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MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE ACTIVITIES (OCTOBER 2023)

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

**MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE
ACTIVITIES (OCTOBER 2023)
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
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
TSS	Total Suspended Solids
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 October 2023. 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, October 2, 2023, through approximately 0800 hours, November 1, 2023. 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 30 days in this reporting period during which the treatment system experienced 0 minutes of downtime.

Readings of the key plant process parameters are normally recorded each workday. These readings and the Human Machine Interface (HMI) flow trend lines are used to monitor the system's performance and condition. Selected readings are recorded in the daily database which is an electronic file maintained in the monthly operating documents folder. If the plant is not occupied, the system is monitored remotely.

The treatment process control and alarm systems are functional. The recovery well pumps, process pumps, and air stripper blower are operated in the automatic mode and are normally remotely controlled and monitored. RW-3 and RW-5 recovery wells were operational during the month of October. RW-4 experienced random electrical shut downs and excessive vibration between August 11 through 14, 2023 and has since been offline. RW-4 is scheduled for replacement in November 2023.

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 (October 23 Database.xlsx)
- NYSDEC Log-in Sheet – Entry/Exit Log with COVID-19 Acknowledgement

1.2 Summary of Maintenance Activities

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

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

Maintenance and project activities undertaken during the October 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.
- Recovery wells RW-4 and RW-5 were restarted following pump replacement.
- Basin 33 was inspected.
- The ASF pumps were lubricated, and the seals tightened.
- The OU5 comprehensive inspections were completed.
- The Pressure Filter Feed (PFF) pumps were lubricated, and the seals tightened.
- The fire alarm system components were inspected.
- The monthly electrical device survey was completed.
- The SUNY wellfield was inspected.

1.3 Maintenance Logs

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

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

2. TECHNICAL SUPPORT ACTIVITIES

2.1 GES/Ramboll Personnel

- GES maintained the system throughout the period.
- Between October 23, 2023 and October 26, 2023 as well as October 30, 2023 and 31, 2023, Liam Blake and Rebecca Britt (Ramboll) on site for the quarterly groundwater sampling event.

2.2 NYSDEC Personnel, Sub - contractors, and Other Visitors

- On October 11, 2023 – LEB Electric electrician was on site to test RW-4 electrical issues.

2.3 Deliveries

On October 17, 2023 – Fedex delivery of sampling coolers and sampling materials for the upcoming quarterly groundwater 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:

- OU4 remains without water to the fire sprinkler system due to no heat in the building.
- OU4 potable water line was shut off due to pipe ruptures from frozen pipes.
- Air valve at MW-6 cluster in Bethpage State Park reinsertion.
- Investigate plant electric driven back-up heater failures.
- Close and exercise all globe valves at the non-operational recovery wells.

5. MONITORING WELL WATER ELEVATIONS

The monitoring well system's groundwater elevation data table was updated after the October 2023 quarterly GW elevation recording task. This database is available for review. The next set of synoptic water level measurements will be scheduled for February 2024 and will be conducted by Ramboll.

6. TREATMENT SYSTEM FLOWS

During the October 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.

RW-5 pressure switch was replaced on January 5, 2023, and the well was successfully restarted on automatic run mode. RW-5 experienced electrical short across the motor windings on January 26, 2023, and was confirmed inoperable. The motor short circuiting was confirmed on March 13, 2023 during pump extraction and inspection activities. RW-5 motor and wiring was replaced on May 1, 2023. RW-5 has been operating since the replacement activities. RW-3 continues to

function normally. RW-4 was offline from August 17, 2022 through May 2, 2023 following full replacement of pump, pump motor and down well wiring. RW-4 has been operating normally since the replacement activities. The old RW-4 pump was inspected, and it was determined that the shaft has ceased up and broke off between the motor and pump connection. RW-4 experienced abnormal vibrations and tripping on August 11, 2023 and was temporarily shut down on August 14, 2023 for further electrical and mechanical troubleshooting. Pump is scheduled for replacement mid-November 2023.

During the month of October, the plant discharge was directed to Recharge Basin 33.

The total volume of treated water discharged from ~0800 hours October 2 to ~0800 hours November 1 was approximately 19,852,000 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 October 2023 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 October of 2023.

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 October of 2023.

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 October of 2023.

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. Waste container was last emptied on September 25, 2023.

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 October 2, 2023 indicate that the analyzed parameters were compliant with permit limits (**Table 6**). Monthly 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

Mechanical repairs have been made to the plant HVAC system at OU4. Upon testing, the gas supply appeared to be shut off. Ramboll is currently planning demolition of the OU4 building.

The sprinkler system at OU4 remains drained of water. The potable and non-potable water lines at OU4 have been drained.

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.

Repairs have been made at RW-4 and RW-5. Both pumps have returned to operation. RW-4 has experienced excessive vibrations on August 11, 2023 and was shut down to preserve mechanical components until replacement in November 2023.

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. An alarm system for the sprinkler has been installed with central monitoring.
- 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 developing bid documents for this work.

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 October 2023 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 October sampling activities included:

- The October PD data was processed and submitted.
- Monthly system sampling was completed on October 2, 2023.
- Quarterly groundwater elevation monitoring and groundwater sampling via low flow method and passive diffusive bailers.

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 October 2023 can be found in **Table 8** following the text of this report.

The October 2023 average pH measurement was 7.22 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 October 2023 readings from the AS tower are provided in **Table 10**.

Other routine data collected in October 2023 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.

13.1 Extraction (RW) Processes

- The monthly system inspection was completed.
- The vault space heating units were deactivated on March 23, 2023.
- The recovery well pump system is remotely controlled and monitored, it operates in the auto mode.
- The pump at RW-3 is online and fully functional.
- The pump at RW-4 is online and fully functional following replacement on May 2, 2023. The pump experienced multiple random shut downs and was quickly restarted without any issues. The pump experience excessive vibrations and electrical shut downs since August 11, 2023 and was temporarily shut down on August 14, 2023 to preserve the pump until further testing. The pump remains offline until it can be extracted and inspected in November 2023.
- The pump at RW-5 is online and fully functional following motor replacement on May 1, 2023.
- 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 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 5 minutes to rotate the motors. The pumps were tested operational as of October 2023.

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 PD Process

- The plant discharge flow is currently directed to Recharge Basin 33.
- The valve influent to Recharge Basin 1 remained closed during the October reporting period.
- Pump 1 has been taken out of service due to excessive noise and vibration. A full evaluation is required. Pumps 2 and 3 are fully functional.
- The motors and seals were lubricated as necessary.
- The discharge valve for PFF P3 has failed open.

13.4 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.

14. GROUNDS

14.1 Plant Perimeter

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

14.2 Well Field

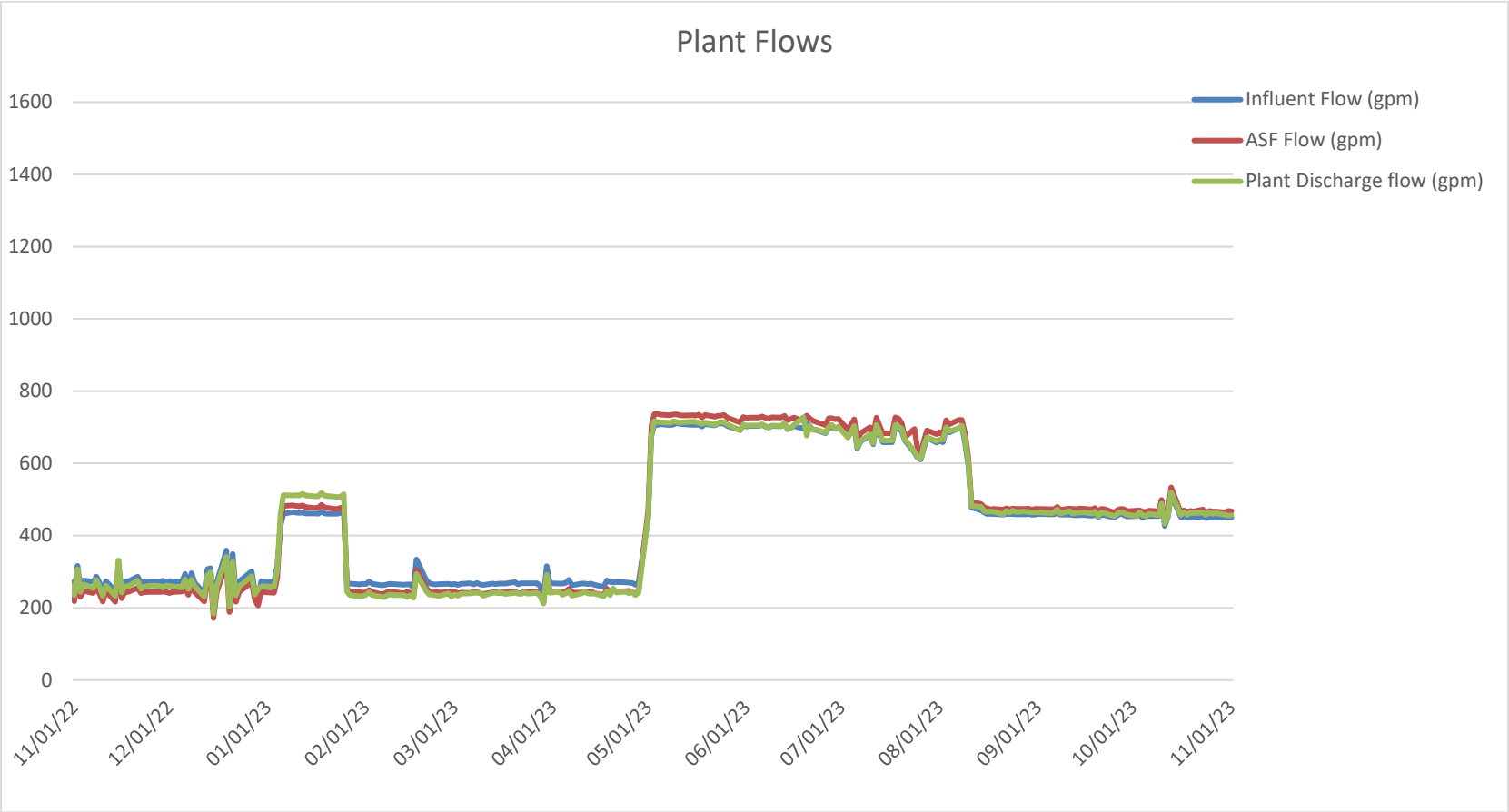
- Well field, and recharge basin inspections continue. Quarterly groundskeeping activities are performed in order to clear vegetation and poison ivy from around all well fields in anticipation of quarterly groundwater sampling event. In addition, the entrance to recharge basin #33 is maintained for ease 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. <i>Repair work may require evaluation and outside resources. Currently the situation is controlled.</i>	Outside plumbing contractor	None	Sanitary water may be shut off during repairs

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
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 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>	Plant operator and GES resources	Plant shut down is required	Possible Confined Space Entry work
PFF P1 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. <i>It is recommended that the motor be disconnected, lifted, and the mechanical connection checked.</i>	Outside contractors	None anticipated	To be determined

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
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 equipment and variable frequency controls were discussed.</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
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 operatable	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

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
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
RW-5 has failed	RW-5 pump was replaced on October 10, 2022, however due to PLC signal loss, it cannot be operated in automatic mode. GES conducted troubleshooting and parts replacement without success. System controls were examined by a PLC certified technician mid-December and determined pressure switch failure. Used device has been installed while a new one has been ordered. The pump ran on auto mode from January 5, 2023 to January 26, 2023 until an electrical short at the motor disabled the safe operation of the pump. New pressure switch was installed on March 23, 2023. New pump motor installed on May 1, 2023.	Plant Operator and Ramboll.	Less water is treated	To be determined
RW-4 has failed	RW-4 started to experience possible motor thermal overload shutdowns on multiple occasions during August monitoring period. The pump motor fully shut down on August 17, 2022 and all troubleshooting/restarting attempts were unsuccessful. New pump and pump motor installed on May 2, 2023. Pump experienced excessive vibration and shut downs on August 11, 2023. Suspected impeller bearing failure or electrical short circuiting. Pump temporarily shut down on August 14, 2023 for further electrical testing. Repair of the pump in RW-4 is scheduled for mid-November 2023.	Plant Operator and Ramboll	Less water is treated	To be determined
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	GES Mechanical Support	Less water is treated	Confined space entry required to do

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
	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.			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

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.
- 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	Fans cannot be manually operated	Once the methane monitoring system is

Equipment	Fault	Status
system		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
Oct 2023	429	661,733	19,852,000	0	43,200

