

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	7/15/24	7/18/24 1:30	MF

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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	7/10/24	7/11/24 12:53	BGL
Atrazine	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Benzaldehyde	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Biphenyl	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Caprolactam	ND	8.9	µg/L	1	L-04	SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Acenaphthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Acenaphthylene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Acetophenone	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Aniline	ND	18	µg/L	1	V-05, V-34	SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Anthracene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Benzo(a)anthracene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Benzo(a)pyrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Benzo(b)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Benzo(g,h,i)perylene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Benzo(k)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Bis(2-chloroethoxy)methane	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Bis(2-chloroethyl)ether	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Bis(2-chloroisopropyl)ether	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Bis(2-Ethylhexyl)phthalate	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4-Bromophenylphenylether	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Butylbenzylphthalate	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Carbazole	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4-Chloroaniline	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4-Chloro-3-methylphenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2-Chloronaphthalene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2-Chlorophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4-Chlorophenylphenylether	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Chrysene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Dibenz(a,h)anthracene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Dibenzofuran	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Di-n-butylphthalate	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
3,3-Dichlorobenzidine	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,4-Dichlorophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Diethylphthalate	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,4-Dimethylphenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Dimethylphthalate	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4,6-Dinitro-2-methylphenol	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,4-Dinitrophenol	ND	8.9	µg/L	1	V-04	SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,4-Dinitrotoluene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,6-Dinitrotoluene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Di-n-octylphthalate	ND	8.9	µg/L	1	V-04	SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Fluorene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Hexachlorobenzene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Hexachlorocyclopentadiene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Hexachloroethane	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Isophorone	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
1-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2-Methylphenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
3/4-Methylphenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Naphthalene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2-Nitroaniline	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
3-Nitroaniline	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4-Nitroaniline	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Nitrobenzene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2-Nitrophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
4-Nitrophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
N-Nitrosodi-n-propylamine	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Pentachlorophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Phenanthrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Phenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Pyrene	ND	4.5	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
Pyridine	ND	18	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
1,2,4,5-Tetrachlorobenzene	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,4,5-Trichlorophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL
2,4,6-Trichlorophenol	ND	8.9	µg/L	1		SW-846 8270E	7/10/24	7/11/24 12:53	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	35.4	15-110	7/11/24 12:53
Phenol-d6	21.9	15-110	7/11/24 12:53
Nitrobenzene-d5	39.9	30-130	7/11/24 12:53
2-Fluorobiphenyl	56.1	30-130	7/11/24 12:53
2,4,6-Tribromophenol	56.2	15-110	7/11/24 12:53
p-Terphenyl-d14	71.7	30-130	7/11/24 12:53

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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	19	0.19	µg/L	1		SW-846 8270E	7/10/24	7/15/24 12:07	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	27.5	15-110						7/15/24 12:07	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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)	4.7	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorooctanoic acid (PFOA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorononanoic acid (PFNA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorodecanoic acid (PFDA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1	PF-17C	Draft Method 1633	7/29/24	7/29/24 18:50	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1	PF-17C	Draft Method 1633	7/29/24	7/29/24 18:50	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.3	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
11Cl-PF3OUDS (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sampled: 7/9/2024 09:00

Sample ID: 24G1263-02

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	7/29/24	7/29/24 18:50	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 18:50	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
13C4-PFBA	63.4		10-130					7/29/24 18:50	
13C5-PFPeA	66.6		35-150					7/29/24 18:50	
13C5-PFHxA	61.4		55-150					7/29/24 18:50	
13C4-PFHpA	64.4		55-150					7/29/24 18:50	
13C8-PFOA	61.2		60-140					7/29/24 18:50	
13C9-PFNA	59.1		55-140					7/29/24 18:50	
13C6-PFDA	57.2		50-140					7/29/24 18:50	
13C7-PFUnA	55.0		30-140					7/29/24 18:50	
13C2-PFDoA	52.9		10-150					7/29/24 18:50	
13C2-PFTeDA	50.1		10-130					7/29/24 18:50	
13C3-PFBS	64.4		55-150					7/29/24 18:50	
13C3-PFHxS	61.1		55-150					7/29/24 18:50	
13C8-PFOS	58.9		45-140					7/29/24 18:50	
13C2-4:2FTS	57.3	*	60-200		PF-17C			7/29/24 18:50	
13C2-6:2FTS	59.5	*	60-200		PF-17C			7/29/24 18:50	
13C2-8:2FTS	55.7		50-200					7/29/24 18:50	
13C8-PFOSA	57.7		30-130					7/29/24 18:50	
D3-NMeFOSA	49.1		15-130					7/29/24 18:50	
D5-NEtFOSA	53.3		10-130					7/29/24 18:50	
D3-NMeFOSAA	59.6		45-200					7/29/24 18:50	
D5-NEtFOSAA	60.2		10-200					7/29/24 18:50	
D7-NMeFOSE	53.3		10-150					7/29/24 18:50	
D9-NEtFOSE	54.9		10-150					7/29/24 18:50	
13C3-HFPO-DA	58.9		25-160					7/29/24 18:50	

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: PD-CP-01-070924

Sample ID: 24G1263-02

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/9/2024 09:00

Work Order: 24G1263

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		Draft Method 1633	7/11/24	7/11/24 13:17	LL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-00-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-03

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	18	0.19	µg/L	1		SW-846 8270E	7/10/24	7/15/24 16:24	GJB
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	24.7	15-110						7/15/24 16:24	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-00-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-03

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)	32	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoropentanoic acid (PFPeA)	25	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorohexanoic acid (PFHxA)	29	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoroheptanoic acid (PFHpA)	14	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorooctanoic acid (PFOA)	43	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorononanoic acid (PFNA)	36	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorodecanoic acid (PFDA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorobutanesulfonic acid (PFBS)	4.7	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoropentanesulfonic acid (PFPeS)	3.6	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorohexanesulfonic acid (PFHxS)	11	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorooctanesulfonic acid (PFOS)	19	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
N-EtFOSAA (NEtFOSAA)	2.5	0.94	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.4	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
11Cl-PF3OUs (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	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: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-00-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-03

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	7/29/24	7/29/24 19:06	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:06	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	78.1	10-130						7/29/24 19:06	
13C5-PFPeA	79.3	35-150						7/29/24 19:06	
13C5-PFHxA	79.0	55-150						7/29/24 19:06	
13C4-PFHpA	82.0	55-150						7/29/24 19:06	
13C8-PFOA	73.4	60-140						7/29/24 19:06	
13C9-PFNA	68.4	55-140						7/29/24 19:06	
13C6-PFDA	69.6	50-140						7/29/24 19:06	
13C7-PFUnA	66.3	30-140						7/29/24 19:06	
13C2-PFDoA	61.2	10-150						7/29/24 19:06	
13C2-PFTeDA	39.6	10-130						7/29/24 19:06	
13C3-PFBS	80.8	55-150						7/29/24 19:06	
13C3-PFHxS	74.9	55-150						7/29/24 19:06	
13C8-PFOS	65.2	45-140						7/29/24 19:06	
13C2-4:2FTS	120	60-200						7/29/24 19:06	
13C2-6:2FTS	85.5	60-200						7/29/24 19:06	
13C2-8:2FTS	64.3	50-200						7/29/24 19:06	
13C8-PFOSA	61.0	30-130						7/29/24 19:06	
D3-NMeFOSA	50.4	15-130						7/29/24 19:06	
D5-NEtFOSA	49.7	10-130						7/29/24 19:06	
D3-NMeFOSAA	58.8	45-200						7/29/24 19:06	
D5-NEtFOSAA	56.1	10-200						7/29/24 19:06	
D7-NMeFOSE	38.6	10-150						7/29/24 19:06	
D9-NEtFOSE	32.6	10-150						7/29/24 19:06	
13C3-HFPO-DA	73.0	25-160						7/29/24 19:06	

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: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-00-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-03

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		Draft Method 1633	7/11/24	7/11/24 13:17	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: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-01-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-04

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	18	0.20	µg/L	1		SW-846 8270E	7/10/24	7/15/24 12:48	GJB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,4-Dioxane-d8	21.1	15-110	7/15/24 12:48						

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: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-01-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-04

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)	32	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoropentanoic acid (PFPeA)	23	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorohexanoic acid (PFHxA)	29	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoroheptanoic acid (PFHpA)	13	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorooctanoic acid (PFOA)	43	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorononanoic acid (PFNA)	34	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorodecanoic acid (PFDA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorobutanesulfonic acid (PFBS)	4.8	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoropentanesulfonic acid (PFPeS)	3.1	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorohexanesulfonic acid (PFHxS)	11	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorooctanesulfonic acid (PFOS)	18	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
N-EtFOSAA (NEtFOSAA)	2.4	0.90	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.0	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.0	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
11Cl-PF3OUs (F53B Major)	ND	3.6	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.0	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	45	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	45	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	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: 24G1263

Date Received: 7/10/2024

Field Sample #: ASF-CP-01-070924

Sampled: 7/9/2024 09:30

Sample ID: 24G1263-04

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	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:22	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	73.9	10-130						7/29/24 19:22	
13C5-PFPeA	74.2	35-150						7/29/24 19:22	
13C5-PFHxA	73.3	55-150						7/29/24 19:22	
13C4-PFHpA	76.7	55-150						7/29/24 19:22	
13C8-PFOA	71.5	60-140						7/29/24 19:22	
13C9-PFNA	66.5	55-140						7/29/24 19:22	
13C6-PFDA	63.0	50-140						7/29/24 19:22	
13C7-PFUnA	59.8	30-140						7/29/24 19:22	
13C2-PFDoA	51.9	10-150						7/29/24 19:22	
13C2-PFTeDA	36.0	10-130						7/29/24 19:22	
13C3-PFBS	75.8	55-150						7/29/24 19:22	
13C3-PFHxS	69.1	55-150						7/29/24 19:22	
13C8-PFOS	63.6	45-140						7/29/24 19:22	
13C2-4:2FTS	112	60-200						7/29/24 19:22	
13C2-6:2FTS	80.9	60-200						7/29/24 19:22	
13C2-8:2FTS	57.5	50-200						7/29/24 19:22	
13C8-PFOSA	59.8	30-130						7/29/24 19:22	
D3-NMeFOSA	48.7	15-130						7/29/24 19:22	
D5-NEtFOSA	49.5	10-130						7/29/24 19:22	
D3-NMeFOSAA	59.9	45-200						7/29/24 19:22	
D5-NEtFOSAA	54.3	10-200						7/29/24 19:22	
D7-NMeFOSE	36.7	10-150						7/29/24 19:22	
D9-NEtFOSE	30.7	10-150						7/29/24 19:22	
13C3-HFPO-DA	69.3	25-160						7/29/24 19:22	

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: ASF-CP-01-070924

Sample ID: 24G1263-04

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/9/2024 09:30

Work Order: 24G1263

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		Draft Method 1633	7/11/24	7/11/24 13:17	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: 24G1263

Date Received: 7/10/2024

Field Sample #: TB-070924

Sampled: 7/9/2024 14:00

Sample ID: 24G1263-05

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	7/15/24	7/17/24 23:17	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Cyclohexane	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	7/15/24	7/17/24 23:17	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF

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: 24G1263

Date Received: 7/10/2024

Field Sample #: TB-070924

Sampled: 7/9/2024 14:00

Sample ID: 24G1263-05

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	7/15/24	7/17/24 23:17	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Xylenes (total)	ND	1.0	µg/L	1		SW-846 8260D	7/15/24	7/17/24 23:17	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	111	70-130							
Toluene-d8	101	70-130							
4-Bromofluorobenzene	85.1	70-130							

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: TB-070924

Sample ID: 24G1263-05

Sample Matrix: Trip Blank Water

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

Sample Description:

Sampled: 7/9/2024 14:00

Work Order: 24G1263

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	7/15/24	7/17/24 23:17	MF

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: 24G1263

Date Received: 7/10/2024

Field Sample #: MIDGAC-CP-00-070924

Sampled: 7/9/2024 10:00

Sample ID: 24G1263-06

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	19	0.19	µg/L	1		SW-846 8270E	7/10/24	7/15/24 13:09	GJB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,4-Dioxane-d8	23.8		15-110					7/15/24 13:09	

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: 24G1263

Date Received: 7/10/2024

Field Sample #: MIDGAC-CP-00-070924

Sampled: 7/9/2024 10:00

Sample ID: 24G1263-06

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)	33	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoropentanoic acid (PFPeA)	14	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorohexanoic acid (PFHxA)	12	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoroheptanoic acid (PFHpA)	3.6	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorooctanoic acid (PFOA)	7.5	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorononanoic acid (PFNA)	3.4	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorodecanoic acid (PFDA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorobutanesulfonic acid (PFBS)	1.5	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.4	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorooctanesulfonic acid (PFOS)	1.3	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.91	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.1	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.1	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
11Cl-PF3OUs (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.1	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	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: 24G1263

Date Received: 7/10/2024

Field Sample #: MIDGAC-CP-00-070924

Sampled: 7/9/2024 10:00

Sample ID: 24G1263-06

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	7/29/24	7/29/24 19:37	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	7/29/24	7/29/24 19:37	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	72.0	10-130						7/29/24 19:37	
13C5-PFPeA	75.5	35-150						7/29/24 19:37	
13C5-PFHxA	71.9	55-150						7/29/24 19:37	
13C4-PFHpA	73.1	55-150						7/29/24 19:37	
13C8-PFOA	68.9	60-140						7/29/24 19:37	
13C9-PFNA	64.3	55-140						7/29/24 19:37	
13C6-PFDA	65.8	50-140						7/29/24 19:37	
13C7-PFUnA	62.2	30-140						7/29/24 19:37	
13C2-PFDoA	59.5	10-150						7/29/24 19:37	
13C2-PFTeDA	53.6	10-130						7/29/24 19:37	
13C3-PFBS	74.0	55-150						7/29/24 19:37	
13C3-PFHxS	67.3	55-150						7/29/24 19:37	
13C8-PFOS	64.4	45-140						7/29/24 19:37	
13C2-4:2FTS	69.5	60-200						7/29/24 19:37	
13C2-6:2FTS	66.3	60-200						7/29/24 19:37	
13C2-8:2FTS	60.0	50-200						7/29/24 19:37	
13C8-PFOSA	65.0	30-130						7/29/24 19:37	
D3-NMeFOSA	53.5	15-130						7/29/24 19:37	
D5-NEtFOSA	55.7	10-130						7/29/24 19:37	
D3-NMeFOSAA	65.3	45-200						7/29/24 19:37	
D5-NEtFOSAA	63.0	10-200						7/29/24 19:37	
D7-NMeFOSE	58.1	10-150						7/29/24 19:37	
D9-NEtFOSE	56.8	10-150						7/29/24 19:37	
13C3-HFPO-DA	67.0	25-160						7/29/24 19:37	

Project Location: Old Bethpage, New York

Date Received: 7/10/2024

Field Sample #: MIDGAC-CP-00-070924

Sample ID: 24G1263-06

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/9/2024 10:00

Work Order: 24G1263

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		Draft Method 1633	7/11/24	7/11/24 13:17	LL

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
24G1263-01 [PD-CP-00-070924]	B379734	50.0	07/11/24
24G1263-02 [PD-CP-01-070924]	B379734	50.0	07/11/24
24G1263-03 [ASF-CP-00-070924]	B379734	50.0	07/11/24
24G1263-04 [ASF-CP-01-070924]	B379734	50.0	07/11/24
24G1263-06 [MIDGAC-CP-00-070924]	B379734	50.0	07/11/24

Prep Method:Draft Method 1633 **Analytical Method:**Draft Method 1633 **Leachates were extracted on 7/11/2024 per NO PREP in Batch B379734**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24G1263-01 [PD-CP-00-070924]	B380484	542	5.00	07/29/24
24G1263-02 [PD-CP-01-070924]	B380484	537	5.00	07/29/24
24G1263-03 [ASF-CP-00-070924]	B380484	535	5.00	07/29/24
24G1263-04 [ASF-CP-01-070924]	B380484	552	5.00	07/29/24
24G1263-06 [MIDGAC-CP-00-070924]	B380484	547	5.00	07/29/24

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24G1263-01 [PD-CP-00-070924]	B380031	5	5.00	07/15/24
24G1263-02 [PD-CP-01-070924]	B380031	5	5.00	07/15/24
24G1263-05 [TB-070924]	B380031	5	5.00	07/15/24

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24G1263-01 [PD-CP-00-070924]	B379652	111	1.00	07/10/24
24G1263-02 [PD-CP-01-070924]	B379652	112	1.00	07/10/24

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24G1263-01 [PD-CP-00-070924]	B379694	1040	1.00	07/10/24
24G1263-02 [PD-CP-01-070924]	B379694	1040	1.00	07/10/24
24G1263-03 [ASF-CP-00-070924]	B379694	1040	1.00	07/10/24
24G1263-04 [ASF-CP-01-070924]	B379694	980	1.00	07/10/24
24G1263-06 [MIDGAC-CP-00-070924]	B379694	1040	1.00	07/10/24

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 Limits	RPD	RPD Limit	Notes
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Batch B380031 - SW-846 5030B
Blank (B380031-BLK1)

Prepared: 07/15/24 Analyzed: 07/17/24

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

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 B380031 - SW-846 5030B
Blank (B380031-BLK1)

Prepared: 07/15/24 Analyzed: 07/17/24

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	27.9		µg/L	25.0		112	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	22.4		µg/L	25.0		89.4	70-130			

LCS (B380031-BS1)

Prepared: 07/15/24 Analyzed: 07/17/24

Acetone	108	50	µg/L	100		108	70-160			†
Benzene	11.4	1.0	µg/L	10.0		114	70-130			
Bromochloromethane	12.7	1.0	µg/L	10.0		127	70-130		V-20	
Bromodichloromethane	11.4	0.50	µg/L	10.0		114	70-130			
Bromoform	8.37	1.0	µg/L	10.0		83.7	70-130			
Bromomethane	12.4	2.0	µg/L	10.0		124	40-160		V-20	†
2-Butanone (MEK)	119	20	µg/L	100		119	40-160			†
n-Butylbenzene	9.80	1.0	µg/L	10.0		98.0	70-130			
sec-Butylbenzene	9.20	1.0	µg/L	10.0		92.0	70-130			
tert-Butylbenzene	9.05	1.0	µg/L	10.0		90.5	70-130			
Carbon Disulfide	109	5.0	µg/L	100		109	70-130			
Carbon Tetrachloride	11.6	5.0	µg/L	10.0		116	70-130			
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
Chlorodibromomethane	10.9	0.50	µg/L	10.0		109	70-130			
Chloroethane	9.96	2.0	µg/L	10.0		99.6	70-130			
Chloroform	11.5	2.0	µg/L	10.0		115	70-130			
Chloromethane	11.8	2.0	µg/L	10.0		118	40-160			†
Cyclohexane	11.0	5.0	µg/L	10.0		110	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.2	5.0	µg/L	10.0		102	70-130			
1,2-Dibromoethane (EDB)	11.1	0.50	µg/L	10.0		111	70-130			
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
Dichlorodifluoromethane (Freon 12)	10.8	2.0	µg/L	10.0		108	40-160			†
1,1-Dichloroethane	11.3	1.0	µg/L	10.0		113	70-130			
1,2-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130			
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			
cis-1,2-Dichloroethylene	11.3	1.0	µg/L	10.0		113	70-130			
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130			
cis-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116	70-130			
trans-1,3-Dichloropropene	11.3	0.50	µg/L	10.0		113	70-130			
Ethylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
2-Hexanone (MBK)	113	10	µg/L	100		113	70-160			†
Isopropylbenzene (Cumene)	9.48	1.0	µg/L	10.0		94.8	70-130			
p-Isopropyltoluene (p-Cymene)	9.90	1.0	µg/L	10.0		99.0	70-130			
Methyl Acetate	11.9	1.0	µg/L	10.0		119	70-130			
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	µg/L	10.0		105	70-130			

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 B380031 - SW-846 5030B
LCS (B380031-BS1)

Prepared: 07/15/24 Analyzed: 07/17/24

Methyl Cyclohexane	11.0	1.0	µg/L	10.0		110	70-130			
Methylene Chloride	10.7	5.0	µg/L	10.0		107	70-130			
4-Methyl-2-pentanone (MIBK)	115	10	µg/L	100		115	70-160			†
Naphthalene	7.93	2.0	µg/L	10.0		79.3	40-130		V-05	†
n-Propylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
Styrene	10.1	1.0	µg/L	10.0		101	70-130			
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0		100	70-130			
Tetrachloroethylene	10.9	1.0	µg/L	10.0		109	70-130			
Toluene	11.3	1.0	µg/L	10.0		113	70-130			
1,2,3-Trichlorobenzene	10.0	5.0	µg/L	10.0		100	70-130			
1,2,4-Trichlorobenzene	9.56	1.0	µg/L	10.0		95.6	70-130			
1,1,1-Trichloroethane	11.9	1.0	µg/L	10.0		119	70-130			
1,1,2-Trichloroethane	12.0	1.0	µg/L	10.0		120	70-130			
Trichloroethylene	11.0	1.0	µg/L	10.0		110	70-130			
Trichlorofluoromethane (Freon 11)	10.8	2.0	µg/L	10.0		108	70-130			
1,2,3-Trichloropropane	11.2	2.0	µg/L	10.0		112	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.80	1.0	µg/L	10.0		98.0	70-130			
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trimethylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
Vinyl Chloride	11.0	2.0	µg/L	10.0		110	40-160			†
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130			
o-Xylene	9.51	1.0	µg/L	10.0		95.1	70-130			
Xylenes (total)	29.8	1.0	µg/L	30.0		99.3	0-200			
Surrogate: 1,2-Dichloroethane-d4	27.1		µg/L	25.0		108	70-130			
Surrogate: Toluene-d8	26.0		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.4	70-130			