Acronyms: gal - gallons gpm – gallons per minute

Table 3
Plant Daily Totalizer Readings

October 2023 Flows						
Plant Influent			Plant Discharge		RW Discharge	
Date	Volume	Avg. Flow	Volume	Avg. Flow	Volume	Avg. Flow
10/02/23	-	467	-	458	-	453
10/03/23	676,000	469	655,000	455	654,000	454
10/04/23	677,000	470	669,000	465	660,000	458
10/05/23	671,000	466	657,000	456	647,000	449
10/06/23	678,000	466	660,000	454	660,000	454
10/09/23	2,020,000	469	1,982,000	460	1,955,000	454
10/10/23	673,000	467	657,000	456	654,000	454
10/11/23	719,000	499	704,000	489	695,000	483
10/12/23	637,000	442	624,000	433	614,000	426
10/13/23	670,000	465	652,000	453	651,000	452
10/16/23	2,305,000	534	2,247,000	520	2,223,000	515
10/17/23	390,000	191	384,000	188	379,000	186
10/18/23	677,000	806	669,000	796	651,000	775
10/19/23	671,000	466	660,000	458	648,000	450
10/20/23	674,000	468	667,000	463	647,000	449
10/23/23	2,015,000	466	1,995,000	462	1,942,000	450
10/24/23	680,000	472	667,000	463	653,000	453
10/25/23	666,000	463	658,000	457	646,000	449
10/26/23	675,000	469	669,000	465	649,000	451
10/27/23	672,000	467	663,000	460	650,000	451
10/30/23	2,016,000	467	1,997,000	462	1,943,000	450
10/31/23	690,000	465	680,000	458	669,000	451
11/01/23	653,000	468	636,000	456	628,000	450
October Total Plant Influent (Gal)			20,205,000			
October Total Plant Effluent (Gal)			19,852,000			
October Total RW Discharge (Gal)			19,518,000			

Acronyms: gal - gallons

gpm – gallons per minute

Table 4
Pump System Flow Readings

October	On-Time Minutes (actual)	Avg. Flow (gpm)	Avg. Flow (gpd)	Total Flow (gal)
RW-1*	5	149	0	745
RW-2*	5	209	0	1,045
RW-3	43,200	210	302,100	9,063,000
RW-4	0	0	0	0
RW-5	43,200	245	353,300	10,599,000
RW Totals	43,200	452	607,367	19,518,000
Plant Influent	43,200	437	628,733	20,205,000
Plant Effluent	43,200	429	661,733	19,852,000

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

The treatment process was online 30 days during this period with 0 minutes of downtime. RW-4 pump experienced random shut downs and excessive vibration at the well head and was temporarily placed offline until it can be pulled and inspected.

Flows are taken from the HMI meter readings.

* 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)	Monthly	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
October 2, 2023

Parameters	Discharge Limitations (SPDES)	Units	Results
<i>pH (range)</i>	6.5 – 8.5	<i>su</i>	7.22
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 Influent & Effluent Analytical Results
October 2, 2023

Parameters	Guidance Values	Units	Influent Results	Effluent Results
Perfluorooctanoic acid (PFOA)	10 ¹	ng/l	45 / 44	44 / 45
Perfluorooctanesulfonic acid (PFOS)	10 ¹	ng/l	18 / 18	18 / 16
1,4-Dioxane	1 ²	ug/l	18 / 20	19 / 20
J – Estimated value U – Analyzed but not detected ug/l – micrograms per liter ng/l – nanograms per liter x / x – indicates primary/duplicate results				
¹ New York State Department of Environmental Conservation, Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), November 2022. ² New York State, Department of Health, Subpart 5, Table 3, May 2018.				

Table 8
Effluent pH and Temperature Readings

Date	pH (su)	Temp (° C)
10/03/2023	7.52	16.6
10/10/2023	7.02	19.1
10/18/2023	7.18	17.3
10/25/2023	7.17	16.6
October Average	7.22 su	17.4 °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

Plant Discharge Monthly Average pH Readings

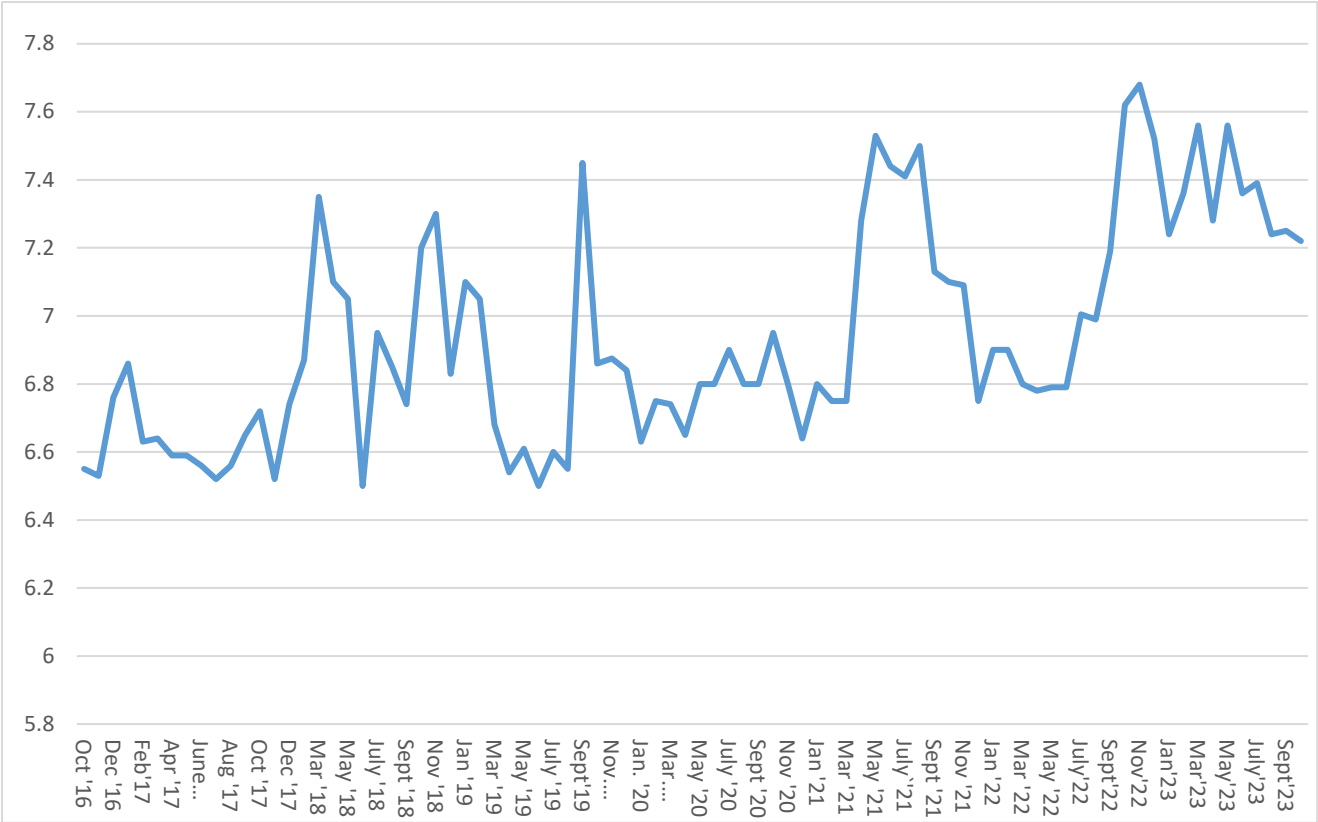


Table 10
AS Tower Air Monitoring Readings

Recorded Date	Port B (ppm)
10/03/2023	0.0
10/13/2023	0.0
10/19/2023	0.0
10/25/2023	0.0

ATTACHMENT 1
MONTHLY O&M SAMPLING ANALYTICAL RESULTS –OCTOBER 2, 2023

October 16, 2023

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

Project Location: Old Bethpage, NY
Client Job Number:
Project Number: 130015
Laboratory Work Order Number: 23J0366

Enclosed are results of analyses for samples as received by the laboratory on October 3, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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

REPORT DATE: 10/16/2023

PURCHASE ORDER NUMBER: 144165

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23J0366

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

PROJECT LOCATION: Old Bethpage, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PD-CP-00-100223	23J0366-01	Ground Water		SW-846 8260D	
				SW-846 8270E	
PD-CP-01-100223	23J0366-02	Ground Water		SW-846 8260D	
				SW-846 8270E	
ASF-CP-00-100223	23J0366-03	Ground Water		SW-846 8270E	
ASF-CP-01-100223	23J0366-04	Ground Water		SW-846 8270E	
TB-100223	23J0366-05	Trip Blank Water		SW-846 8260D	

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

CASE NARRATIVE SUMMARY

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

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

SW-846 8260D

Qualifications:**MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.

Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

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

23J0366-01[PD-CP-00-100223], B354034-MS1, B354034-MSD1

Chloromethane

23J0366-01[PD-CP-00-100223], B354034-MS1, B354034-MSD1

Methyl Acetate

23J0366-01[PD-CP-00-100223], B354034-MS1, B354034-MSD1

tert-Butyl Alcohol (TBA)

23J0366-01[PD-CP-00-100223], B354034-MS1, B354034-MSD1

trans-1,4-Dichloro-2-butene

23J0366-01[PD-CP-00-100223], B354034-MS1, B354034-MSD1

V-05

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

Analyte & Samples(s) Qualified:**1,1-Dichloroethylene**

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

2,2-Dichloropropane

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

Acrylonitrile

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

Chloromethane

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

Ethanol

B354034-BLK1, B354034-BS1, B354034-BSD1, S094534-CCV1

tert-Butyl Alcohol (TBA)

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

trans-1,4-Dichloro-2-butene

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-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:**Bromomethane**

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

Chloromethane

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], 23J0366-05[TB-100223], B354034-BLK1, B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

V-35

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

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

B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

Carbon Disulfide

B354034-BS1, B354034-BSD1, B354034-MS1, B354034-MSD1, S094534-CCV1

SW-846 8270E

Qualifications:

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

R-05

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

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

B354294-BS1, B354294-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:**Benzidine**

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], B354294-BLK1, B354294-BS1, B354294-BSD1, S094664-CCV1, S094846-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:**Benzidine**

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], B354294-BLK1, B354294-BS1, B354294-BSD1, S094664-CCV1, S094846-CCV1

Hexachlorocyclopentadiene

23J0366-01[PD-CP-00-100223], 23J0366-02[PD-CP-01-100223], B354294-BLK1, B354294-BS1, B354294-BSD1, S094664-CCV1, S094846-CCV1

V-06

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

Analyte & Samples(s) Qualified:**Bis(2-chloroisopropyl)ether**

23J0366-02[PD-CP-01-100223], B354294-BS1, S094846-CCV1

N-Nitrosodimethylamine

23J0366-02[PD-CP-01-100223], B354294-BS1, B354294-BSD1, S094664-CCV1, S094846-CCV1

V-20

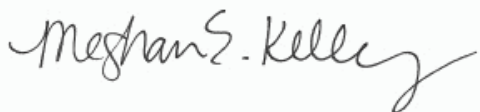
Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**N-Nitrosodimethylamine**

23J0366-01[PD-CP-00-100223], B354294-BLK1

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, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-01

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	10/5/23	10/7/23 1:54	EEH
Acrylonitrile	ND	5.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	MS-07A, V-05	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Chloromethane	ND	2.0	µg/L	1	MS-07A, V-05, V-34	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	MS-07A, V-05	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	MS-07A, V-05	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Methyl Acetate	ND	1.0	µg/L	1	MS-07A	SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:54	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	109	70-130							
Toluene-d8	106	70-130							
4-Bromofluorobenzene	99.3	70-130							

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Acenaphthylene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Acetophenone	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Aniline	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Anthracene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzidine	ND	19	µg/L	1	V-04, V-05	SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzo(a)anthracene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzo(a)pyrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzo(b)fluoranthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzo(g,h,i)perylene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzo(k)fluoranthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Benzoic Acid	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Bis(2-chloroethoxy)methane	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Bis(2-chloroethyl)ether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Bis(2-chloroisopropyl)ether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4-Bromophenylphenylether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Butylbenzylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Carbazole	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4-Chloroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4-Chloro-3-methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2-Chloronaphthalene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2-Chlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4-Chlorophenylphenylether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Chrysene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Dibenz(a,h)anthracene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Dibenzofuran	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Di-n-butylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1,2-Dichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1,3-Dichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1,4-Dichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
3,3-Dichlorobenzidine	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,4-Dichlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Diethylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,4-Dimethylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Dimethylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4,6-Dinitro-2-methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,4-Dinitrophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,4-Dinitrotoluene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,6-Dinitrotoluene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Di-n-octylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1,2-Diphenylhydrazine/Azobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Fluoranthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Fluorene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Hexachlorobutadiene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Hexachlorocyclopentadiene	ND	9.6	µg/L	1	V-05	SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Hexachloroethane	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Indeno(1,2,3-cd)pyrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Isophorone	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1-Methylnaphthalene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2-Methylnaphthalene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2-Methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
3/4-Methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Naphthalene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2-Nitroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
3-Nitroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4-Nitroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Nitrobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2-Nitrophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
4-Nitrophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
N-Nitrosodimethylamine	ND	9.6	µg/L	1	V-20	SW-846 8270E	10/6/23	10/10/23 15:46	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
N-Nitrosodi-n-propylamine	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Pentachloronitrobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Pentachlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Phenanthrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Phenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Pyrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Pyridine	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
1,2,4-Trichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,4,5-Trichlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
2,4,6-Trichlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/10/23 15:46	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	42.6	15-110						10/10/23 15:46	
Phenol-d6	30.3	15-110						10/10/23 15:46	
Nitrobenzene-d5	58.6	30-130						10/10/23 15:46	
2-Fluorobiphenyl	59.1	30-130						10/10/23 15:46	
2,4,6-Tribromophenol	57.4	15-110						10/10/23 15:46	
p-Terphenyl-d14	62.2	30-130						10/10/23 15:46	

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-01

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	19	0.19	µg/L	1		SW-846 8270E	10/4/23	10/9/23 18:11	MEW
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	31.5	15-110						10/9/23 18:11	

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-02

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	10/5/23	10/7/23 2:22	EEH
Acrylonitrile	ND	5.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Chloromethane	ND	2.0	µg/L	1	V-05, V-34	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 2:22	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	109	70-130							
Toluene-d8	103	70-130							
4-Bromofluorobenzene	97.6	70-130							

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Acenaphthylene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Acetophenone	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Aniline	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Anthracene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzidine	ND	19	µg/L	1	V-04, V-05	SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzo(a)anthracene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzo(a)pyrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzo(b)fluoranthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzo(g,h,i)perylene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzo(k)fluoranthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Benzoic Acid	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Bis(2-chloroethoxy)methane	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Bis(2-chloroethyl)ether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Bis(2-chloroisopropyl)ether	ND	9.6	µg/L	1	V-06	SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Bis(2-Ethylhexyl)phthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4-Bromophenylphenylether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Butylbenzylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Carbazole	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4-Chloroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4-Chloro-3-methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2-Chloronaphthalene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2-Chlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4-Chlorophenylphenylether	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Chrysene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Dibenz(a,h)anthracene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Dibenzofuran	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Di-n-butylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1,2-Dichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1,3-Dichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1,4-Dichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
3,3-Dichlorobenzidine	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,4-Dichlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Diethylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,4-Dimethylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Dimethylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4,6-Dinitro-2-methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,4-Dinitrophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,4-Dinitrotoluene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,6-Dinitrotoluene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Di-n-octylphthalate	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1,2-Diphenylhydrazine/Azobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Fluoranthene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Fluorene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Hexachlorobutadiene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Hexachlorocyclopentadiene	ND	9.6	µg/L	1	V-05	SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Hexachloroethane	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Indeno(1,2,3-cd)pyrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Isophorone	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1-Methylnaphthalene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2-Methylnaphthalene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2-Methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
3/4-Methylphenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Naphthalene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2-Nitroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
3-Nitroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4-Nitroaniline	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Nitrobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2-Nitrophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
4-Nitrophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
N-Nitrosodimethylamine	ND	9.6	µg/L	1	V-06	SW-846 8270E	10/6/23	10/13/23 12:52	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
N-Nitrosodi-n-propylamine	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Pentachloronitrobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Pentachlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Phenanthrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Phenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Pyrene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Pyridine	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1,2,4,5-Tetrachlorobenzene	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
1,2,4-Trichlorobenzene	ND	4.8	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,4,5-Trichlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
2,4,6-Trichlorophenol	ND	9.6	µg/L	1		SW-846 8270E	10/6/23	10/13/23 12:52	AR2
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	48.7	15-110						10/13/23 12:52	
Phenol-d6	36.0	15-110						10/13/23 12:52	
Nitrobenzene-d5	73.1	30-130						10/13/23 12:52	
2-Fluorobiphenyl	65.8	30-130						10/13/23 12:52	
2,4,6-Tribromophenol	67.4	15-110						10/13/23 12:52	
p-Terphenyl-d14	72.9	30-130						10/13/23 12:52	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0366-02

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	20	0.19	µg/L	1		SW-846 8270E	10/4/23	10/9/23 18:31	MEW
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	27.6	15-110						10/9/23 18:31	

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: ASF-CP-00-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0366-03

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	10/4/23	10/9/23 18:52	MEW
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,4-Dioxane-d8	27.6		15-110					10/9/23 18:52	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: ASF-CP-01-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0366-04

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	20	0.19	µg/L	1		SW-846 8270E	10/4/23	10/9/23 19:13	MEW
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	28.0	15-110						10/9/23 19:13	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: TB-100223

Sampled: 10/2/2023 00:00

Sample ID: 23J0366-05

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	10/5/23	10/7/23 1:27	EEH
Acrylonitrile	ND	5.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Bromomethane	ND	2.0	µg/L	1	V-34	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Chloromethane	ND	2.0	µg/L	1	V-05, V-34	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0366

Date Received: 10/3/2023

Field Sample #: TB-100223

Sampled: 10/2/2023 00:00

Sample ID: 23J0366-05

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
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Hexachlorobutadiene	ND	0.60	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	10/5/23	10/7/23 1:27	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	109	70-130							
Toluene-d8	104	70-130							
4-Bromofluorobenzene	98.0	70-130							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method:SW-846 5030B Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23J0366-01 [PD-CP-00-100223]	B354034	5	5.00	10/05/23
23J0366-02 [PD-CP-01-100223]	B354034	5	5.00	10/05/23
23J0366-05 [TB-100223]	B354034	5	5.00	10/05/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23J0366-01 [PD-CP-00-100223]	B353881	1030	1.00	10/04/23
23J0366-02 [PD-CP-01-100223]	B353881	1050	1.00	10/04/23
23J0366-03 [ASF-CP-00-100223]	B353881	1050	1.00	10/04/23
23J0366-04 [ASF-CP-01-100223]	B353881	1050	1.00	10/04/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23J0366-01 [PD-CP-00-100223]	B354294	1040	1.00	10/06/23
23J0366-02 [PD-CP-01-100223]	B354294	1040	1.00	10/06/23

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B354034 - SW-846 5030B										
Blank (B354034-BLK1)				Prepared: 10/05/23 Analyzed: 10/07/23						
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	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							V-34
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-05
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	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							V-05, V-34
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	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							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							V-05
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							V-05
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							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							V-05
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethanol	ND	50	µg/L							V-05
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	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							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B354034 - SW-846 5030B
Blank (B354034-BLK1)

Prepared: 10/05/23 Analyzed: 10/07/23

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							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	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							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	27.2		µg/L	25.0		109	70-130			
Surrogate: Toluene-d8	26.4		µg/L	25.0		106	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		97.9	70-130			

LCS (B354034-BS1)

Prepared: 10/05/23 Analyzed: 10/06/23

Acetone	82.2	50	µg/L	100		82.2	70-160			V-35 †
Acrylonitrile	7.57	5.0	µg/L	10.0		75.7	70-130			V-05
tert-Amyl Methyl Ether (TAME)	9.36	0.50	µg/L	10.0		93.6	70-130			
Benzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130			
Bromodichloromethane	9.56	0.50	µg/L	10.0		95.6	70-130			
Bromoform	9.46	1.0	µg/L	10.0		94.6	70-130			
Bromomethane	9.41	2.0	µg/L	10.0		94.1	40-160		V-34	†
2-Butanone (MEK)	96.6	20	µg/L	100		96.6	40-160			†
tert-Butyl Alcohol (TBA)	71.8	20	µg/L	100		71.8	40-160		V-05	†
n-Butylbenzene	9.05	1.0	µg/L	10.0		90.5	70-130			
sec-Butylbenzene	9.52	1.0	µg/L	10.0		95.2	70-130			
tert-Butylbenzene	9.24	1.0	µg/L	10.0		92.4	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.68	0.50	µg/L	10.0		96.8	70-130			
Carbon Disulfide	91.2	5.0	µg/L	100		91.2	70-130			V-35
Carbon Tetrachloride	10.7	5.0	µg/L	10.0		107	70-130			
Chlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Chlorodibromomethane	9.80	0.50	µg/L	10.0		98.0	70-130			
Chloroethane	10.6	2.0	µg/L	10.0		106	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B354034 - SW-846 5030B										
LCS (B354034-BS1)										
Prepared: 10/05/23 Analyzed: 10/06/23										
Chloroform	9.78	2.0	µg/L	10.0		97.8	70-130			
Chloromethane	6.25	2.0	µg/L	10.0		62.5	40-160			V-05, V-34 †
2-Chlorotoluene	9.08	1.0	µg/L	10.0		90.8	70-130			
4-Chlorotoluene	9.98	1.0	µg/L	10.0		99.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.51	5.0	µg/L	10.0		85.1	70-130			
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130			
Dibromomethane	9.96	1.0	µg/L	10.0		99.6	70-130			
1,2-Dichlorobenzene	9.76	1.0	µg/L	10.0		97.6	70-130			
1,3-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,4-Dichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130			
trans-1,4-Dichloro-2-butene	7.42	2.0	µg/L	10.0		74.2	70-130			V-05
Dichlorodifluoromethane (Freon 12)	8.35	2.0	µg/L	10.0		83.5	40-160			†
1,1-Dichloroethane	9.66	1.0	µg/L	10.0		96.6	70-130			
1,2-Dichloroethane	9.15	1.0	µg/L	10.0		91.5	70-130			
1,1-Dichloroethylene	7.94	1.0	µg/L	10.0		79.4	70-130			V-05
cis-1,2-Dichloroethylene	9.71	1.0	µg/L	10.0		97.1	70-130			
trans-1,2-Dichloroethylene	9.02	1.0	µg/L	10.0		90.2	70-130			
1,2-Dichloropropane	9.50	1.0	µg/L	10.0		95.0	70-130			
1,3-Dichloropropane	10.1	0.50	µg/L	10.0		101	70-130			
2,2-Dichloropropane	7.50	1.0	µg/L	10.0		75.0	40-130			V-05 †
1,1-Dichloropropene	9.14	2.0	µg/L	10.0		91.4	70-130			
cis-1,3-Dichloropropene	9.07	0.50	µg/L	10.0		90.7	70-130			
trans-1,3-Dichloropropene	8.46	0.50	µg/L	10.0		84.6	70-130			
Diethyl Ether	9.43	2.0	µg/L	10.0		94.3	70-130			
Diisopropyl Ether (DIPE)	9.94	0.50	µg/L	10.0		99.4	70-130			
1,4-Dioxane	101	50	µg/L	100		101	40-130			†
Ethanol	72.8	50	µg/L	100		72.8	40-160			V-05
Ethylbenzene	9.33	1.0	µg/L	10.0		93.3	70-130			
Hexachlorobutadiene	9.49	0.60	µg/L	10.0		94.9	70-130			
2-Hexanone (MBK)	91.0	10	µg/L	100		91.0	70-160			†
Isopropylbenzene (Cumene)	9.59	1.0	µg/L	10.0		95.9	70-130			
p-Isopropyltoluene (p-Cymene)	9.21	1.0	µg/L	10.0		92.1	70-130			
Methyl Acetate	9.14	1.0	µg/L	10.0		91.4	70-130			
Methyl tert-Butyl Ether (MTBE)	9.68	1.0	µg/L	10.0		96.8	70-130			
Methyl Cyclohexane	8.23	1.0	µg/L	10.0		82.3	70-130			
Methylene Chloride	8.33	5.0	µg/L	10.0		83.3	70-130			
4-Methyl-2-pentanone (MIBK)	93.7	10	µg/L	100		93.7	70-160			†
Naphthalene	8.04	2.0	µg/L	10.0		80.4	40-130			†
n-Propylbenzene	9.50	1.0	µg/L	10.0		95.0	70-130			
Styrene	9.60	1.0	µg/L	10.0		96.0	70-130			
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1,2,2-Tetrachloroethane	9.03	0.50	µg/L	10.0		90.3	70-130			
Tetrachloroethylene	9.25	1.0	µg/L	10.0		92.5	70-130			
Tetrahydrofuran	8.76	10	µg/L	10.0		87.6	70-130			
Toluene	9.18	1.0	µg/L	10.0		91.8	70-130			
1,2,3-Trichlorobenzene	8.37	5.0	µg/L	10.0		83.7	70-130			
1,2,4-Trichlorobenzene	8.40	1.0	µg/L	10.0		84.0	70-130			
1,3,5-Trichlorobenzene	9.03	1.0	µg/L	10.0		90.3	70-130			
1,1,1-Trichloroethane	9.53	1.0	µg/L	10.0		95.3	70-130			
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
Trichloroethylene	9.96	1.0	µg/L	10.0		99.6	70-130			
Trichlorofluoromethane (Freon 11)	8.95	2.0	µg/L	10.0		89.5	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B354034 - SW-846 5030B
LCS (B354034-BS1)