LCS Dup (B380031-BS1)

Prepared: 07/15/24 Analyzed: 07/17/24

Acetone	109	50	µg/L	100		109	70-160	1.29	25	†
Benzene	11.2	1.0	µg/L	10.0		112	70-130	1.59	25	
Bromochloromethane	12.7	1.0	µg/L	10.0		127	70-130	0.236	25	V-20
Bromodichloromethane	11.1	0.50	µg/L	10.0		111	70-130	2.66	25	
Bromoform	8.14	1.0	µg/L	10.0		81.4	70-130	2.79	25	
Bromomethane	11.7	2.0	µg/L	10.0		117	40-160	6.05	25	V-20
2-Butanone (MEK)	119	20	µg/L	100		119	40-160	0.0841	25	†
n-Butylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130	1.42	25	
sec-Butylbenzene	9.24	1.0	µg/L	10.0		92.4	70-130	0.434	25	
tert-Butylbenzene	8.85	1.0	µg/L	10.0		88.5	70-130	2.23	25	
Carbon Disulfide	108	5.0	µg/L	100		108	70-130	1.22	25	
Carbon Tetrachloride	11.5	5.0	µg/L	10.0		115	70-130	1.21	25	
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	3.30	25	
Chlorodibromomethane	10.6	0.50	µg/L	10.0		106	70-130	2.32	25	
Chloroethane	9.84	2.0	µg/L	10.0		98.4	70-130	1.21	25	
Chloroform	11.4	2.0	µg/L	10.0		114	70-130	0.788	25	
Chloromethane	12.5	2.0	µg/L	10.0		125	40-160	5.43	25	†
Cyclohexane	10.8	5.0	µg/L	10.0		108	70-130	2.11	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.90	5.0	µg/L	10.0		99.0	70-130	2.49	25	
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130	2.10	25	
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.00	25	
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	0.869	25	
1,4-Dichlorobenzene	9.92	1.0	µg/L	10.0		99.2	70-130	5.30	25	
Dichlorodifluoromethane (Freon 12)	10.7	2.0	µg/L	10.0		107	40-160	1.12	25	†

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
Batch B380031 - SW-846 5030B										
LCS Dup (B380031-BSD1)										
Prepared: 07/15/24 Analyzed: 07/17/24										
1,1-Dichloroethane	11.1	1.0	µg/L	10.0		111	70-130	1.87	25	
1,2-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130	1.69	25	
1,1-Dichloroethylene	9.68	1.0	µg/L	10.0		96.8	70-130	4.25	25	
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	4.26	25	
trans-1,2-Dichloroethylene	9.91	1.0	µg/L	10.0		99.1	70-130	5.50	25	
1,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	70-130	2.68	25	
cis-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130	3.86	25	
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130	4.16	25	
Ethylbenzene	9.99	1.0	µg/L	10.0		99.9	70-130	1.19	25	
2-Hexanone (MBK)	116	10	µg/L	100		116	70-160	2.28	25	†
Isopropylbenzene (Cumene)	9.25	1.0	µg/L	10.0		92.5	70-130	2.46	25	
p-Isopropyltoluene (p-Cymene)	9.90	1.0	µg/L	10.0		99.0	70-130	0.00	25	
Methyl Acetate	12.3	1.0	µg/L	10.0		123	70-130	3.72	25	
Methyl tert-Butyl Ether (MTBE)	10.3	1.0	µg/L	10.0		103	70-130	2.40	25	
Methyl Cyclohexane	10.5	1.0	µg/L	10.0		105	70-130	4.64	25	
Methylene Chloride	10.6	5.0	µg/L	10.0		106	70-130	1.03	25	
4-Methyl-2-pentanone (MIBK)	115	10	µg/L	100		115	70-160	0.209	25	†
Naphthalene	7.94	2.0	µg/L	10.0		79.4	40-130	0.126	25	V-05 †
n-Propylbenzene	9.57	1.0	µg/L	10.0		95.7	70-130	3.79	25	
Styrene	9.65	1.0	µg/L	10.0		96.5	70-130	4.56	25	
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0		100	70-130	0.499	25	
Tetrachloroethylene	11.0	1.0	µg/L	10.0		110	70-130	1.01	25	
Toluene	11.2	1.0	µg/L	10.0		112	70-130	1.51	25	
1,2,3-Trichlorobenzene	10.1	5.0	µg/L	10.0		101	70-130	0.892	25	
1,2,4-Trichlorobenzene	9.43	1.0	µg/L	10.0		94.3	70-130	1.37	25	
1,1,1-Trichloroethane	11.3	1.0	µg/L	10.0		113	70-130	5.00	25	
1,1,2-Trichloroethane	11.7	1.0	µg/L	10.0		117	70-130	2.28	25	
Trichloroethylene	11.4	1.0	µg/L	10.0		114	70-130	3.49	25	
Trichlorofluoromethane (Freon 11)	10.7	2.0	µg/L	10.0		107	70-130	0.835	25	
1,2,3-Trichloropropane	10.9	2.0	µg/L	10.0		109	70-130	3.53	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1	1.0	µg/L	10.0		101	70-130	3.02	25	
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	3.41	25	
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130	2.73	25	
Vinyl Chloride	11.1	2.0	µg/L	10.0		111	40-160	0.813	25	†
m+p Xylene	20.2	2.0	µg/L	20.0		101	70-130	0.544	25	
o-Xylene	9.31	1.0	µg/L	10.0		93.1	70-130	2.13	25	
Xylenes (total)	29.5	1.0	µg/L	30.0		98.3	0-200	1.05		
Surrogate: 1,2-Dichloroethane-d4	27.5		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	26.1		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	23.9		µg/L	25.0		95.6	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 B380031 - SW-846 5030B**Blank (B380031-BLK1)**

Prepared: 07/15/24 Analyzed: 07/17/24

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch B379652 - SW-846 3510C									
Blank (B379652-BLK1)									
Prepared: 07/10/24 Analyzed: 07/11/24									
2,3,4,6-Tetrachlorophenol	ND	20	µg/L						
Atrazine	ND	20	µg/L						
Benzaldehyde	ND	10	µg/L						
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, V-34
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						
Bis(2-chloroisopropyl)ether	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
2,4-Dinitrotoluene	ND	10	µg/L						
2,6-Dinitrotoluene	ND	10	µg/L						
Di-n-octylphthalate	ND	10	µg/L						V-04
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
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Batch B379652 - SW-846 3510C
Blank (B379652-BLK1)

Prepared: 07/10/24 Analyzed: 07/11/24

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							
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							
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	184		µg/L	400		46.1	15-110			
Surrogate: Phenol-d6	115		µg/L	400		28.8	15-110			
Surrogate: Nitrobenzene-d5	119		µg/L	250		47.5	30-130			
Surrogate: 2-Fluorobiphenyl	129		µg/L	200		64.5	30-130			
Surrogate: 2,4,6-Tribromophenol	234		µg/L	400		58.5	15-110			
Surrogate: p-Terphenyl-d14	136		µg/L	200		68.2	30-130			

LCS (B379652-BS1)

Prepared: 07/10/24 Analyzed: 07/11/24

2,3,4,6-Tetrachlorophenol	65.7	20	µg/L	100		65.7	40-140			
Atrazine	71.6	20	µg/L	100		71.6	40-140			
Benzaldehyde	51.4	10	µg/L	100		51.4	40-140			
Biphenyl	63.2	20	µg/L	100		63.2	40-140			
Caprolactam	19.2	10	µg/L	100		19.2	* 40-140			L-04
Acenaphthene	62.6	5.0	µg/L	100		62.6	40-140			
Acenaphthylene	62.0	5.0	µg/L	100		62.0	40-140			
Acetophenone	64.9	10	µg/L	100		64.9	40-140			
Aniline	43.6	20	µg/L	100		43.6	40-140			V-05, V-34
Anthracene	63.5	5.0	µg/L	100		63.5	40-140			
Benzo(a)anthracene	63.0	5.0	µg/L	100		63.0	40-140			
Benzo(a)pyrene	64.0	5.0	µg/L	100		64.0	40-140			
Benzo(b)fluoranthene	63.9	5.0	µg/L	100		63.9	40-140			
Benzo(g,h,i)perylene	69.3	5.0	µg/L	100		69.3	40-140			
Benzo(k)fluoranthene	68.1	5.0	µg/L	100		68.1	40-140			
Bis(2-chloroethoxy)methane	66.9	10	µg/L	100		66.9	40-140			
Bis(2-chloroethyl)ether	67.7	10	µg/L	100		67.7	40-140			
Bis(2-chloroisopropyl)ether	71.9	10	µg/L	100		71.9	40-140			
Bis(2-Ethylhexyl)phthalate	65.6	10	µg/L	100		65.6	40-140			
4-Bromophenylphenylether	61.8	10	µg/L	100		61.8	40-140			
Butylbenzylphthalate	68.5	10	µg/L	100		68.5	40-140			
Carbazole	65.6	10	µg/L	100		65.6	40-140			
4-Chloroaniline	61.0	10	µg/L	100		61.0	40-140			
4-Chloro-3-methylphenol	61.3	10	µg/L	100		61.3	30-130			
2-Chloronaphthalene	55.5	10	µg/L	100		55.5	40-140			
2-Chlorophenol	61.2	10	µg/L	100		61.2	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 B379652 - SW-846 3510C										
LCS (B379652-BS1)										
Prepared: 07/10/24 Analyzed: 07/11/24										
4-Chlorophenylphenylether	65.4	10	µg/L	100		65.4	40-140			
Chrysene	63.2	5.0	µg/L	100		63.2	40-140			
Dibenz(a,h)anthracene	70.5	5.0	µg/L	100		70.5	40-140			
Dibenzofuran	64.5	5.0	µg/L	100		64.5	40-140			
Di-n-butylphthalate	67.6	10	µg/L	100		67.6	40-140			
3,3-Dichlorobenzidine	77.5	10	µg/L	100		77.5	40-140			
2,4-Dichlorophenol	62.1	10	µg/L	100		62.1	30-130			
Diethylphthalate	66.1	10	µg/L	100		66.1	40-140			
2,4-Dimethylphenol	46.0	10	µg/L	100		46.0	30-130			
Dimethylphthalate	67.2	10	µg/L	100		67.2	40-140			
4,6-Dinitro-2-methylphenol	57.4	20	µg/L	100		57.4	30-130			
2,4-Dinitrophenol	51.1	10	µg/L	100		51.1	30-130			V-04
2,4-Dinitrotoluene	68.4	10	µg/L	100		68.4	40-140			
2,6-Dinitrotoluene	67.9	10	µg/L	100		67.9	40-140			
Di-n-octylphthalate	58.6	10	µg/L	100		58.6	40-140			V-04
Fluoranthene	65.3	5.0	µg/L	100		65.3	40-140			
Fluorene	62.9	5.0	µg/L	100		62.9	40-140			
Hexachlorobenzene	62.0	10	µg/L	100		62.0	40-140			
Hexachlorobutadiene	58.1	10	µg/L	100		58.1	40-140			
Hexachlorocyclopentadiene	47.5	10	µg/L	100		47.5	30-140			†
Hexachloroethane	55.1	10	µg/L	100		55.1	40-140			
Indeno(1,2,3-cd)pyrene	71.2	5.0	µg/L	100		71.2	40-140			
Isophorone	66.4	10	µg/L	100		66.4	40-140			
1-Methylnaphthalene	61.3	5.0	µg/L	100		61.3	40-140			
2-Methylnaphthalene	63.4	5.0	µg/L	100		63.4	40-140			
2-Methylphenol	58.0	10	µg/L	100		58.0	30-130			
3/4-Methylphenol	56.8	10	µg/L	100		56.8	30-130			
Naphthalene	60.9	5.0	µg/L	100		60.9	40-140			
2-Nitroaniline	60.5	10	µg/L	100		60.5	40-140			
3-Nitroaniline	67.4	10	µg/L	100		67.4	40-140			
4-Nitroaniline	63.8	10	µg/L	100		63.8	40-140			
Nitrobenzene	62.9	10	µg/L	100		62.9	40-140			
2-Nitrophenol	61.7	10	µg/L	100		61.7	30-130			
4-Nitrophenol	35.5	10	µg/L	100		35.5	10-130			†
N-Nitrosodiphenylamine/Diphenylamine	65.6	10	µg/L	100		65.6	40-140			
N-Nitrosodi-n-propylamine	65.0	10	µg/L	100		65.0	40-140			
Pentachlorophenol	59.7	10	µg/L	100		59.7	30-130			
Phenanthrene	63.0	5.0	µg/L	100		63.0	40-140			
Phenol	32.8	10	µg/L	100		32.8	20-130			†
Pyrene	61.3	5.0	µg/L	100		61.3	40-140			
Pyridine	22.5	20	µg/L	100		22.5	10-140			†
1,2,4,5-Tetrachlorobenzene	62.0	10	µg/L	100		62.0	40-140			
2,4,5-Trichlorophenol	63.5	10	µg/L	100		63.5	30-130			
2,4,6-Trichlorophenol	59.1	10	µg/L	100		59.1	30-130			
Surrogate: 2-Fluorophenol	213		µg/L	400		53.3	15-110			
Surrogate: Phenol-d6	142		µg/L	400		35.4	15-110			
Surrogate: Nitrobenzene-d5	134		µg/L	250		53.6	30-130			
Surrogate: 2-Fluorobiphenyl	145		µg/L	200		72.7	30-130			
Surrogate: 2,4,6-Tribromophenol	319		µg/L	400		79.7	15-110			
Surrogate: p-Terphenyl-d14	143		µg/L	200		71.4	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 B379652 - SW-846 3510C										
LCS Dup (B379652-BSD1)					Prepared: 07/10/24 Analyzed: 07/11/24					
2,3,4,6-Tetrachlorophenol	56.7	20	µg/L	100		56.7	40-140	14.6	20	
Atrazine	62.0	20	µg/L	100		62.0	40-140	14.4	20	
Benzaldehyde	47.8	10	µg/L	100		47.8	40-140	7.26	20	
Biphenyl	59.7	20	µg/L	100		59.7	40-140	5.65	20	
Caprolactam	17.5	10	µg/L	100		17.5	* 40-140	9.28	20	L-04
Acenaphthene	60.2	5.0	µg/L	100		60.2	40-140	3.88	20	
Acenaphthylene	58.5	5.0	µg/L	100		58.5	40-140	5.86	20	
Acetophenone	61.3	10	µg/L	100		61.3	40-140	5.71	20	
Aniline	38.6	20	µg/L	100		38.6	* 40-140	12.4	50	L-07, V-05, V-34 ‡
Anthracene	59.4	5.0	µg/L	100		59.4	40-140	6.61	20	
Benzo(a)anthracene	60.0	5.0	µg/L	100		60.0	40-140	4.79	20	
Benzo(a)pyrene	59.4	5.0	µg/L	100		59.4	40-140	7.55	20	
Benzo(b)fluoranthene	58.7	5.0	µg/L	100		58.7	40-140	8.49	20	
Benzo(g,h,i)perylene	65.6	5.0	µg/L	100		65.6	40-140	5.56	20	
Benzo(k)fluoranthene	63.4	5.0	µg/L	100		63.4	40-140	7.03	20	
Bis(2-chloroethoxy)methane	63.7	10	µg/L	100		63.7	40-140	4.87	20	
Bis(2-chloroethyl)ether	62.0	10	µg/L	100		62.0	40-140	8.78	20	
Bis(2-chloroisopropyl)ether	67.6	10	µg/L	100		67.6	40-140	6.21	20	
Bis(2-Ethylhexyl)phthalate	61.2	10	µg/L	100		61.2	40-140	6.88	20	
4-Bromophenylphenylether	58.9	10	µg/L	100		58.9	40-140	4.77	20	
Butylbenzylphthalate	64.8	10	µg/L	100		64.8	40-140	5.45	20	
Carbazole	60.3	10	µg/L	100		60.3	40-140	8.42	20	
4-Chloroaniline	57.6	10	µg/L	100		57.6	40-140	5.61	20	
4-Chloro-3-methylphenol	55.4	10	µg/L	100		55.4	30-130	9.96	20	
2-Chloronaphthalene	51.6	10	µg/L	100		51.6	40-140	7.34	20	
2-Chlorophenol	56.9	10	µg/L	100		56.9	30-130	7.20	20	
4-Chlorophenylphenylether	62.0	10	µg/L	100		62.0	40-140	5.27	20	
Chrysene	60.6	5.0	µg/L	100		60.6	40-140	4.22	20	
Dibenz(a,h)anthracene	66.0	5.0	µg/L	100		66.0	40-140	6.56	20	
Dibenzofuran	60.4	5.0	µg/L	100		60.4	40-140	6.48	20	
Di-n-butylphthalate	62.6	10	µg/L	100		62.6	40-140	7.62	20	
3,3-Dichlorobenzidine	74.0	10	µg/L	100		74.0	40-140	4.67	20	
2,4-Dichlorophenol	57.7	10	µg/L	100		57.7	30-130	7.30	20	
Diethylphthalate	60.2	10	µg/L	100		60.2	40-140	9.30	20	
2,4-Dimethylphenol	42.8	10	µg/L	100		42.8	30-130	7.21	20	
Dimethylphthalate	62.3	10	µg/L	100		62.3	40-140	7.55	50	‡
4,6-Dinitro-2-methylphenol	51.4	20	µg/L	100		51.4	30-130	11.2	50	‡
2,4-Dinitrophenol	44.1	10	µg/L	100		44.1	30-130	14.7	50	V-04 ‡
2,4-Dinitrotoluene	61.2	10	µg/L	100		61.2	40-140	11.1	20	
2,6-Dinitrotoluene	64.6	10	µg/L	100		64.6	40-140	5.03	20	
Di-n-octylphthalate	53.2	10	µg/L	100		53.2	40-140	9.48	20	V-04
Fluoranthene	60.0	5.0	µg/L	100		60.0	40-140	8.45	20	
Fluorene	59.5	5.0	µg/L	100		59.5	40-140	5.56	20	
Hexachlorobenzene	59.4	10	µg/L	100		59.4	40-140	4.22	20	
Hexachlorobutadiene	54.0	10	µg/L	100		54.0	40-140	7.41	20	
Hexachlorocyclopentadiene	45.2	10	µg/L	100		45.2	30-140	5.05	50	† ‡
Hexachloroethane	52.9	10	µg/L	100		52.9	40-140	4.05	50	‡
Indeno(1,2,3-cd)pyrene	67.5	5.0	µg/L	100		67.5	40-140	5.34	50	‡
Isophorone	62.3	10	µg/L	100		62.3	40-140	6.37	20	
1-Methylnaphthalene	55.9	5.0	µg/L	100		55.9	40-140	9.21	20	
2-Methylnaphthalene	58.1	5.0	µg/L	100		58.1	40-140	8.78	20	
2-Methylphenol	50.2	10	µg/L	100		50.2	30-130	14.3	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 B379652 - SW-846 3510C										
LCS Dup (B379652-BSD1)										
Prepared: 07/10/24 Analyzed: 07/11/24										
3/4-Methylphenol	52.8	10	µg/L	100		52.8	30-130	7.13	20	
Naphthalene	57.4	5.0	µg/L	100		57.4	40-140	5.92	20	
2-Nitroaniline	56.6	10	µg/L	100		56.6	40-140	6.51	20	
3-Nitroaniline	58.8	10	µg/L	100		58.8	40-140	13.7	20	
4-Nitroaniline	57.5	10	µg/L	100		57.5	40-140	10.3	20	
Nitrobenzene	58.0	10	µg/L	100		58.0	40-140	8.12	20	
2-Nitrophenol	59.5	10	µg/L	100		59.5	30-130	3.66	20	
4-Nitrophenol	33.4	10	µg/L	100		33.4	10-130	6.09	50	† ‡
N-Nitrosodiphenylamine/Diphenylamine	62.3	10	µg/L	100		62.3	40-140	5.30	20	
N-Nitrosodi-n-propylamine	58.4	10	µg/L	100		58.4	40-140	10.7	20	
Pentachlorophenol	53.2	10	µg/L	100		53.2	30-130	11.5	50	‡
Phenanthrene	59.6	5.0	µg/L	100		59.6	40-140	5.60	20	
Phenol	30.5	10	µg/L	100		30.5	20-130	7.46	20	†
Pyrene	57.9	5.0	µg/L	100		57.9	40-140	5.76	20	
Pyridine	23.0	20	µg/L	100		23.0	10-140	2.06	50	† ‡
1,2,4,5-Tetrachlorobenzene	59.8	10	µg/L	100		59.8	40-140	3.73	20	
2,4,5-Trichlorophenol	58.6	10	µg/L	100		58.6	30-130	8.11	20	
2,4,6-Trichlorophenol	56.8	10	µg/L	100		56.8	30-130	4.07	50	‡
Surrogate: 2-Fluorophenol	197		µg/L	400		49.2	15-110			
Surrogate: Phenol-d6	126		µg/L	400		31.5	15-110			
Surrogate: Nitrobenzene-d5	124		µg/L	250		49.8	30-130			
Surrogate: 2-Fluorobiphenyl	133		µg/L	200		66.7	30-130			
Surrogate: 2,4,6-Tribromophenol	284		µg/L	400		70.9	15-110			
Surrogate: p-Terphenyl-d14	133		µg/L	200		66.4	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	RPD Limit	Notes
Batch B379694 - SW-846 3510C									
Blank (B379694-BLK1)									
				Prepared: 07/10/24 Analyzed: 07/15/24					
1,4-Dioxane	ND	0.20	µg/L						
Surrogate: 1,4-Dioxane-d8	2.76		µg/L	10.0		27.6	15-110		
LCS (B379694-BS1)									
				Prepared: 07/10/24 Analyzed: 07/15/24					
1,4-Dioxane	10.4	0.20	µg/L	10.0		104	40-140		
Surrogate: 1,4-Dioxane-d8	2.39		µg/L	10.0		23.9	15-110		
LCS Dup (B379694-BSD1)									
				Prepared: 07/10/24 Analyzed: 07/15/24					
1,4-Dioxane	10.9	0.20	µg/L	10.0		109	40-140	4.84	30
Surrogate: 1,4-Dioxane-d8	2.55		µg/L	10.0		25.5	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 B380484 - Draft Method 1633										
Blank (B380484-BLK1)				Prepared & Analyzed: 07/29/24						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.97	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.97	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.97	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.97	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.97	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.97	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.97	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.97	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.97	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.97	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.97	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	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	0.97	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.97	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.97	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.97	ng/L							
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.7	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	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	9.7	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	1.9	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L							
Surrogate: 13C4-PFBA	67.7		ng/L	97.4		69.5	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 B380484 - Draft Method 1633
Blank (B380484-BLK1)