Prepared: 10/05/23 Analyzed: 10/06/23

1,2,3-Trichloropropane	9.78	2.0	µg/L	10.0		97.8	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.45	1.0	µg/L	10.0		84.5	70-130			
1,2,4-Trimethylbenzene	9.27	1.0	µg/L	10.0		92.7	70-130			
1,3,5-Trimethylbenzene	9.66	1.0	µg/L	10.0		96.6	70-130			
Vinyl Chloride	8.38	2.0	µg/L	10.0		83.8	40-160			†
m+p Xylene	19.1	2.0	µg/L	20.0		95.4	70-130			
o-Xylene	9.83	1.0	µg/L	10.0		98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	27.4		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.0		103	70-130			

LCS Dup (B354034-BSD1)

Prepared: 10/05/23 Analyzed: 10/06/23

Acetone	82.7	50	µg/L	100		82.7	70-160	0.643	25	V-35	†
Acrylonitrile	7.69	5.0	µg/L	10.0		76.9	70-130	1.57	25	V-05	
tert-Amyl Methyl Ether (TAME)	9.17	0.50	µg/L	10.0		91.7	70-130	2.05	25		
Benzene	10.0	1.0	µg/L	10.0		100	70-130	0.695	25		
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130	4.34	25		
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130	0.454	25		
Bromodichloromethane	9.43	0.50	µg/L	10.0		94.3	70-130	1.37	25		
Bromoform	9.41	1.0	µg/L	10.0		94.1	70-130	0.530	25		
Bromomethane	9.30	2.0	µg/L	10.0		93.0	40-160	1.18	25	V-34	†
2-Butanone (MEK)	91.7	20	µg/L	100		91.7	40-160	5.15	25		†
tert-Butyl Alcohol (TBA)	74.3	20	µg/L	100		74.3	40-160	3.35	25	V-05	†
n-Butylbenzene	8.98	1.0	µg/L	10.0		89.8	70-130	0.776	25		
sec-Butylbenzene	9.17	1.0	µg/L	10.0		91.7	70-130	3.75	25		
tert-Butylbenzene	9.12	1.0	µg/L	10.0		91.2	70-130	1.31	25		
tert-Butyl Ethyl Ether (TBEE)	9.45	0.50	µg/L	10.0		94.5	70-130	2.40	25		
Carbon Disulfide	91.2	5.0	µg/L	100		91.2	70-130	0.0768	25	V-35	
Carbon Tetrachloride	11.0	5.0	µg/L	10.0		110	70-130	2.77	25		
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.892	25		
Chlorodibromomethane	9.58	0.50	µg/L	10.0		95.8	70-130	2.27	25		
Chloroethane	10.7	2.0	µg/L	10.0		107	70-130	0.655	25		
Chloroform	9.69	2.0	µg/L	10.0		96.9	70-130	0.925	25		
Chloromethane	6.30	2.0	µg/L	10.0		63.0	40-160	0.797	25	V-05, V-34	†
2-Chlorotoluene	9.30	1.0	µg/L	10.0		93.0	70-130	2.39	25		
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	2.67	25		
1,2-Dibromo-3-chloropropane (DBCP)	7.97	5.0	µg/L	10.0		79.7	70-130	6.55	25		
1,2-Dibromoethane (EDB)	9.44	0.50	µg/L	10.0		94.4	70-130	6.76	25		
Dibromomethane	9.36	1.0	µg/L	10.0		93.6	70-130	6.21	25		
1,2-Dichlorobenzene	9.28	1.0	µg/L	10.0		92.8	70-130	5.04	25		
1,3-Dichlorobenzene	9.61	1.0	µg/L	10.0		96.1	70-130	4.87	25		
1,4-Dichlorobenzene	9.24	1.0	µg/L	10.0		92.4	70-130	4.03	25		
trans-1,4-Dichloro-2-butene	7.36	2.0	µg/L	10.0		73.6	70-130	0.812	25	V-05	
Dichlorodifluoromethane (Freon 12)	8.81	2.0	µg/L	10.0		88.1	40-160	5.36	25		†
1,1-Dichloroethane	9.73	1.0	µg/L	10.0		97.3	70-130	0.722	25		
1,2-Dichloroethane	8.61	1.0	µg/L	10.0		86.1	70-130	6.08	25		
1,1-Dichloroethylene	8.04	1.0	µg/L	10.0		80.4	70-130	1.25	25	V-05	
cis-1,2-Dichloroethylene	9.64	1.0	µg/L	10.0		96.4	70-130	0.724	25		
trans-1,2-Dichloroethylene	9.19	1.0	µg/L	10.0		91.9	70-130	1.87	25		
1,2-Dichloropropane	9.32	1.0	µg/L	10.0		93.2	70-130	1.91	25		
1,3-Dichloropropane	9.50	0.50	µg/L	10.0		95.0	70-130	6.02	25		
2,2-Dichloropropane	7.43	1.0	µg/L	10.0		74.3	40-130	0.938	25	V-05	†

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B354034 - SW-846 5030B										
LCS Dup (B354034-BSD1)				Prepared: 10/05/23 Analyzed: 10/06/23						
1,1-Dichloropropene	9.43	2.0	µg/L	10.0		94.3	70-130	3.12	25	
cis-1,3-Dichloropropene	8.75	0.50	µg/L	10.0		87.5	70-130	3.59	25	
trans-1,3-Dichloropropene	8.29	0.50	µg/L	10.0		82.9	70-130	2.03	25	
Diethyl Ether	8.72	2.0	µg/L	10.0		87.2	70-130	7.82	25	
Diisopropyl Ether (DIPE)	9.73	0.50	µg/L	10.0		97.3	70-130	2.14	25	
1,4-Dioxane	104	50	µg/L	100		104	40-130	2.86	50	† ‡
Ethanol	73.6	50	µg/L	100		73.6	40-160	0.997	25	V-05
Ethylbenzene	9.45	1.0	µg/L	10.0		94.5	70-130	1.28	25	
Hexachlorobutadiene	9.64	0.60	µg/L	10.0		96.4	70-130	1.57	25	
2-Hexanone (MBK)	87.6	10	µg/L	100		87.6	70-160	3.75	25	†
Isopropylbenzene (Cumene)	9.84	1.0	µg/L	10.0		98.4	70-130	2.57	25	
p-Isopropyltoluene (p-Cymene)	9.15	1.0	µg/L	10.0		91.5	70-130	0.654	25	
Methyl Acetate	8.66	1.0	µg/L	10.0		86.6	70-130	5.39	25	
Methyl tert-Butyl Ether (MTBE)	9.32	1.0	µg/L	10.0		93.2	70-130	3.79	25	
Methyl Cyclohexane	8.56	1.0	µg/L	10.0		85.6	70-130	3.93	25	
Methylene Chloride	8.01	5.0	µg/L	10.0		80.1	70-130	3.92	25	
4-Methyl-2-pentanone (MIBK)	89.0	10	µg/L	100		89.0	70-160	5.22	25	†
Naphthalene	7.95	2.0	µg/L	10.0		79.5	40-130	1.13	25	†
n-Propylbenzene	9.82	1.0	µg/L	10.0		98.2	70-130	3.31	25	
Styrene	9.76	1.0	µg/L	10.0		97.6	70-130	1.65	25	
1,1,1,2-Tetrachloroethane	9.92	1.0	µg/L	10.0		99.2	70-130	2.88	25	
1,1,2,2-Tetrachloroethane	8.94	0.50	µg/L	10.0		89.4	70-130	1.00	25	
Tetrachloroethylene	9.04	1.0	µg/L	10.0		90.4	70-130	2.30	25	
Tetrahydrofuran	8.51	10	µg/L	10.0		85.1	70-130	2.90	25	
Toluene	9.19	1.0	µg/L	10.0		91.9	70-130	0.109	25	
1,2,3-Trichlorobenzene	8.49	5.0	µg/L	10.0		84.9	70-130	1.42	25	
1,2,4-Trichlorobenzene	8.22	1.0	µg/L	10.0		82.2	70-130	2.17	25	
1,3,5-Trichlorobenzene	8.95	1.0	µg/L	10.0		89.5	70-130	0.890	25	
1,1,1-Trichloroethane	9.46	1.0	µg/L	10.0		94.6	70-130	0.737	25	
1,1,2-Trichloroethane	9.88	1.0	µg/L	10.0		98.8	70-130	1.81	25	
Trichloroethylene	9.66	1.0	µg/L	10.0		96.6	70-130	3.06	25	
Trichlorofluoromethane (Freon 11)	8.90	2.0	µg/L	10.0		89.0	70-130	0.560	25	
1,2,3-Trichloropropane	9.93	2.0	µg/L	10.0		99.3	70-130	1.52	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.75	1.0	µg/L	10.0		87.5	70-130	3.49	25	
1,2,4-Trimethylbenzene	9.07	1.0	µg/L	10.0		90.7	70-130	2.18	25	
1,3,5-Trimethylbenzene	9.79	1.0	µg/L	10.0		97.9	70-130	1.34	25	
Vinyl Chloride	8.55	2.0	µg/L	10.0		85.5	40-160	2.01	25	†
m+p Xylene	19.5	2.0	µg/L	20.0		97.4	70-130	2.13	25	
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130	2.61	25	
Surrogate: 1,2-Dichloroethane-d4	27.2		µg/L	25.0		109	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	26.5		µg/L	25.0		106	70-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B354034 - SW-846 5030B										
Matrix Spike (B354034-MS1)	Source: 23J0366-01			Prepared: 10/05/23 Analyzed: 10/07/23						
Acetone	76.1	50	µg/L	100	ND	76.1	70-130			V-35
Acrylonitrile	7.29	5.0	µg/L	10.0	ND	72.9	70-130			V-05
tert-Amyl Methyl Ether (TAME)	8.41	0.50	µg/L	10.0	ND	84.1	70-130			
Benzene	9.49	1.0	µg/L	10.0	ND	94.9	70-130			
Bromobenzene	9.68	1.0	µg/L	10.0	ND	96.8	70-130			
Bromochloromethane	9.60	1.0	µg/L	10.0	ND	96.0	70-130			
Bromodichloromethane	9.22	0.50	µg/L	10.0	ND	92.2	70-130			
Bromoform	8.69	1.0	µg/L	10.0	ND	86.9	70-130			
Bromomethane	8.28	2.0	µg/L	10.0	ND	82.8	70-130			V-34
2-Butanone (MEK)	85.5	20	µg/L	100	ND	85.5	70-130			
tert-Butyl Alcohol (TBA)	68.5	20	µg/L	100	ND	68.5	* 70-130			MS-07A, V-05
n-Butylbenzene	8.39	1.0	µg/L	10.0	ND	83.9	70-130			
sec-Butylbenzene	8.99	1.0	µg/L	10.0	ND	89.9	70-130			
tert-Butylbenzene	8.90	1.0	µg/L	10.0	ND	89.0	70-130			
tert-Butyl Ethyl Ether (TBEE)	8.92	0.50	µg/L	10.0	ND	89.2	70-130			
Carbon Disulfide	85.2	5.0	µg/L	100	ND	85.2	70-130			V-35
Carbon Tetrachloride	10.3	5.0	µg/L	10.0	ND	103	70-130			
Chlorobenzene	9.58	1.0	µg/L	10.0	ND	95.8	70-130			
Chlorodibromomethane	8.89	0.50	µg/L	10.0	ND	88.9	70-130			
Chloroethane	10.3	2.0	µg/L	10.0	ND	103	70-130			
Chloroform	9.07	2.0	µg/L	10.0	ND	90.7	70-130			
Chloromethane	5.37	2.0	µg/L	10.0	ND	53.7	* 70-130			MS-07A, V-05, V-34
2-Chlorotoluene	8.66	1.0	µg/L	10.0	ND	86.6	70-130			
4-Chlorotoluene	9.69	1.0	µg/L	10.0	ND	96.9	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.90	5.0	µg/L	10.0	ND	79.0	70-130			
1,2-Dibromoethane (EDB)	9.35	0.50	µg/L	10.0	ND	93.5	70-130			
Dibromomethane	9.02	1.0	µg/L	10.0	ND	90.2	70-130			
1,2-Dichlorobenzene	8.87	1.0	µg/L	10.0	ND	88.7	70-130			
1,3-Dichlorobenzene	8.94	1.0	µg/L	10.0	ND	89.4	70-130			
1,4-Dichlorobenzene	8.86	1.0	µg/L	10.0	ND	88.6	70-130			
trans-1,4-Dichloro-2-butene	6.64	2.0	µg/L	10.0	ND	66.4	* 70-130			MS-07A, V-05
Dichlorodifluoromethane (Freon 12)	7.59	2.0	µg/L	10.0	ND	75.9	70-130			
1,1-Dichloroethane	9.12	1.0	µg/L	10.0	ND	91.2	70-130			
1,2-Dichloroethane	8.22	1.0	µg/L	10.0	ND	82.2	70-130			
1,1-Dichloroethylene	7.54	1.0	µg/L	10.0	ND	75.4	70-130			V-05
cis-1,2-Dichloroethylene	9.03	1.0	µg/L	10.0	ND	90.3	70-130			
trans-1,2-Dichloroethylene	8.80	1.0	µg/L	10.0	ND	88.0	70-130			
1,2-Dichloropropane	8.93	1.0	µg/L	10.0	ND	89.3	70-130			
1,3-Dichloropropane	9.18	0.50	µg/L	10.0	ND	91.8	70-130			
2,2-Dichloropropane	5.39	1.0	µg/L	10.0	ND	53.9	* 70-130			MS-07A, V-05
1,1-Dichloropropene	9.10	2.0	µg/L	10.0	ND	91.0	70-130			
cis-1,3-Dichloropropene	7.74	0.50	µg/L	10.0	ND	77.4	70-130			
trans-1,3-Dichloropropene	7.47	0.50	µg/L	10.0	ND	74.7	70-130			
Diethyl Ether	8.42	2.0	µg/L	10.0	ND	84.2	70-130			
Diisopropyl Ether (DIPE)	9.25	0.50	µg/L	10.0	ND	92.5	70-130			
1,4-Dioxane	128	50	µg/L	100	ND	128	70-130			
Ethylbenzene	9.36	1.0	µg/L	10.0	ND	93.6	70-130			
Hexachlorobutadiene	9.29	0.60	µg/L	10.0	ND	92.9	70-130			
2-Hexanone (MBK)	91.0	10	µg/L	100	ND	91.0	70-130			
Isopropylbenzene (Cumene)	9.63	1.0	µg/L	10.0	ND	96.3	70-130			
p-Isopropyltoluene (p-Cymene)	8.79	1.0	µg/L	10.0	ND	87.9	70-130			
Methyl Acetate	6.08	1.0	µg/L	10.0	ND	60.8	* 70-130			MS-07A