Prepared & Analyzed: 07/29/24

Surrogate: 13C5-PFPeA	34.3		ng/L	48.7		70.5	35-150			
Surrogate: 13C5-PFHxA	16.6		ng/L	24.3		68.1	55-150			
Surrogate: 13C4-PFHpA	16.7		ng/L	24.3		68.8	55-150			
Surrogate: 13C8-PFOA	16.8		ng/L	24.3		69.2	60-140			
Surrogate: 13C9-PFNA	8.31		ng/L	12.2		68.3	55-140			
Surrogate: 13C6-PFDA	7.95		ng/L	12.2		65.3	50-140			
Surrogate: 13C7-PFUnA	7.44		ng/L	12.2		61.1	30-140			
Surrogate: 13C2-PFDoA	7.35		ng/L	12.2		60.4	10-150			
Surrogate: 13C2-PFTeDA	6.98		ng/L	12.2		57.3	10-130			
Surrogate: 13C3-PFBS	16.6		ng/L	24.3		68.1	55-150			
Surrogate: 13C3-PFHxS	15.9		ng/L	24.3		65.4	55-150			
Surrogate: 13C8-PFOS	15.9		ng/L	24.3		65.2	45-140			
Surrogate: 13C2-4:2FTS	33.0		ng/L	48.7		67.7	60-200			
Surrogate: 13C2-6:2FTS	30.5		ng/L	48.7		62.7	60-200			
Surrogate: 13C2-8:2FTS	30.5		ng/L	48.7		62.6	50-200			
Surrogate: 13C8-PFOA	14.2		ng/L	24.3		58.2	30-130			
Surrogate: D3-NMeFOSA	12.5		ng/L	24.3		51.2	15-130			
Surrogate: D5-NEtFOSA	13.2		ng/L	24.3		54.3	10-130			
Surrogate: D3-NMeFOSAA	33.1		ng/L	48.7		68.0	45-200			
Surrogate: D5-NEtFOSAA	31.7		ng/L	48.7		65.0	10-200			
Surrogate: D7-NMeFOSE	143		ng/L	243		58.5	10-150			
Surrogate: D9-NEtFOSE	142		ng/L	243		58.2	10-150			
Surrogate: 13C3-HFPO-DA	61.0		ng/L	97.4		62.6	25-160			

LCS (B380484-BS1)

Prepared & Analyzed: 07/29/24

Perfluorobutanoic acid (PFBA)	100	3.9	ng/L	94.3		106	58-148			
Perfluoropentanoic acid (PFPeA)	50.5	2.0	ng/L	47.1		107	54-152			
Perfluorohexanoic acid (PFHxA)	25.3	0.98	ng/L	23.6		107	55-152			
Perfluoroheptanoic acid (PFHpA)	24.6	0.98	ng/L	23.6		104	54-154			
Perfluorooctanoic acid (PFOA)	25.1	0.98	ng/L	23.6		107	52-161			
Perfluorononanoic acid (PFNA)	25.6	0.98	ng/L	23.6		109	59-149			
Perfluorodecanoic acid (PFDA)	24.8	0.98	ng/L	23.6		105	52-147			
Perfluoroundecanoic acid (PFUnA)	24.5	0.98	ng/L	23.6		104	48-159			
Perfluorododecanoic acid (PFDoA)	24.9	0.98	ng/L	23.6		106	64-142			
Perfluorotridecanoic acid (PFTTrDA)	24.7	0.98	ng/L	23.6		105	49-148			
Perfluorotetradecanoic acid (PFTeDA)	24.8	0.98	ng/L	23.6		105	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.3	0.98	ng/L	20.9		107	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.9	0.98	ng/L	22.2		108	59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.3	0.98	ng/L	21.6		98.8	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.5	0.98	ng/L	22.4		109	55-152			
Perfluorooctanesulfonic acid (PFOS)	22.4	0.98	ng/L	21.9		103	58-149			
Perfluorononanesulfonic acid (PFNS)	24.0	0.98	ng/L	22.7		106	52-148			
Perfluorodecanesulfonic acid (PFDS)	23.9	0.98	ng/L	22.7		105	51-147			
Perfluorododecanesulfonic acid (PFDoS)	22.6	0.98	ng/L	22.9		98.9	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	96.0	3.9	ng/L	88.4		109	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	98.0	3.9	ng/L	89.6		109	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	98.9	3.9	ng/L	90.7		109	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.4	0.98	ng/L	23.6		104	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	25.0	0.98	ng/L	23.6		106	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 B380484 - Draft Method 1633
LCS (B380484-BS1)

Prepared & Analyzed: 07/29/24

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.8	0.98	ng/L	23.6		105	65-139			
N-MeFOSAA (NMeFOSAA)	25.3	0.98	ng/L	23.6		108	58-144			
N-EtFOSAA (NEtFOSAA)	24.4	0.98	ng/L	23.6		103	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	239	9.8	ng/L	236		101	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	242	9.8	ng/L	236		103	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	101	3.9	ng/L	94.3		108	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	104	3.9	ng/L	89.0		117	68-146			
9Cl-PF3ONS (F53B Minor)	98.6	3.9	ng/L	88.4		112	56-156			
11Cl-PF3OUdS (F53B Major)	98.5	3.9	ng/L	89.0		111	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	263	9.8	ng/L	236		112	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1290	49	ng/L	1180		110	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1250	49	ng/L	1180		106	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	54.4	2.0	ng/L	41.9		130	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	54.4	2.0	ng/L	47.1		115	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	52.2	2.0	ng/L	47.1		111	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	66.3	2.0	ng/L	47.1		141	48-161			
Surrogate: 13C4-PFBA	65.6		ng/L	98.2		66.8	10-130			
Surrogate: 13C5-PFPeA	34.5		ng/L	49.1		70.2	35-150			
Surrogate: 13C5-PFHxA	15.9		ng/L	24.5		64.6	55-150			
Surrogate: 13C4-PFHpA	16.2		ng/L	24.5		65.8	55-150			
Surrogate: 13C8-PFOA	15.4		ng/L	24.5		62.8	60-140			
Surrogate: 13C9-PFNA	7.60		ng/L	12.3		61.9	55-140			
Surrogate: 13C6-PFDA	7.85		ng/L	12.3		63.9	50-140			
Surrogate: 13C7-PFUnA	7.44		ng/L	12.3		60.6	30-140			
Surrogate: 13C2-PFDoA	7.48		ng/L	12.3		61.0	10-150			
Surrogate: 13C2-PFTeDA	7.06		ng/L	12.3		57.5	10-130			
Surrogate: 13C3-PFBS	16.3		ng/L	24.5		66.3	55-150			
Surrogate: 13C3-PFHxS	15.7		ng/L	24.5		64.1	55-150			
Surrogate: 13C8-PFOS	15.2		ng/L	24.5		61.7	45-140			
Surrogate: 13C2-4:2FTS	31.8		ng/L	49.1		64.9	60-200			
Surrogate: 13C2-6:2FTS	34.0		ng/L	49.1		69.2	60-200			
Surrogate: 13C2-8:2FTS	32.8		ng/L	49.1		66.9	50-200			
Surrogate: 13C8-PFOSA	15.6		ng/L	24.5		63.5	30-130			
Surrogate: D3-NMeFOSA	13.4		ng/L	24.5		54.6	15-130			
Surrogate: D5-NEtFOSA	14.3		ng/L	24.5		58.1	10-130			
Surrogate: D3-NMeFOSAA	31.7		ng/L	49.1		64.6	45-200			
Surrogate: D5-NEtFOSAA	31.2		ng/L	49.1		63.5	10-200			
Surrogate: D7-NMeFOSE	153		ng/L	245		62.2	10-150			
Surrogate: D9-NEtFOSE	161		ng/L	245		65.5	10-150			
Surrogate: 13C3-HFPO-DA	60.1		ng/L	98.2		61.2	25-160			

MRL Check (B380484-MRL1)

Prepared & Analyzed: 07/29/24

Perfluorobutanoic acid (PFBA)	10.2	3.9	ng/L	7.87		129	44-157			
Perfluoropentanoic acid (PFPeA)	5.06	2.0	ng/L	3.93		129	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 B380484 - Draft Method 1633										
MRL Check (B380484-MRL1)				Prepared & Analyzed: 07/29/24						
Perfluorohexanoic acid (PFHxA)	2.60	0.98	ng/L	1.97		132	62-149			
Perfluoroheptanoic acid (PFHpA)	2.50	0.98	ng/L	1.97		127	56-150			
Perfluorooctanoic acid (PFOA)	2.60	0.98	ng/L	1.97		132	57-161			
Perfluorononanoic acid (PFNA)	2.73	0.98	ng/L	1.97		139	53-157			
Perfluorodecanoic acid (PFDA)	2.61	0.98	ng/L	1.97		133	43-158			
Perfluoroundecanoic acid (PFUnA)	2.33	0.98	ng/L	1.97		118	50-155			
Perfluorododecanoic acid (PFDoA)	2.45	0.98	ng/L	1.97		125	60-141			
Perfluorotridecanoic acid (PFTrDA)	2.52	0.98	ng/L	1.97		128	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.45	0.98	ng/L	1.97		125	52-156			
Perfluorobutanesulfonic acid (PFBS)	2.14	0.98	ng/L	1.75		123	63-145			
Perfluoropentanesulfonic acid (PFPeS)	2.40	0.98	ng/L	1.85		130	58-144			
Perfluorohexanesulfonic acid (PFHxS)	2.34	0.98	ng/L	1.80		130	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.23	0.98	ng/L	1.87		119	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.42	0.98	ng/L	1.82		132	43-162			
Perfluorononanesulfonic acid (PFNS)	2.23	0.98	ng/L	1.89		118	46-151			
Perfluorodecanesulfonic acid (PFDS)	2.49	0.98	ng/L	1.90		131	50-144			
Perfluorododecanesulfonic acid (PFDoS)	2.25	0.98	ng/L	1.91		118	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	9.36	3.9	ng/L	7.38		127	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	10.2	3.9	ng/L	7.47		137	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	9.89	3.9	ng/L	7.57		131	46-165			
Perfluorooctanesulfonamide (PFOSA)	2.43	0.98	ng/L	1.97		123	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.52	0.98	ng/L	1.97		128	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.37	0.98	ng/L	1.97		120	49-156			
N-MeFOSAA (NMeFOSAA)	2.41	0.98	ng/L	1.97		122	32-160			
N-EtFOSAA (NEtFOSAA)	1.79	0.98	ng/L	1.97		90.8	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	24.1	9.8	ng/L	19.7		122	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	24.5	9.8	ng/L	19.7		124	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.50	3.9	ng/L	7.87		95.3	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.78	3.9	ng/L	7.42		105	61-148			
9Cl-PF3ONS (F53B Minor)	7.42	3.9	ng/L	7.38		101	44-167			
11Cl-PF3OUDS (F53B Major)	7.58	3.9	ng/L	7.42		102	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	22.5	9.8	ng/L	19.7		115	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	109	49	ng/L	98.3		111	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	102	49	ng/L	98.3		103	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	3.94	2.0	ng/L	3.50		113	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.50	2.0	ng/L	3.93		114	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.22	2.0	ng/L	3.93		107	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.59	2.0	ng/L	3.93		117	47-160			
Surrogate: 13C4-PFBA	66.4		ng/L	98.3		67.5	10-130			
Surrogate: 13C5-PFPeA	33.3		ng/L	49.2		67.6	35-150			
Surrogate: 13C5-PFHxA	16.3		ng/L	24.6		66.2	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 B380484 - Draft Method 1633
MRL Check (B380484-MRL1)

Prepared & Analyzed: 07/29/24

Surrogate: 13C4-PFHpA	16.8		ng/L	24.6		68.5	55-150			
Surrogate: 13C8-PFOA	16.5		ng/L	24.6		67.2	60-140			
Surrogate: 13C9-PFNA	7.83		ng/L	12.3		63.7	55-140			
Surrogate: 13C6-PFDA	8.03		ng/L	12.3		65.4	50-140			
Surrogate: 13C7-PFUnA	7.95		ng/L	12.3		64.7	30-140			
Surrogate: 13C2-PFDoA	7.83		ng/L	12.3		63.7	10-150			
Surrogate: 13C2-PFTeDA	7.38		ng/L	12.3		60.0	10-130			
Surrogate: 13C3-PFBS	17.9		ng/L	24.6		73.0	55-150			
Surrogate: 13C3-PFHxS	16.7		ng/L	24.6		67.9	55-150			
Surrogate: 13C8-PFOS	15.7		ng/L	24.6		63.8	45-140			
Surrogate: 13C2-4:2FTS	32.6		ng/L	49.2		66.4	60-200			
Surrogate: 13C2-6:2FTS	33.8		ng/L	49.2		68.7	60-200			
Surrogate: 13C2-8:2FTS	31.3		ng/L	49.2		63.7	50-200			
Surrogate: 13C8-PFOSA	15.6		ng/L	24.6		63.4	30-130			
Surrogate: D3-NMeFOSA	13.4		ng/L	24.6		54.4	15-130			
Surrogate: D5-NEtFOSA	14.6		ng/L	24.6		59.5	10-130			
Surrogate: D3-NMeFOSAA	31.8		ng/L	49.2		64.7	45-200			
Surrogate: D5-NEtFOSAA	31.8		ng/L	49.2		64.7	10-200			
Surrogate: D7-NMeFOSE	151		ng/L	246		61.3	10-150			
Surrogate: D9-NEtFOSE	161		ng/L	246		65.5	10-150			
Surrogate: 13C3-HFPO-DA	67.3		ng/L	98.3		68.5	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 B379734 - Draft Method 1633
Blank (B379734-BLK1)

Prepared & Analyzed: 07/11/24

Total Suspended Solids	ND	5.0	mg/L
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LCS (B379734-BS1)

Prepared & Analyzed: 07/11/24

Total Suspended Solids	149	5.0	mg/L	200	74.5	51.5-130
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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.
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-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
PF-17C	Extracted internal standard is outside of control limits. Analyte is a known difficult compound.
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-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 (PFEEA)	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 8260D in Water</i>	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
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
<i>SW-846 8270E in Water</i>	
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
Bis(2-chloroisopropyl)ether	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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270E in Water</i>	
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
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

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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	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

	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 Rumball
 Project Claremont Polychemical Site Q2
 MCP/RCP Required MA
 Deliverable Package Requirement MA
 Location Old Bethpage, New York
 PWSID# (When Applicable) MA
 Arrival Method:
 Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐
 Received By / Date / Time ER 7/10/24 630
 Back-Sheet By / Date / Time LA 7/10/24 1115
 Temperature Method gun # 6
 WV samples: Yes (see note*) ☒ No (follow normal procedure)
 Temp V < 6° C Actual Temperature 3.1/3.2
 Rush Samples: Yes / ☒ No Notify _____
 Short Hold: Yes / ☒ No Notify _____

Notes regarding Samples/COC outside of SOP:

MS/MSD Requested on COC
for VOC but Volume not
received for MS/MSD.

	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

[illegible]

ATTACHMENT 2
MID-MONTH GAC TREATMENT SYSTEM PERFORMANCE ANALYTICAL RESULTS – JULY
22, 2024

August 7, 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: 24G3166

Enclosed are results of analyses for samples as received by the laboratory on July 24, 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: 8/7/2024

PURCHASE ORDER NUMBER: 151811

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24G3166

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
PREGAC-CP-00-072224	24G3166-01	Ground Water		Draft Method 1633	
MIDGAC-CP-00-072224	24G3166-02	Ground Water		Draft Method 1633	
POSTGAC-CP-00-072224	24G3166-03	Ground Water		Draft Method 1633	

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:

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

13C2-4:2FTS

24G3166-02[MIDGAC-CP-00-072224]

13C2-6:2FTS

24G3166-02[MIDGAC-CP-00-072224]

13C8-PFOA

24G3166-02[MIDGAC-CP-00-072224]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)

24G3166-02[MIDGAC-CP-00-072224]

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)

24G3166-02[MIDGAC-CP-00-072224]

Perfluorooctanoic acid (PFOA)

24G3166-02[MIDGAC-CP-00-072224]

Z-01

Detection in CCB for target analyte. Re-analysis confirmed carryover due to sample matrix.

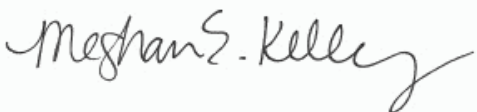
Analyte & Samples(s) Qualified:

Perfluorooctanesulfonic acid (PFOS)

S108571-CCB4

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: 24G3166

Date Received: 7/24/2024

Field Sample #: PREGAC-CP-00-072224

Sampled: 7/22/2024 15:00

Sample ID: 24G3166-01

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)	32	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoropentanoic acid (PFPeA)	18	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorohexanoic acid (PFHxA)	17	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoroheptanoic acid (PFHpA)	6.1	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorooctanoic acid (PFOA)	14	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorononanoic acid (PFNA)	7.6	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorodecanoic acid (PFDA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorododecanoic acid (PFDoA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorobutanesulfonic acid (PFBS)	2.2	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoropentanesulfonic acid (PFPeS)	1.1	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorohexanesulfonic acid (PFHxS)	2.8	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorooctanesulfonic acid (PFOS)	3.3	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
N-MeFOSAA (NMeFOSAA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
N-EtFOSAA (NEtFOSAA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.4	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
9Cl-PF3ONS (F53B Minor)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
11Cl-PF3OUs (F53B Major)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 24G3166

Date Received: 7/24/2024

Field Sample #: PREGAC-CP-00-072224

Sampled: 7/22/2024 15:00

Sample ID: 24G3166-01

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	8/2/24	8/5/24 9:59	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 9:59	AB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	78.4	10-130						8/5/24 9:59	
13C5-PFPeA	77.0	35-150						8/5/24 9:59	
13C5-PFHxA	76.9	55-150						8/5/24 9:59	
13C4-PFHpA	77.0	55-150						8/5/24 9:59	
13C8-PFOA	75.5	60-140						8/5/24 9:59	
13C9-PFNA	78.1	55-140						8/5/24 9:59	
13C6-PFDA	75.3	50-140						8/5/24 9:59	
13C7-PFUnA	75.6	30-140						8/5/24 9:59	
13C2-PFDoA	69.9	10-150						8/5/24 9:59	
13C2-PFTeDA	60.7	10-130						8/5/24 9:59	
13C3-PFBS	84.8	55-150						8/5/24 9:59	
13C3-PFHxS	75.1	55-150						8/5/24 9:59	
13C8-PFOS	73.0	45-140						8/5/24 9:59	
13C2-4:2FTS	89.3	60-200						8/5/24 9:59	
13C2-6:2FTS	72.5	60-200						8/5/24 9:59	
13C2-8:2FTS	64.6	50-200						8/5/24 9:59	
13C8-PFOSA	64.0	30-130						8/5/24 9:59	
D3-NMeFOSA	57.4	15-130						8/5/24 9:59	
D5-NEtFOSA	55.7	10-130						8/5/24 9:59	
D3-NMeFOSAA	73.7	45-200						8/5/24 9:59	
D5-NEtFOSAA	65.5	10-200						8/5/24 9:59	
D7-NMeFOSE	55.6	10-150						8/5/24 9:59	
D9-NEtFOSE	50.8	10-150						8/5/24 9:59	
13C3-HFPO-DA	80.4	25-160						8/5/24 9:59	

Project Location: Old Bethpage, New York

Date Received: 7/24/2024

Field Sample #: PREGAC-CP-00-072224

Sample ID: 24G3166-01

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/22/2024 15:00

Work Order: 24G3166

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		Draft Method 1633	7/25/24	7/25/24 12:44	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: 24G3166