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B354034 - SW-846 5030B

Matrix Spike (B354034-MS1)		Source: 23J0366-01			Prepared: 10/05/23 Analyzed: 10/07/23					
Methyl tert-Butyl Ether (MTBE)	9.02	1.0	µg/L	10.0	ND	90.2	70-130			
Methyl Cyclohexane	8.29	1.0	µg/L	10.0	ND	82.9	70-130			
Methylene Chloride	7.54	5.0	µg/L	10.0	ND	75.4	70-130			
4-Methyl-2-pentanone (MIBK)	93.0	10	µg/L	100	ND	93.0	70-130			
Naphthalene	8.02	2.0	µg/L	10.0	ND	80.2	70-130			
n-Propylbenzene	9.42	1.0	µg/L	10.0	ND	94.2	70-130			
Styrene	9.30	1.0	µg/L	10.0	ND	93.0	70-130			
1,1,1,2-Tetrachloroethane	9.40	1.0	µg/L	10.0	ND	94.0	70-130			
1,1,2,2-Tetrachloroethane	9.22	0.50	µg/L	10.0	ND	92.2	70-130			
Tetrachloroethylene	9.06	1.0	µg/L	10.0	ND	90.6	70-130			
Tetrahydrofuran	9.45	10	µg/L	10.0	0.950	85.0	70-130			
Toluene	9.09	1.0	µg/L	10.0	ND	90.9	70-130			
1,2,3-Trichlorobenzene	7.86	5.0	µg/L	10.0	ND	78.6	70-130			
1,2,4-Trichlorobenzene	7.82	1.0	µg/L	10.0	ND	78.2	70-130			
1,3,5-Trichlorobenzene	8.23	1.0	µg/L	10.0	ND	82.3	70-130			
1,1,1-Trichloroethane	9.21	1.0	µg/L	10.0	ND	92.1	70-130			
1,1,2-Trichloroethane	9.20	1.0	µg/L	10.0	ND	92.0	70-130			
Trichloroethylene	9.18	1.0	µg/L	10.0	ND	91.8	70-130			
Trichlorofluoromethane (Freon 11)	8.63	2.0	µg/L	10.0	ND	86.3	70-130			
1,2,3-Trichloropropane	9.74	2.0	µg/L	10.0	ND	97.4	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.02	1.0	µg/L	10.0	ND	80.2	70-130			
1,2,4-Trimethylbenzene	8.71	1.0	µg/L	10.0	ND	87.1	70-130			
1,3,5-Trimethylbenzene	9.58	1.0	µg/L	10.0	ND	95.8	70-130			
Vinyl Chloride	8.12	2.0	µg/L	10.0	ND	81.2	70-130			
m+p Xylene	18.9	2.0	µg/L	20.0	ND	94.6	70-130			
o-Xylene	9.72	1.0	µg/L	10.0	ND	97.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.3		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	26.4		µg/L	25.0		106	70-130			

Matrix Spike Dup (B354034-MSD1)		Source: 23J0366-01			Prepared: 10/05/23 Analyzed: 10/07/23					
Acetone	76.2	50	µg/L	100	ND	76.2	70-130	0.171	30	V-35
Acrylonitrile	7.14	5.0	µg/L	10.0	ND	71.4	70-130	2.08	30	V-05
tert-Amyl Methyl Ether (TAME)	8.60	0.50	µg/L	10.0	ND	86.0	70-130	2.23	30	
Benzene	9.40	1.0	µg/L	10.0	ND	94.0	70-130	0.953	30	
Bromobenzene	9.72	1.0	µg/L	10.0	ND	97.2	70-130	0.412	30	
Bromochloromethane	9.94	1.0	µg/L	10.0	ND	99.4	70-130	3.48	30	
Bromodichloromethane	8.90	0.50	µg/L	10.0	ND	89.0	70-130	3.53	30	
Bromoform	8.63	1.0	µg/L	10.0	ND	86.3	70-130	0.693	30	
Bromomethane	8.66	2.0	µg/L	10.0	ND	86.6	70-130	4.49	30	V-34
2-Butanone (MEK)	84.6	20	µg/L	100	ND	84.6	70-130	1.11	30	
tert-Butyl Alcohol (TBA)	68.3	20	µg/L	100	ND	68.3	* 70-130	0.263	30	MS-07A, V-05
n-Butylbenzene	8.86	1.0	µg/L	10.0	ND	88.6	70-130	5.45	30	
sec-Butylbenzene	9.43	1.0	µg/L	10.0	ND	94.3	70-130	4.78	30	
tert-Butylbenzene	9.29	1.0	µg/L	10.0	ND	92.9	70-130	4.29	30	
tert-Butyl Ethyl Ether (TBEE)	9.06	0.50	µg/L	10.0	ND	90.6	70-130	1.56	30	
Carbon Disulfide	85.5	5.0	µg/L	100	ND	85.5	70-130	0.293	30	V-35
Carbon Tetrachloride	10.3	5.0	µg/L	10.0	ND	103	70-130	0.486	30	
Chlorobenzene	9.59	1.0	µg/L	10.0	ND	95.9	70-130	0.104	30	
Chlorodibromomethane	8.75	0.50	µg/L	10.0	ND	87.5	70-130	1.59	30	
Chloroethane	10.4	2.0	µg/L	10.0	ND	104	70-130	1.45	30	
Chloroform	9.04	2.0	µg/L	10.0	ND	90.4	70-130	0.331	30	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B354034 - SW-846 5030B										
Matrix Spike Dup (B354034-MSD1)	Source: 23J0366-01			Prepared: 10/05/23 Analyzed: 10/07/23						
Chloromethane	5.67	2.0	µg/L	10.0	ND	56.7 *	70-130	5.43	30	MS-07A, V-05, V-34
2-Chlorotoluene	8.90	1.0	µg/L	10.0	ND	89.0	70-130	2.73	30	
4-Chlorotoluene	9.56	1.0	µg/L	10.0	ND	95.6	70-130	1.35	30	
1,2-Dibromo-3-chloropropane (DBCP)	8.60	5.0	µg/L	10.0	ND	86.0	70-130	8.48	30	
1,2-Dibromoethane (EDB)	9.20	0.50	µg/L	10.0	ND	92.0	70-130	1.62	30	
Dibromomethane	9.10	1.0	µg/L	10.0	ND	91.0	70-130	0.883	30	
1,2-Dichlorobenzene	9.18	1.0	µg/L	10.0	ND	91.8	70-130	3.43	30	
1,3-Dichlorobenzene	9.52	1.0	µg/L	10.0	ND	95.2	70-130	6.28	30	
1,4-Dichlorobenzene	9.21	1.0	µg/L	10.0	ND	92.1	70-130	3.87	30	
trans-1,4-Dichloro-2-butene	5.77	2.0	µg/L	10.0	ND	57.7 *	70-130	14.0	30	MS-07A, V-05
Dichlorodifluoromethane (Freon 12)	8.28	2.0	µg/L	10.0	ND	82.8	70-130	8.70	30	
1,1-Dichloroethane	9.18	1.0	µg/L	10.0	ND	91.8	70-130	0.656	30	
1,2-Dichloroethane	8.16	1.0	µg/L	10.0	ND	81.6	70-130	0.733	30	
1,1-Dichloroethylene	7.46	1.0	µg/L	10.0	ND	74.6	70-130	1.07	30	V-05
cis-1,2-Dichloroethylene	9.01	1.0	µg/L	10.0	ND	90.1	70-130	0.222	30	
trans-1,2-Dichloroethylene	8.79	1.0	µg/L	10.0	ND	87.9	70-130	0.114	30	
1,2-Dichloropropane	9.11	1.0	µg/L	10.0	ND	91.1	70-130	2.00	30	
1,3-Dichloropropane	9.30	0.50	µg/L	10.0	ND	93.0	70-130	1.30	30	
2,2-Dichloropropane	5.43	1.0	µg/L	10.0	ND	54.3 *	70-130	0.739	30	MS-07A, V-05
1,1-Dichloropropene	9.03	2.0	µg/L	10.0	ND	90.3	70-130	0.772	30	
cis-1,3-Dichloropropene	8.02	0.50	µg/L	10.0	ND	80.2	70-130	3.55	30	
trans-1,3-Dichloropropene	7.47	0.50	µg/L	10.0	ND	74.7	70-130	0.00	30	
Diethyl Ether	8.34	2.0	µg/L	10.0	ND	83.4	70-130	0.955	30	
Diisopropyl Ether (DIPE)	9.29	0.50	µg/L	10.0	ND	92.9	70-130	0.431	30	
1,4-Dioxane	127	50	µg/L	100	ND	127	70-130	0.778	30	
Ethylbenzene	9.29	1.0	µg/L	10.0	ND	92.9	70-130	0.751	30	
Hexachlorobutadiene	9.56	0.60	µg/L	10.0	ND	95.6	70-130	2.86	30	
2-Hexanone (MBK)	90.6	10	µg/L	100	ND	90.6	70-130	0.463	30	
Isopropylbenzene (Cumene)	9.63	1.0	µg/L	10.0	ND	96.3	70-130	0.00	30	
p-Isopropyltoluene (p-Cymene)	9.28	1.0	µg/L	10.0	ND	92.8	70-130	5.42	30	
Methyl Acetate	6.27	1.0	µg/L	10.0	ND	62.7 *	70-130	3.08	30	MS-07A
Methyl tert-Butyl Ether (MTBE)	9.09	1.0	µg/L	10.0	ND	90.9	70-130	0.773	30	
Methyl Cyclohexane	8.90	1.0	µg/L	10.0	ND	89.0	70-130	7.10	30	
Methylene Chloride	7.55	5.0	µg/L	10.0	ND	75.5	70-130	0.133	30	
4-Methyl-2-pentanone (MIBK)	90.1	10	µg/L	100	ND	90.1	70-130	3.12	30	
Naphthalene	8.58	2.0	µg/L	10.0	ND	85.8	70-130	6.75	30	
n-Propylbenzene	9.49	1.0	µg/L	10.0	ND	94.9	70-130	0.740	30	
Styrene	9.33	1.0	µg/L	10.0	ND	93.3	70-130	0.322	30	
1,1,1,2-Tetrachloroethane	9.17	1.0	µg/L	10.0	ND	91.7	70-130	2.48	30	
1,1,2,2-Tetrachloroethane	9.46	0.50	µg/L	10.0	ND	94.6	70-130	2.57	30	
Tetrachloroethylene	9.04	1.0	µg/L	10.0	ND	90.4	70-130	0.221	30	
Tetrahydrofuran	8.89	10	µg/L	10.0	0.950	79.4	70-130	6.11	30	
Toluene	9.06	1.0	µg/L	10.0	ND	90.6	70-130	0.331	30	
1,2,3-Trichlorobenzene	8.55	5.0	µg/L	10.0	ND	85.5	70-130	8.41	30	
1,2,4-Trichlorobenzene	8.46	1.0	µg/L	10.0	ND	84.6	70-130	7.86	30	
1,3,5-Trichlorobenzene	8.83	1.0	µg/L	10.0	ND	88.3	70-130	7.03	30	
1,1,1-Trichloroethane	9.13	1.0	µg/L	10.0	ND	91.3	70-130	0.872	30	
1,1,2-Trichloroethane	9.09	1.0	µg/L	10.0	ND	90.9	70-130	1.20	30	
Trichloroethylene	9.28	1.0	µg/L	10.0	ND	92.8	70-130	1.08	30	
Trichlorofluoromethane (Freon 11)	8.76	2.0	µg/L	10.0	ND	87.6	70-130	1.50	30	
1,2,3-Trichloropropane	9.47	2.0	µg/L	10.0	ND	94.7	70-130	2.81	30	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B354034 - SW-846 5030B
Matrix Spike Dup (B354034-MSD1)
Source: 23J0366-01