Date Received: 7/24/2024

Field Sample #: MIDGAC-CP-00-072224

Sampled: 7/22/2024 15:05

Sample ID: 24G3166-02

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)	20	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorohexanoic acid (PFHxA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoroheptanoic acid (PFHpA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorooctanoic acid (PFOA)	ND	0.94	ng/L	1	S-29	Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorononanoic acid (PFNA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorodecanoic acid (PFDA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorododecanoic acid (PFDoA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorobutanesulfonic acid (PFBS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorooctanesulfonic acid (PFOS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	ng/L	1	S-29	Draft Method 1633	8/2/24	8/5/24 10:14	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.3	3.8	ng/L	1	S-29	Draft Method 1633	8/2/24	8/5/24 10:14	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
N-MeFOSAA (NMeFOSAA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
N-EtFOSAA (NEtFOSAA)	ND	0.94	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.4	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
9Cl-PF3ONS (F53B Minor)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
11Cl-PF3OUs (F53B Major)	ND	3.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	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: 24G3166

Date Received: 7/24/2024

Field Sample #: MIDGAC-CP-00-072224

Sampled: 7/22/2024 15:05

Sample ID: 24G3166-02

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	8/2/24	8/5/24 10:14	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:14	AB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
13C4-PFBA	66.3		10-130					8/5/24 10:14	
13C5-PFPeA	64.7		35-150					8/5/24 10:14	
13C5-PFHxA	65.0		55-150					8/5/24 10:14	
13C4-PFHpA	63.1		55-150					8/5/24 10:14	
13C8-PFOA	57.5 *		60-140		S-29			8/5/24 10:14	
13C9-PFNA	61.8		55-140					8/5/24 10:14	
13C6-PFDA	61.8		50-140					8/5/24 10:14	
13C7-PFUnA	59.2		30-140					8/5/24 10:14	
13C2-PFDoA	56.4		10-150					8/5/24 10:14	
13C2-PFTeDA	50.6		10-130					8/5/24 10:14	
13C3-PFBS	67.9		55-150					8/5/24 10:14	
13C3-PFHxS	62.2		55-150					8/5/24 10:14	
13C8-PFOS	62.7		45-140					8/5/24 10:14	
13C2-4:2FTS	59.4 *		60-200		S-29			8/5/24 10:14	
13C2-6:2FTS	59.9 *		60-200		S-29			8/5/24 10:14	
13C2-8:2FTS	54.2		50-200					8/5/24 10:14	
13C8-PFOSA	54.9		30-130					8/5/24 10:14	
D3-NMeFOSA	46.8		15-130					8/5/24 10:14	
D5-NEtFOSA	46.0		10-130					8/5/24 10:14	
D3-NMeFOSAA	57.1		45-200					8/5/24 10:14	
D5-NEtFOSAA	55.9		10-200					8/5/24 10:14	
D7-NMeFOSE	44.7		10-150					8/5/24 10:14	
D9-NEtFOSE	42.0		10-150					8/5/24 10:14	
13C3-HFPO-DA	72.2		25-160					8/5/24 10:14	

Project Location: Old Bethpage, New York

Date Received: 7/24/2024

Field Sample #: MIDGAC-CP-00-072224

Sample ID: 24G3166-02

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/22/2024 15:05

Work Order: 24G3166

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		Draft Method 1633	7/25/24	7/25/24 12:44	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: 24G3166

Date Received: 7/24/2024

Field Sample #: POSTGAC-CP-00-072224

Sampled: 7/22/2024 15:10

Sample ID: 24G3166-03

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)	16	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoropentanoic acid (PFPeA)	ND	1.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorohexanoic acid (PFHxA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoroheptanoic acid (PFHpA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorooctanoic acid (PFOA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorononanoic acid (PFNA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorodecanoic acid (PFDA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorododecanoic acid (PFDoA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorobutanesulfonic acid (PFBS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorohexanesulfonic acid (PFHxS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorooctanesulfonic acid (PFOS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
N-MeFOSAA (NMeFOSAA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
N-EtFOSAA (NEtFOSAA)	ND	0.92	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.2	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.2	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
11Cl-PF3OUs (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.2	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	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: 24G3166

Date Received: 7/24/2024

Field Sample #: POSTGAC-CP-00-072224

Sampled: 7/22/2024 15:10

Sample ID: 24G3166-03

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	8/2/24	8/5/24 10:30	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	8/2/24	8/5/24 10:30	AB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	76.0	10-130						8/5/24 10:30	
13C5-PFPeA	75.6	35-150						8/5/24 10:30	
13C5-PFHxA	74.3	55-150						8/5/24 10:30	
13C4-PFHpA	76.2	55-150						8/5/24 10:30	
13C8-PFOA	71.2	60-140						8/5/24 10:30	
13C9-PFNA	73.8	55-140						8/5/24 10:30	
13C6-PFDA	73.5	50-140						8/5/24 10:30	
13C7-PFUnA	67.6	30-140						8/5/24 10:30	
13C2-PFDoA	68.5	10-150						8/5/24 10:30	
13C2-PFTeDA	59.4	10-130						8/5/24 10:30	
13C3-PFBS	79.1	55-150						8/5/24 10:30	
13C3-PFHxS	71.1	55-150						8/5/24 10:30	
13C8-PFOS	69.9	45-140						8/5/24 10:30	
13C2-4:2FTS	68.0	60-200						8/5/24 10:30	
13C2-6:2FTS	71.3	60-200						8/5/24 10:30	
13C2-8:2FTS	60.9	50-200						8/5/24 10:30	
13C8-PFOSA	65.9	30-130						8/5/24 10:30	
D3-NMeFOSA	54.3	15-130						8/5/24 10:30	
D5-NEtFOSA	52.7	10-130						8/5/24 10:30	
D3-NMeFOSAA	70.3	45-200						8/5/24 10:30	
D5-NEtFOSAA	65.5	10-200						8/5/24 10:30	
D7-NMeFOSE	52.6	10-150						8/5/24 10:30	
D9-NEtFOSE	48.1	10-150						8/5/24 10:30	
13C3-HFPO-DA	87.3	25-160						8/5/24 10:30	

Project Location: Old Bethpage, New York

Date Received: 7/24/2024

Field Sample #: POSTGAC-CP-00-072224

Sample ID: 24G3166-03

Sample Matrix: Ground Water

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

Sample Description:

Sampled: 7/22/2024 15:10

Work Order: 24G3166

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		Draft Method 1633	7/25/24	7/25/24 12:44	LL

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
24G3166-01 [PREGAC-CP-00-072224]	B381071	50.0	07/25/24
24G3166-02 [MIDGAC-CP-00-072224]	B381071	50.0	07/25/24
24G3166-03 [POSTGAC-CP-00-072224]	B381071	50.0	07/25/24

Prep Method:Draft Method 1633 **Analytical Method:**Draft Method 1633 **Leachates were extracted on 7/25/2024 per NO PREP in Batch B381071**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24G3166-01 [PREGAC-CP-00-072224]	B381755	530	5.00	08/02/24
24G3166-02 [MIDGAC-CP-00-072224]	B381755	531	5.00	08/02/24
24G3166-03 [POSTGAC-CP-00-072224]	B381755	543	5.00	08/02/24

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

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 B381755 - Draft Method 1633										
Blank (B381755-BLK1)				Prepared & Analyzed: 08/02/24						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.97	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.97	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.97	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.97	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.97	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.97	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.97	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.97	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.97	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.97	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.97	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	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	0.97	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.97	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.97	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.97	ng/L							
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.7	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	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	9.7	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	1.9	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L							
Surrogate: 13C4-PFBA	80.5		ng/L	97.4		82.7	10-130			

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

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 B381755 - Draft Method 1633
Blank (B381755-BLK1)

Prepared & Analyzed: 08/02/24

Surrogate: 13C5-PFPeA	37.9		ng/L	48.7		77.7	35-150			
Surrogate: 13C5-PFHxA	20.1		ng/L	24.4		82.4	55-150			
Surrogate: 13C4-PFHpA	19.3		ng/L	24.4		79.2	55-150			
Surrogate: 13C8-PFOA	18.9		ng/L	24.4		77.6	60-140			
Surrogate: 13C9-PFNA	9.65		ng/L	12.2		79.3	55-140			
Surrogate: 13C6-PFDA	9.59		ng/L	12.2		78.7	50-140			
Surrogate: 13C7-PFUnA	9.03		ng/L	12.2		74.2	30-140			
Surrogate: 13C2-PFDoA	8.42		ng/L	12.2		69.1	10-150			
Surrogate: 13C2-PFTeDA	8.01		ng/L	12.2		65.8	10-130			
Surrogate: 13C3-PFBS	21.1		ng/L	24.4		86.5	55-150			
Surrogate: 13C3-PFHxS	19.8		ng/L	24.4		81.5	55-150			
Surrogate: 13C8-PFOS	18.2		ng/L	24.4		74.8	45-140			
Surrogate: 13C2-4:2FTS	39.2		ng/L	48.7		80.4	60-200			
Surrogate: 13C2-6:2FTS	38.2		ng/L	48.7		78.5	60-200			
Surrogate: 13C2-8:2FTS	37.2		ng/L	48.7		76.4	50-200			
Surrogate: 13C8-PFOA	18.0		ng/L	24.4		73.9	30-130			
Surrogate: D3-NMeFOSA	15.6		ng/L	24.4		64.0	15-130			
Surrogate: D5-NEtFOSA	15.6		ng/L	24.4		63.9	10-130			
Surrogate: D3-NMeFOSAA	42.0		ng/L	48.7		86.2	45-200			
Surrogate: D5-NEtFOSAA	36.0		ng/L	48.7		73.8	10-200			
Surrogate: D7-NMeFOSE	167		ng/L	244		68.6	10-150			
Surrogate: D9-NEtFOSE	160		ng/L	244		65.8	10-150			
Surrogate: 13C3-HFPO-DA	87.3		ng/L	97.4		89.6	25-160			

LCS (B381755-BS1)

Prepared & Analyzed: 08/02/24

Perfluorobutanoic acid (PFBA)	98.9	3.9	ng/L	94.1		105	58-148			
Perfluoropentanoic acid (PFPeA)	50.9	2.0	ng/L	47.0		108	54-152			
Perfluorohexanoic acid (PFHxA)	24.8	0.98	ng/L	23.5		105	55-152			
Perfluoroheptanoic acid (PFHpA)	24.7	0.98	ng/L	23.5		105	54-154			
Perfluorooctanoic acid (PFOA)	25.8	0.98	ng/L	23.5		110	52-161			
Perfluorononanoic acid (PFNA)	23.9	0.98	ng/L	23.5		101	59-149			
Perfluorodecanoic acid (PFDA)	24.5	0.98	ng/L	23.5		104	52-147			
Perfluoroundecanoic acid (PFUnA)	24.6	0.98	ng/L	23.5		104	48-159			
Perfluorododecanoic acid (PFDoA)	24.9	0.98	ng/L	23.5		106	64-142			
Perfluorotridecanoic acid (PFTTrDA)	26.2	0.98	ng/L	23.5		111	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.6	0.98	ng/L	23.5		109	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.2	0.98	ng/L	20.9		106	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.7	0.98	ng/L	22.1		107	59-151			
Perfluorohexanesulfonic acid (PFHxS)	22.0	0.98	ng/L	21.5		102	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.9	0.98	ng/L	22.4		107	55-152			
Perfluorooctanesulfonic acid (PFOS)	22.7	0.98	ng/L	21.8		104	58-149			
Perfluorononanesulfonic acid (PFNS)	23.3	0.98	ng/L	22.6		103	52-148			
Perfluorodecanesulfonic acid (PFDS)	22.9	0.98	ng/L	22.7		101	51-147			
Perfluorododecanesulfonic acid (PFDoS)	21.7	0.98	ng/L	22.8		95.1	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	95.7	3.9	ng/L	88.2		108	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	103	3.9	ng/L	89.4		115	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	95.2	3.9	ng/L	90.6		105	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.3	0.98	ng/L	23.5		103	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	24.5	0.98	ng/L	23.5		104	63-145			

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

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 B381755 - Draft Method 1633
LCS (B381755-BS1)

Prepared & Analyzed: 08/02/24

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.3	0.98	ng/L	23.5		103	65-139			
N-MeFOSAA (NMeFOSAA)	24.5	0.98	ng/L	23.5		104	58-144			
N-EtFOSAA (NEtFOSAA)	25.0	0.98	ng/L	23.5		106	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	250	9.8	ng/L	235		106	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	247	9.8	ng/L	235		105	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	100	3.9	ng/L	94.1		107	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	85.6	3.9	ng/L	88.8		96.4	68-146			
9Cl-PF3ONS (F53B Minor)	81.3	3.9	ng/L	88.2		92.2	56-156			
11Cl-PF3OUdS (F53B Major)	79.2	3.9	ng/L	88.8		89.1	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	257	9.8	ng/L	235		109	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1190	49	ng/L	1180		101	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1110	49	ng/L	1180		94.7	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	54.4	2.0	ng/L	41.9		130	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.5	2.0	ng/L	47.0		129	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	65.6	2.0	ng/L	47.0		139	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	68.5	2.0	ng/L	47.0		146	48-161			
Surrogate: 13C4-PFBA	76.9		ng/L	98.0		78.5	10-130			
Surrogate: 13C5-PFPeA	37.2		ng/L	49.0		75.9	35-150			
Surrogate: 13C5-PFHxA	19.0		ng/L	24.5		77.7	55-150			
Surrogate: 13C4-PFHpA	19.1		ng/L	24.5		78.1	55-150			
Surrogate: 13C8-PFOA	18.8		ng/L	24.5		76.6	60-140			
Surrogate: 13C9-PFNA	9.38		ng/L	12.3		76.6	55-140			
Surrogate: 13C6-PFDA	9.32		ng/L	12.3		76.0	50-140			
Surrogate: 13C7-PFUnA	8.97		ng/L	12.3		73.2	30-140			
Surrogate: 13C2-PFDoA	8.12		ng/L	12.3		66.2	10-150			
Surrogate: 13C2-PFTeDA	7.85		ng/L	12.3		64.1	10-130			
Surrogate: 13C3-PFBS	19.4		ng/L	24.5		79.2	55-150			
Surrogate: 13C3-PFHxS	18.5		ng/L	24.5		75.5	55-150			
Surrogate: 13C8-PFOS	18.6		ng/L	24.5		76.1	45-140			
Surrogate: 13C2-4:2FTS	38.7		ng/L	49.0		78.9	60-200			
Surrogate: 13C2-6:2FTS	39.7		ng/L	49.0		80.9	60-200			
Surrogate: 13C2-8:2FTS	35.8		ng/L	49.0		73.0	50-200			
Surrogate: 13C8-PFOSA	17.8		ng/L	24.5		72.5	30-130			
Surrogate: D3-NMeFOSA	15.4		ng/L	24.5		63.0	15-130			
Surrogate: D5-NEtFOSA	16.0		ng/L	24.5		65.3	10-130			
Surrogate: D3-NMeFOSAA	38.6		ng/L	49.0		78.7	45-200			
Surrogate: D5-NEtFOSAA	35.8		ng/L	49.0		73.1	10-200			
Surrogate: D7-NMeFOSE	163		ng/L	245		66.5	10-150			
Surrogate: D9-NEtFOSE	160		ng/L	245		65.4	10-150			
Surrogate: 13C3-HFPO-DA	83.4		ng/L	98.0		85.1	25-160			

MRL Check (B381755-MRL1)

Prepared & Analyzed: 08/02/24

Perfluorobutanoic acid (PFBA)	7.79	3.9	ng/L	7.82		99.6	44-157			
Perfluoropentanoic acid (PFPeA)	4.03	2.0	ng/L	3.91		103	57-148			

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

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 B381755 - Draft Method 1633										
MRL Check (B381755-MRL1)				Prepared & Analyzed: 08/02/24						
Perfluorohexanoic acid (PFHxA)	1.99	0.98	ng/L	1.96		102	62-149			
Perfluoroheptanoic acid (PFHpA)	2.01	0.98	ng/L	1.96		103	56-150			
Perfluorooctanoic acid (PFOA)	2.31	0.98	ng/L	1.96		118	57-161			
Perfluorononanoic acid (PFNA)	1.97	0.98	ng/L	1.96		101	53-157			
Perfluorodecanoic acid (PFDA)	1.97	0.98	ng/L	1.96		101	43-158			
Perfluoroundecanoic acid (PFUnA)	1.90	0.98	ng/L	1.96		97.0	50-155			
Perfluorododecanoic acid (PFDoA)	1.83	0.98	ng/L	1.96		93.8	60-141			
Perfluorotridecanoic acid (PFTTrDA)	1.90	0.98	ng/L	1.96		97.1	52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.91	0.98	ng/L	1.96		97.6	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.85	0.98	ng/L	1.74		106	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.85	0.98	ng/L	1.84		100	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.83	0.98	ng/L	1.79		102	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.10	0.98	ng/L	1.86		113	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.21	0.98	ng/L	1.81		122	43-162			
Perfluorononanesulfonic acid (PFNS)	2.05	0.98	ng/L	1.88		109	46-151			
Perfluorodecanesulfonic acid (PFDS)	2.04	0.98	ng/L	1.89		108	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.96	0.98	ng/L	1.90		103	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.26	3.9	ng/L	7.33		99.0	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	8.67	3.9	ng/L	7.43		117	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.42	3.9	ng/L	7.53		112	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.89	0.98	ng/L	1.96		96.7	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.10	0.98	ng/L	1.96		107	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.17	0.98	ng/L	1.96		111	49-156			
N-MeFOSAA (NMeFOSAA)	1.87	0.98	ng/L	1.96		95.8	32-160			
N-EtFOSAA (NEtFOSAA)	1.87	0.98	ng/L	1.96		95.6	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	20.1	9.8	ng/L	19.6		103	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	20.3	9.8	ng/L	19.6		104	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.01	3.9	ng/L	7.82		89.6	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.24	3.9	ng/L	7.38		84.5	61-148			
9Cl-PF3ONS (F53B Minor)	6.17	3.9	ng/L	7.33		84.1	44-167			
11Cl-PF3OUDS (F53B Major)	5.83	3.9	ng/L	7.38		79.0	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	18.6	9.8	ng/L	19.6		95.2	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	85.9	49	ng/L	97.8		87.8	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	83.3	49	ng/L	97.8		85.2	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.53	2.0	ng/L	3.48		101	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.81	2.0	ng/L	3.91		97.3	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.23	2.0	ng/L	3.91		108	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.12	2.0	ng/L	3.91		131	47-160			
Surrogate: 13C4-PFBA	80.4		ng/L	97.8		82.2	10-130			
Surrogate: 13C5-PFPeA	38.2		ng/L	48.9		78.2	35-150			
Surrogate: 13C5-PFHxA	19.4		ng/L	24.4		79.5	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 B381755 - Draft Method 1633
MRL Check (B381755-MRL1)

Prepared & Analyzed: 08/02/24

Surrogate: 13C4-PFHpA	19.2		ng/L	24.4		78.6	55-150			
Surrogate: 13C8-PFOA	18.8		ng/L	24.4		76.9	60-140			
Surrogate: 13C9-PFNA	9.58		ng/L	12.2		78.4	55-140			
Surrogate: 13C6-PFDA	9.50		ng/L	12.2		77.7	50-140			
Surrogate: 13C7-PFUnA	9.36		ng/L	12.2		76.6	30-140			
Surrogate: 13C2-PFDoA	8.90		ng/L	12.2		72.8	10-150			
Surrogate: 13C2-PFTeDA	8.40		ng/L	12.2		68.7	10-130			
Surrogate: 13C3-PFBS	20.4		ng/L	24.4		83.4	55-150			
Surrogate: 13C3-PFHxS	19.3		ng/L	24.4		79.1	55-150			
Surrogate: 13C8-PFOS	17.8		ng/L	24.4		72.7	45-140			
Surrogate: 13C2-4:2FTS	38.3		ng/L	48.9		78.4	60-200			
Surrogate: 13C2-6:2FTS	38.9		ng/L	48.9		79.6	60-200			
Surrogate: 13C2-8:2FTS	37.4		ng/L	48.9		76.6	50-200			
Surrogate: 13C8-PFOSA	17.9		ng/L	24.4		73.3	30-130			
Surrogate: D3-NMeFOSA	15.1		ng/L	24.4		61.7	15-130			
Surrogate: D5-NEtFOSA	16.1		ng/L	24.4		65.9	10-130			
Surrogate: D3-NMeFOSAA	37.8		ng/L	48.9		77.4	45-200			
Surrogate: D5-NEtFOSAA	34.9		ng/L	48.9		71.5	10-200			
Surrogate: D7-NMeFOSE	165		ng/L	244		67.6	10-150			
Surrogate: D9-NEtFOSE	161		ng/L	244		65.7	10-150			
Surrogate: 13C3-HFPO-DA	83.8		ng/L	97.8		85.7	25-160			

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

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 B381071 - Draft Method 1633
Blank (B381071-BLK1)

Prepared & Analyzed: 07/25/24

Total Suspended Solids	ND	5.0	mg/L							
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LCS (B381071-BS1)

Prepared & Analyzed: 07/25/24

Total Suspended Solids	175	5.0	mg/L	200		87.5	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.
S-29	Extracted Internal Standard is outside of control limits.
Z-01	Detection in CCB for target analyte. Re-analysis confirmed carryover due to sample matrix.

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 (PFEEA)	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

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	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

[illegible]

	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 Ramball
Project Claremont 2018
MCP/RCP Required MA
Deliverable Package Requirement MA
Location 012 Bethpage, New York
PWSID# (When Applicable) MA

Arrival Method:

Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time ER 12/14/24 508

Back-Sheet By / Date / Time LA 12/14/24 921

Temperature Method gun #6

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

Temp 6° C Actual Temperature 2.8

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.*



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

Effective Date: 06/11/2024

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	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Nitric	NaOH	Ammonium Acetate	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact		
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