Prepared: 10/05/23 Analyzed: 10/07/23

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.31	1.0	µg/L	10.0	ND	83.1	70-130	3.55	30	
1,2,4-Trimethylbenzene	9.23	1.0	µg/L	10.0	ND	92.3	70-130	5.80	30	
1,3,5-Trimethylbenzene	9.60	1.0	µg/L	10.0	ND	96.0	70-130	0.209	30	
Vinyl Chloride	8.20	2.0	µg/L	10.0	ND	82.0	70-130	0.980	30	
m+p Xylene	19.0	2.0	µg/L	20.0	ND	94.8	70-130	0.211	20	
o-Xylene	9.72	1.0	µg/L	10.0	ND	97.2	70-130	0.00	30	
Surrogate: 1,2-Dichloroethane-d4	26.4		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	25.7		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	26.0		µg/L	25.0		104	70-130			

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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
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Batch B354294 - SW-846 3510C
Blank (B354294-BLK1)

Prepared: 10/06/23 Analyzed: 10/10/23

Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	5.0	µg/L							
Anthracene	ND	5.0	µg/L							
Benzidine	ND	20	µg/L							V-04, V-05
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							
Benzoic Acid	ND	10	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							
1,2-Dichlorobenzene	ND	5.0	µg/L							
1,3-Dichlorobenzene	ND	5.0	µg/L							
1,4-Dichlorobenzene	ND	5.0	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	10	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							
1,2-Diphenylhydrazine/Azobenzene	ND	10	µg/L							
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							V-05
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							

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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 B354294 - SW-846 3510C
Blank (B354294-BLK1)

Prepared: 10/06/23 Analyzed: 10/10/23

2-Methylphenol	ND	10	µg/L							
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-Nitrosodimethylamine	ND	10	µg/L							V-20
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
Pentachloronitrobenzene	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	5.0	µg/L							
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	135		µg/L	200		67.7	15-110			
Surrogate: Phenol-d6	99.6		µg/L	200		49.8	15-110			
Surrogate: Nitrobenzene-d5	91.7		µg/L	100		91.7	30-130			
Surrogate: 2-Fluorobiphenyl	82.2		µg/L	100		82.2	30-130			
Surrogate: 2,4,6-Tribromophenol	185		µg/L	200		92.4	15-110			
Surrogate: p-Terphenyl-d14	100		µg/L	100		100	30-130			

LCS (B354294-BS1)

Prepared: 10/06/23 Analyzed: 10/10/23

Acenaphthene	36.1	5.0	µg/L	50.0		72.3	40-140			
Acenaphthylene	40.4	5.0	µg/L	50.0		80.9	40-140			
Acetophenone	40.9	10	µg/L	50.0		81.8	40-140			
Aniline	40.0	5.0	µg/L	50.0		80.0	40-140			
Anthracene	41.9	5.0	µg/L	50.0		83.8	40-140			
Benzidine	35.2	20	µg/L	50.0		70.4	40-140			R-05, V-04, V-05
Benzo(a)anthracene	41.0	5.0	µg/L	50.0		81.9	40-140			
Benzo(a)pyrene	40.9	5.0	µg/L	50.0		81.8	40-140			
Benzo(b)fluoranthene	41.3	5.0	µg/L	50.0		82.5	40-140			
Benzo(g,h,i)perylene	43.7	5.0	µg/L	50.0		87.4	40-140			
Benzo(k)fluoranthene	44.2	5.0	µg/L	50.0		88.3	40-140			
Benzoic Acid	21.3	10	µg/L	45.0		47.4	10-130			†
Bis(2-chloroethoxy)methane	41.6	10	µg/L	50.0		83.1	40-140			
Bis(2-chloroethyl)ether	45.0	10	µg/L	50.0		90.0	40-140			
Bis(2-chloroisopropyl)ether	53.4	10	µg/L	50.0		107	40-140			V-06
Bis(2-Ethylhexyl)phthalate	42.7	10	µg/L	50.0		85.5	40-140			
4-Bromophenylphenylether	39.7	10	µg/L	50.0		79.4	40-140			
Butylbenzylphthalate	42.9	10	µg/L	50.0		85.8	40-140			
Carbazole	43.3	10	µg/L	50.0		86.6	40-140			
4-Chloroaniline	38.4	10	µg/L	50.0		76.7	40-140			
4-Chloro-3-methylphenol	42.0	10	µg/L	50.0		84.0	30-130			
2-Chloronaphthalene	32.1	10	µg/L	50.0		64.2	40-140			

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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 B354294 - SW-846 3510C										
LCS (B354294-BS1)										
				Prepared: 10/06/23 Analyzed: 10/10/23						
2-Chlorophenol	40.2	10	µg/L	50.0		80.3	30-130			
4-Chlorophenylphenylether	37.9	10	µg/L	50.0		75.8	40-140			
Chrysene	41.2	5.0	µg/L	50.0		82.5	40-140			
Dibenz(a,h)anthracene	42.1	5.0	µg/L	50.0		84.2	40-140			
Dibenzofuran	39.6	5.0	µg/L	50.0		79.1	40-140			
Di-n-butylphthalate	42.8	10	µg/L	50.0		85.7	40-140			
1,2-Dichlorobenzene	29.1	5.0	µg/L	50.0		58.1	40-140			
1,3-Dichlorobenzene	26.9	5.0	µg/L	50.0		53.7	40-140			
1,4-Dichlorobenzene	27.6	5.0	µg/L	50.0		55.2	40-140			
3,3-Dichlorobenzidine	43.7	10	µg/L	50.0		87.4	40-140			
2,4-Dichlorophenol	38.7	10	µg/L	50.0		77.5	30-130			
Diethylphthalate	41.9	10	µg/L	50.0		83.7	40-140			
2,4-Dimethylphenol	36.2	10	µg/L	50.0		72.4	30-130			
Dimethylphthalate	41.0	10	µg/L	50.0		81.9	40-140			
4,6-Dinitro-2-methylphenol	43.8	10	µg/L	50.0		87.6	30-130			
2,4-Dinitrophenol	35.7	10	µg/L	50.0		71.4	30-130			
2,4-Dinitrotoluene	41.7	10	µg/L	50.0		83.5	40-140			
2,6-Dinitrotoluene	42.0	10	µg/L	50.0		84.1	40-140			
Di-n-octylphthalate	40.7	10	µg/L	50.0		81.4	40-140			
1,2-Diphenylhydrazine/Azobenzene	42.4	10	µg/L	50.0		84.8	40-140			
Fluoranthene	40.4	5.0	µg/L	50.0		80.7	40-140			
Fluorene	37.9	5.0	µg/L	50.0		75.8	40-140			
Hexachlorobenzene	42.4	10	µg/L	50.0		84.9	40-140			
Hexachlorobutadiene	24.6	10	µg/L	50.0		49.3	40-140			
Hexachlorocyclopentadiene	15.3	10	µg/L	50.0		30.6	30-140			V-05 †
Hexachloroethane	24.5	10	µg/L	50.0		49.0	40-140			
Indeno(1,2,3-cd)pyrene	43.0	5.0	µg/L	50.0		86.0	40-140			
Isophorone	42.7	10	µg/L	50.0		85.4	40-140			
1-Methylnaphthalene	35.3	5.0	µg/L	50.0		70.6	40-140			
2-Methylnaphthalene	35.6	5.0	µg/L	50.0		71.2	40-140			
2-Methylphenol	40.2	10	µg/L	50.0		80.3	30-130			
3/4-Methylphenol	40.5	10	µg/L	50.0		81.0	30-130			
Naphthalene	33.7	5.0	µg/L	50.0		67.4	40-140			
2-Nitroaniline	45.6	10	µg/L	50.0		91.1	40-140			
3-Nitroaniline	43.9	10	µg/L	50.0		87.8	40-140			
4-Nitroaniline	44.6	10	µg/L	50.0		89.3	40-140			
Nitrobenzene	37.7	10	µg/L	50.0		75.3	40-140			
2-Nitrophenol	39.3	10	µg/L	50.0		78.6	30-130			
4-Nitrophenol	25.1	10	µg/L	50.0		50.1	10-130			†
N-Nitrosodimethylamine	35.0	10	µg/L	50.0		70.1	40-140			V-06
N-Nitrosodiphenylamine/Diphenylamine	46.1	10	µg/L	50.0		92.2	40-140			
N-Nitrosodi-n-propylamine	46.0	10	µg/L	50.0		92.1	40-140			
Pentachloronitrobenzene	43.6	10	µg/L	50.0		87.2	40-140			
Pentachlorophenol	36.8	10	µg/L	50.0		73.5	30-130			
Phenanthrene	41.6	5.0	µg/L	50.0		83.2	40-140			
Phenol	22.3	10	µg/L	50.0		44.6	20-130			†
Pyrene	40.9	5.0	µg/L	50.0		81.8	40-140			
Pyridine	23.2	5.0	µg/L	50.0		46.5	10-140			†
1,2,4,5-Tetrachlorobenzene	31.1	10	µg/L	50.0		62.2	40-140			
1,2,4-Trichlorobenzene	28.4	5.0	µg/L	50.0		56.9	40-140			
2,4,5-Trichlorophenol	40.4	10	µg/L	50.0		80.8	30-130			
2,4,6-Trichlorophenol	38.5	10	µg/L	50.0		77.0	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
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Batch B354294 - SW-846 3510C
LCS (B354294-BS1)

Prepared: 10/06/23 Analyzed: 10/10/23

Surrogate: 2-Fluorophenol	124		µg/L	200		62.1	15-110			
Surrogate: Phenol-d6	96.2		µg/L	200		48.1	15-110			
Surrogate: Nitrobenzene-d5	77.5		µg/L	100		77.5	30-130			
Surrogate: 2-Fluorobiphenyl	76.0		µg/L	100		76.0	30-130			
Surrogate: 2,4,6-Tribromophenol	184		µg/L	200		91.9	15-110			
Surrogate: p-Terphenyl-d14	83.4		µg/L	100		83.4	30-130			

LCS Dup (B354294-BSD1)

Prepared: 10/06/23 Analyzed: 10/10/23

Acenaphthene	35.1	5.0	µg/L	50.0		70.1	40-140	3.03	20	
Acenaphthylene	38.8	5.0	µg/L	50.0		77.6	40-140	4.14	20	
Acetophenone	40.0	10	µg/L	50.0		79.9	40-140	2.25	20	
Aniline	35.0	5.0	µg/L	50.0		70.1	40-140	13.1	50	‡
Anthracene	40.0	5.0	µg/L	50.0		79.9	40-140	4.76	20	
Benzidine	27.3	20	µg/L	50.0		54.6	40-140	25.3	* 20	R-05, V-04, V-05
Benzo(a)anthracene	38.9	5.0	µg/L	50.0		77.8	40-140	5.13	20	
Benzo(a)pyrene	38.4	5.0	µg/L	50.0		76.9	40-140	6.20	20	
Benzo(b)fluoranthene	38.9	5.0	µg/L	50.0		77.8	40-140	5.86	20	
Benzo(g,h,i)perylene	41.8	5.0	µg/L	50.0		83.7	40-140	4.35	20	
Benzo(k)fluoranthene	40.8	5.0	µg/L	50.0		81.6	40-140	7.89	20	
Benzoic Acid	19.8	10	µg/L	45.0		43.9	10-130	7.69	50	‡ ‡
Bis(2-chloroethoxy)methane	40.4	10	µg/L	50.0		80.7	40-140	2.88	20	
Bis(2-chloroethyl)ether	44.6	10	µg/L	50.0		89.2	40-140	0.915	20	
Bis(2-chloroisopropyl)ether	52.5	10	µg/L	50.0		105	40-140	1.62	20	
Bis(2-Ethylhexyl)phthalate	39.8	10	µg/L	50.0		79.6	40-140	7.07	20	
4-Bromophenylphenylether	37.7	10	µg/L	50.0		75.4	40-140	5.22	20	
Butylbenzylphthalate	40.0	10	µg/L	50.0		80.1	40-140	6.94	20	
Carbazole	41.1	10	µg/L	50.0		82.1	40-140	5.24	20	
4-Chloroaniline	32.1	10	µg/L	50.0		64.2	40-140	17.8	20	
4-Chloro-3-methylphenol	40.1	10	µg/L	50.0		80.1	30-130	4.73	20	
2-Chloronaphthalene	31.9	10	µg/L	50.0		63.8	40-140	0.656	20	
2-Chlorophenol	39.0	10	µg/L	50.0		78.1	30-130	2.80	20	
4-Chlorophenylphenylether	36.6	10	µg/L	50.0		73.2	40-140	3.38	20	
Chrysene	39.1	5.0	µg/L	50.0		78.2	40-140	5.28	20	
Dibenz(a,h)anthracene	40.8	5.0	µg/L	50.0		81.6	40-140	3.04	20	
Dibenzofuran	39.0	5.0	µg/L	50.0		78.0	40-140	1.37	20	
Di-n-butylphthalate	40.3	10	µg/L	50.0		80.6	40-140	6.04	20	
1,2-Dichlorobenzene	29.8	5.0	µg/L	50.0		59.7	40-140	2.62	20	
1,3-Dichlorobenzene	28.0	5.0	µg/L	50.0		55.9	40-140	4.01	20	
1,4-Dichlorobenzene	28.7	5.0	µg/L	50.0		57.4	40-140	3.77	20	
3,3-Dichlorobenzidine	39.4	10	µg/L	50.0		78.9	40-140	10.3	20	
2,4-Dichlorophenol	37.0	10	µg/L	50.0		74.1	30-130	4.46	20	
Diethylphthalate	39.9	10	µg/L	50.0		79.9	40-140	4.72	20	
2,4-Dimethylphenol	35.1	10	µg/L	50.0		70.2	30-130	3.11	20	
Dimethylphthalate	39.8	10	µg/L	50.0		79.5	40-140	2.97	50	‡
4,6-Dinitro-2-methylphenol	41.9	10	µg/L	50.0		83.8	30-130	4.46	50	‡
2,4-Dinitrophenol	33.9	10	µg/L	50.0		67.9	30-130	5.08	50	‡
2,4-Dinitrotoluene	40.7	10	µg/L	50.0		81.4	40-140	2.47	20	
2,6-Dinitrotoluene	39.8	10	µg/L	50.0		79.5	40-140	5.60	20	
Di-n-octylphthalate	35.9	10	µg/L	50.0		71.9	40-140	12.4	20	
1,2-Diphenylhydrazine/Azobenzene	41.0	10	µg/L	50.0		82.0	40-140	3.33	20	
Fluoranthene	38.5	5.0	µg/L	50.0		76.9	40-140	4.80	20	
Fluorene	37.8	5.0	µg/L	50.0		75.6	40-140	0.291	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 B354294 - SW-846 3510C										
LCS Dup (B354294-BSD1)										
Prepared: 10/06/23 Analyzed: 10/10/23										
Hexachlorobenzene	39.9	10	µg/L	50.0		79.7	40-140	6.25	20	
Hexachlorobutadiene	25.0	10	µg/L	50.0		50.1	40-140	1.65	20	
Hexachlorocyclopentadiene	16.8	10	µg/L	50.0		33.7	30-140	9.52	50	V-05 † ‡
Hexachloroethane	26.2	10	µg/L	50.0		52.3	40-140	6.56	50	‡
Indeno(1,2,3-cd)pyrene	42.0	5.0	µg/L	50.0		84.0	40-140	2.42	50	‡
Isophorone	41.3	10	µg/L	50.0		82.7	40-140	3.21	20	
1-Methylnaphthalene	35.1	5.0	µg/L	50.0		70.1	40-140	0.682	20	
2-Methylnaphthalene	35.5	5.0	µg/L	50.0		71.1	40-140	0.141	20	
2-Methylphenol	38.6	10	µg/L	50.0		77.1	30-130	4.07	20	
3/4-Methylphenol	38.9	10	µg/L	50.0		77.7	30-130	4.11	20	
Naphthalene	33.3	5.0	µg/L	50.0		66.7	40-140	1.13	20	
2-Nitroaniline	44.3	10	µg/L	50.0		88.6	40-140	2.80	20	
3-Nitroaniline	41.0	10	µg/L	50.0		81.9	40-140	6.95	20	
4-Nitroaniline	43.4	10	µg/L	50.0		86.8	40-140	2.79	20	
Nitrobenzene	38.0	10	µg/L	50.0		75.9	40-140	0.793	20	
2-Nitrophenol	38.2	10	µg/L	50.0		76.5	30-130	2.66	20	
4-Nitrophenol	25.7	10	µg/L	50.0		51.4	10-130	2.40	50	† ‡
N-Nitrosodimethylamine	34.4	10	µg/L	50.0		68.9	40-140	1.67	20	V-06
N-Nitrosodiphenylamine/Diphenylamine	43.0	10	µg/L	50.0		86.1	40-140	6.84	20	
N-Nitrosodi-n-propylamine	44.2	10	µg/L	50.0		88.4	40-140	4.08	20	
Pentachloronitrobenzene	40.3	10	µg/L	50.0		80.5	40-140	7.92	20	
Pentachlorophenol	35.0	10	µg/L	50.0		70.0	30-130	4.96	50	‡
Phenanthrene	40.0	5.0	µg/L	50.0		80.0	40-140	3.97	20	
Phenol	21.5	10	µg/L	50.0		43.1	20-130	3.51	20	†
Pyrene	38.8	5.0	µg/L	50.0		77.5	40-140	5.45	20	
Pyridine	22.8	5.0	µg/L	50.0		45.5	10-140	2.13	50	† ‡
1,2,4,5-Tetrachlorobenzene	30.7	10	µg/L	50.0		61.5	40-140	1.23	20	
1,2,4-Trichlorobenzene	29.3	5.0	µg/L	50.0		58.5	40-140	2.91	20	
2,4,5-Trichlorophenol	38.9	10	µg/L	50.0		77.7	30-130	3.86	20	
2,4,6-Trichlorophenol	38.0	10	µg/L	50.0		75.9	30-130	1.49	50	‡
Surrogate: 2-Fluorophenol	122		µg/L	200		61.1	15-110			
Surrogate: Phenol-d6	93.2		µg/L	200		46.6	15-110			
Surrogate: Nitrobenzene-d5	75.6		µg/L	100		75.6	30-130			
Surrogate: 2-Fluorobiphenyl	72.1		µg/L	100		72.1	30-130			
Surrogate: 2,4,6-Tribromophenol	174		µg/L	200		87.2	15-110			
Surrogate: p-Terphenyl-d14	76.8		µg/L	100		76.8	30-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Batch B353881 - SW-846 3510C								
Blank (B353881-BLK1)				Prepared: 10/04/23 Analyzed: 10/09/23				
1,4-Dioxane	ND	0.20	µg/L					
Surrogate: 1,4-Dioxane-d8	2.89		µg/L	10.0		28.9	15-110	
LCS (B353881-BS1)				Prepared: 10/04/23 Analyzed: 10/09/23				
1,4-Dioxane	11.1	0.20	µg/L	10.0		111	40-140	
Surrogate: 1,4-Dioxane-d8	3.16		µg/L	10.0		31.6	15-110	
LCS Dup (B353881-BSD1)				Prepared: 10/04/23 Analyzed: 10/09/23				
1,4-Dioxane	11.3	0.20	µg/L	10.0		113	40-140	1.93 30
Surrogate: 1,4-Dioxane-d8	2.92		µg/L	10.0		29.2	15-110	

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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.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this 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-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	ME,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,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
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
Dibromomethane	ME,NH,VA,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
trans-1,4-Dichloro-2-butene	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
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	ME,NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	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>	
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
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
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
<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
Benzidine	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
Benzoic Acid	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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270E in Water</i>	
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
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
1,2-Diphenylhydrazine/Azobenzene	NY,NC
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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270E in Water</i>	
N-Nitrosodimethylamine	CT,NY,NC,ME,NH,VA
N-Nitrosodiphenylamine/Diphenylamine	NY
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachloronitrobenzene	NC
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

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

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023



DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist

Effective Date: 07/13/2023

Log In Back-Sheet

Client Rameco / (DEC)

Project Clement Polychrome Site Q4

MCP/RCP Required _____ **no**

Deliverable Package Requirement none

Location Old Bethpage NY

PWSID# (When Applicable) 157 na

Arrival Method:

Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time AM 10/3/23 0850

Back-Sheet By / Date / Time Man 10/3/23 1504

Temperature Method Gun # 4

Temp < 6°C Actual Temperature 38

Rush Samples: Yes / No Notify No

Short Hold: Yes / No Notify No

Notes regarding Samples/COC outside of SOP:

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

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 ☒ Sampler Name ☒
Collection Date ☒

Project ☐ IDs ☐ Collection Date/Time ☒

All Samples Proper pH: ☒ ☐ ☐

Additional Container Notes

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

Sample	Soils Jars				Ambers				Plastics								VOA Vials					Other / Fill in										
	(Circle Amb/Clear)				1 Liter		250mL		100mL	1 Liter		500mL	250mL						Unpreserved	HCl	MeOH	D.I. Water	BiSulfate									
					Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric											NaOH	Ammonium Acetate	NaOH/Zinc	
1					2				2																							
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	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

October 27, 2023

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

Project Location: Old Bethpage, NY
Client Job Number:
Project Number: 130015
Laboratory Work Order Number: 23J0370

Enclosed are results of analyses for samples as received by the laboratory on October 3, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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

REPORT DATE: 10/27/2023

PURCHASE ORDER NUMBER: 144165

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23J0370

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

PROJECT LOCATION: Old Bethpage, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PD-CP-00-100223	23J0370-01	Ground Water		Draft Method 1633	
PD-CP-01-100223	23J0370-02	Ground Water		Draft Method 1633	
ASF-CP-00-100223	23J0370-03	Ground Water		Draft Method 1633	
ASF-CP-01-100223	23J0370-04	Ground Water		Draft Method 1633	

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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:**

B-07

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

Analyte & Samples(s) Qualified:**Perfluorobutanoic acid (PFBA)**

23J0370-01[PD-CP-00-100223], 23J0370-02[PD-CP-01-100223], 23J0370-03[ASF-CP-00-100223], 23J0370-04[ASF-CP-01-100223]

Z-01

Analyte detected in method blank >1/3 MRL

Analyte & Samples(s) Qualified:**Perfluorobutanoic acid (PFBA)**

B354159-BLK1

Z-01a

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

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

B354159-MRL1

13C2-6:2FTS

B354159-MRL1

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

B354159-MRL1

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

B354159-MRL1

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

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



Lisa A. Worthington

Technical Representative

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0370-01

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)	31	3.5	ng/L	1	B-07	Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoropentanoic acid (PFPeA)	24	1.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorohexanoic acid (PFHxA)	27	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoroheptanoic acid (PFHpA)	14	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorooctanoic acid (PFOA)	44	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorononanoic acid (PFNA)	38	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorodecanoic acid (PFDA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorobutanesulfonic acid (PFBS)	6.1	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoropentanesulfonic acid (PFPeS)	3.9	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorohexanesulfonic acid (PFHxS)	10	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorooctanesulfonic acid (PFOS)	18	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
N-EtFOSAA (NEtFOSAA)	1.7	0.88	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	8.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	8.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
11Cl-PF3OUs (F53B Major)	ND	3.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	8.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	44	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
3-Perfluoroheptyl propanoic acid (FHPrPA) (7:3FTCA)	ND	44	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0370-01

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	10/10/23	10/10/23 21:06	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:06	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	64.4	10-130						10/10/23 21:06	
13C5-PFPeA	64.6	35-150						10/10/23 21:06	
13C5-PFHxA	68.8	55-150						10/10/23 21:06	
13C4-PFHpA	70.8	55-150						10/10/23 21:06	
13C8-PFOA	66.9	60-140						10/10/23 21:06	
13C9-PFNA	63.9	55-140						10/10/23 21:06	
13C6-PFDA	63.6	50-140						10/10/23 21:06	
13C7-PFUnA	58.1	30-140						10/10/23 21:06	
13C2-PFDoA	58.5	10-150						10/10/23 21:06	
13C2-PFTeDA	56.2	10-130						10/10/23 21:06	
13C3-PFBS	66.2	55-150						10/10/23 21:06	
13C3-PFHxS	68.8	55-150						10/10/23 21:06	
13C8-PFOS	61.8	45-140						10/10/23 21:06	
13C2-4:2FTS	80.0	60-200						10/10/23 21:06	
13C2-6:2FTS	66.0	60-200						10/10/23 21:06	
13C2-8:2FTS	52.6	50-200						10/10/23 21:06	
13C8-PFOSA	61.3	30-130						10/10/23 21:06	
D3-NMeFOSA	50.4	15-130						10/10/23 21:06	
D5-NEtFOSA	49.1	10-130						10/10/23 21:06	
D3-NMeFOSAA	59.6	45-200						10/10/23 21:06	
D5-NEtFOSAA	54.9	10-200						10/10/23 21:06	
D7-NMeFOSE	56.3	10-150						10/10/23 21:06	
D9-NEtFOSE	58.1	10-150						10/10/23 21:06	
13C3-HFPO-DA	67.4	25-160						10/10/23 21:06	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: PD-CP-00-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0370-01

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	10/5/23	10/5/23 13:30	IS/MVD

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0370-02

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)	31	3.7	ng/L	1	B-07	Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoropentanoic acid (PFPeA)	24	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorohexanoic acid (PFHxA)	27	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoroheptanoic acid (PFHpA)	14	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorooctanoic acid (PFOA)	45	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorononanoic acid (PFNA)	37	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorodecanoic acid (PFDA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorobutanesulfonic acid (PFBS)	4.4	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoropentanesulfonic acid (PFPeS)	3.2	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorohexanesulfonic acid (PFHxS)	9.5	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorooctanesulfonic acid (PFOS)	16	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
N-EtFOSAA (NEtFOSAA)	1.8	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.3	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
11Cl-PF3OUs (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0370-02

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	10/10/23	10/10/23 21:22	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:22	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	75.5	10-130						10/10/23 21:22	
13C5-PFPeA	76.8	35-150						10/10/23 21:22	
13C5-PFHxA	81.2	55-150						10/10/23 21:22	
13C4-PFHpA	81.6	55-150						10/10/23 21:22	
13C8-PFOA	78.3	60-140						10/10/23 21:22	
13C9-PFNA	77.6	55-140						10/10/23 21:22	
13C6-PFDA	74.3	50-140						10/10/23 21:22	
13C7-PFUnA	70.5	30-140						10/10/23 21:22	
13C2-PFDoA	72.7	10-150						10/10/23 21:22	
13C2-PFTeDA	70.1	10-130						10/10/23 21:22	
13C3-PFBS	81.4	55-150						10/10/23 21:22	
13C3-PFHxS	82.8	55-150						10/10/23 21:22	
13C8-PFOS	78.8	45-140						10/10/23 21:22	
13C2-4:2FTS	87.9	60-200						10/10/23 21:22	
13C2-6:2FTS	74.2	60-200						10/10/23 21:22	
13C2-8:2FTS	63.4	50-200						10/10/23 21:22	
13C8-PFOSA	75.6	30-130						10/10/23 21:22	
D3-NMeFOSA	61.4	15-130						10/10/23 21:22	
D5-NEtFOSA	60.3	10-130						10/10/23 21:22	
D3-NMeFOSAA	73.2	45-200						10/10/23 21:22	
D5-NEtFOSAA	69.7	10-200						10/10/23 21:22	
D7-NMeFOSE	68.4	10-150						10/10/23 21:22	
D9-NEtFOSE	72.5	10-150						10/10/23 21:22	
13C3-HFPO-DA	77.1	25-160						10/10/23 21:22	

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: PD-CP-01-100223

Sampled: 10/2/2023 11:30

Sample ID: 23J0370-02

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	10/5/23	10/5/23 13:30	IS/MVD

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: ASF-CP-00-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0370-03

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)	31	3.7	ng/L	1	B-07	Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoropentanoic acid (PFPeA)	24	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorohexanoic acid (PFHxA)	29	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoroheptanoic acid (PFHpA)	13	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorooctanoic acid (PFOA)	45	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorononanoic acid (PFNA)	37	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorodecanoic acid (PFDA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorobutanesulfonic acid (PFBS)	4.5	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoropentanesulfonic acid (PFPeS)	3.7	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorohexanesulfonic acid (PFHxS)	9.8	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorooctanesulfonic acid (PFOS)	18	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
N-EtFOSAA (NEtFOSAA)	1.9	0.93	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.3	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
11Cl-PF3OUs (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: ASF-CP-00-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0370-03

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	10/10/23	10/10/23 21:37	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:37	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	73.4	10-130						10/10/23 21:37	
13C5-PFPeA	66.8	35-150						10/10/23 21:37	
13C5-PFHxA	70.4	55-150						10/10/23 21:37	
13C4-PFHpA	70.2	55-150						10/10/23 21:37	
13C8-PFOA	66.9	60-140						10/10/23 21:37	
13C9-PFNA	68.5	55-140						10/10/23 21:37	
13C6-PFDA	63.6	50-140						10/10/23 21:37	
13C7-PFUnA	59.4	30-140						10/10/23 21:37	
13C2-PFDoA	56.9	10-150						10/10/23 21:37	
13C2-PFTeDA	55.2	10-130						10/10/23 21:37	
13C3-PFBS	69.7	55-150						10/10/23 21:37	
13C3-PFHxS	71.7	55-150						10/10/23 21:37	
13C8-PFOS	67.1	45-140						10/10/23 21:37	
13C2-4:2FTS	80.9	60-200						10/10/23 21:37	
13C2-6:2FTS	62.7	60-200						10/10/23 21:37	
13C2-8:2FTS	55.0	50-200						10/10/23 21:37	
13C8-PFOSA	58.7	30-130						10/10/23 21:37	
D3-NMeFOSA	45.7	15-130						10/10/23 21:37	
D5-NEtFOSA	47.3	10-130						10/10/23 21:37	
D3-NMeFOSAA	55.6	45-200						10/10/23 21:37	
D5-NEtFOSAA	51.4	10-200						10/10/23 21:37	
D7-NMeFOSE	57.6	10-150						10/10/23 21:37	
D9-NEtFOSE	59.1	10-150						10/10/23 21:37	
13C3-HFPO-DA	65.4	25-160						10/10/23 21:37	

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: ASF-CP-00-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0370-03

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	10/5/23	10/5/23 13:30	IS/MVD

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: ASF-CP-01-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0370-04

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)	33	3.8	ng/L	1	B-07	Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoropentanoic acid (PFPeA)	25	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorohexanoic acid (PFHxA)	27	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoroheptanoic acid (PFHpA)	13	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorooctanoic acid (PFOA)	44	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorononanoic acid (PFNA)	40	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorobutanesulfonic acid (PFBS)	5.1	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoropentanesulfonic acid (PFPeS)	3.4	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorohexanesulfonic acid (PFHxS)	9.8	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorooctanesulfonic acid (PFOS)	18	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
N-EtFOSAA (NEtFOSAA)	1.8	0.95	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
11Cl-PF3OUs (F53B Major)	ND	3.8	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS

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

Project Location: Old Bethpage, NY

Sample Description:

Work Order: 23J0370

Date Received: 10/3/2023

Field Sample #: ASF-CP-01-100223

Sampled: 10/2/2023 10:00

Sample ID: 23J0370-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	10/10/23	10/10/23 21:53	AMS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	74.1	10-130						10/10/23 21:53	
13C5-PFPeA	69.3	35-150						10/10/23 21:53	
13C5-PFHxA	74.6	55-150						10/10/23 21:53	
13C4-PFHpA	75.0	55-150						10/10/23 21:53	
13C8-PFOA	70.7	60-140						10/10/23 21:53	
13C9-PFNA	65.9	55-140						10/10/23 21:53	
13C6-PFDA	67.2	50-140						10/10/23 21:53	
13C7-PFUnA	60.9	30-140						10/10/23 21:53	
13C2-PFDoA	58.6	10-150						10/10/23 21:53	
13C2-PFTeDA	53.8	10-130						10/10/23 21:53	
13C3-PFBS	71.3	55-150						10/10/23 21:53	
13C3-PFHxS	75.2	55-150						10/10/23 21:53	
13C8-PFOS	65.9	45-140						10/10/23 21:53	
13C2-4:2FTS	83.5	60-200						10/10/23 21:53	
13C2-6:2FTS	65.8	60-200						10/10/23 21:53	
13C2-8:2FTS	53.4	50-200						10/10/23 21:53	
13C8-PFOSA	62.4	30-130						10/10/23 21:53	
D3-NMeFOSA	51.2	15-130						10/10/23 21:53	
D5-NEtFOSA	52.4	10-130						10/10/23 21:53	
D3-NMeFOSAA	58.7	45-200						10/10/23 21:53	
D5-NEtFOSAA	55.6	10-200						10/10/23 21:53	
D7-NMeFOSE	61.7	10-150						10/10/23 21:53	
D9-NEtFOSE	63.0	10-150						10/10/23 21:53	
13C3-HFPO-DA	70.7	25-160						10/10/23 21:53	

Project Location: Old Bethpage, NY	39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332	Work Order: 23J0370
Date Received: 10/3/2023	Sample Description:	
Field Sample #: ASF-CP-01-100223	Sampled: 10/2/2023 10:00	
Sample ID: 23J0370-04		
Sample Matrix: Ground Water		

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	10/5/23	10/5/23 13:30	IS/MVD

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
23J0370-01 [PD-CP-00-100223]	B354049	50.0	10/05/23
23J0370-02 [PD-CP-01-100223]	B354049	50.0	10/05/23
23J0370-03 [ASF-CP-00-100223]	B354049	50.0	10/05/23
23J0370-04 [ASF-CP-01-100223]	B354049	50.0	10/05/23

Prep Method:Draft Method 1633**Analytical Method:Draft Method 1633****Leachates were extracted on 10/5/2023 per NO PREP in Batch B354049**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23J0370-01 [PD-CP-00-100223]	B354159	570	5.00	10/10/23
23J0370-02 [PD-CP-01-100223]	B354159	537	5.00	10/10/23
23J0370-03 [ASF-CP-00-100223]	B354159	538	5.00	10/10/23
23J0370-04 [ASF-CP-01-100223]	B354159	526	5.00	10/10/23

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 B354159 - Draft Method 1633										
Blank (B354159-BLK1)				Prepared & Analyzed: 10/10/23						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							Z-01
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-Dioxo-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	85.1		ng/L	97.5		87.3	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 B354159 - Draft Method 1633
Blank (B354159-BLK1)

Prepared & Analyzed: 10/10/23

Surrogate: 13C5-PFPeA	40.5		ng/L	48.7		83.1	35-150			
Surrogate: 13C5-PFHxA	20.7		ng/L	24.4		84.9	55-150			
Surrogate: 13C4-PFHpA	20.8		ng/L	24.4		85.1	55-150			
Surrogate: 13C8-PFOA	20.1		ng/L	24.4		82.5	60-140			
Surrogate: 13C9-PFNA	9.68		ng/L	12.2		79.4	55-140			
Surrogate: 13C6-PFDA	10.1		ng/L	12.2		82.5	50-140			
Surrogate: 13C7-PFUnA	9.49		ng/L	12.2		77.9	30-140			
Surrogate: 13C2-PFDoA	9.73		ng/L	12.2		79.8	10-150			
Surrogate: 13C2-PFTeDA	9.69		ng/L	12.2		79.5	10-130			
Surrogate: 13C3-PFBS	19.9		ng/L	24.4		81.8	55-150			
Surrogate: 13C3-PFHxS	20.2		ng/L	24.4		82.8	55-150			
Surrogate: 13C8-PFOS	20.0		ng/L	24.4		82.1	45-140			
Surrogate: 13C2-4:2FTS	31.7		ng/L	48.7		65.0	60-200			
Surrogate: 13C2-6:2FTS	38.1		ng/L	48.7		78.3	60-200			
Surrogate: 13C2-8:2FTS	36.0		ng/L	48.7		73.9	50-200			
Surrogate: 13C8-PFOA	19.3		ng/L	24.4		79.4	30-130			
Surrogate: D3-NMeFOSA	15.8		ng/L	24.4		64.7	15-130			
Surrogate: D5-NEtFOSA	16.7		ng/L	24.4		68.7	10-130			
Surrogate: D3-NMeFOSAA	38.8		ng/L	48.7		79.7	45-200			
Surrogate: D5-NEtFOSAA	36.0		ng/L	48.7		73.8	10-200			
Surrogate: D7-NMeFOSE	195		ng/L	244		79.9	10-150			
Surrogate: D9-NEtFOSE	201		ng/L	244		82.5	10-150			
Surrogate: 13C3-HFPO-DA	84.2		ng/L	97.5		86.4	25-160			

LCS (B354159-BS1)

Prepared & Analyzed: 10/10/23

Perfluorobutanoic acid (PFBA)	109	4.0	ng/L	95.0		114	58-148			
Perfluoropentanoic acid (PFPeA)	53.3	2.0	ng/L	47.5		112	54-152			
Perfluorohexanoic acid (PFHxA)	26.9	0.99	ng/L	23.7		113	55-152			
Perfluoroheptanoic acid (PFHpA)	25.3	0.99	ng/L	23.7		107	54-154			
Perfluorooctanoic acid (PFOA)	26.4	0.99	ng/L	23.7		111	52-161			
Perfluorononanoic acid (PFNA)	26.4	0.99	ng/L	23.7		111	59-149			
Perfluorodecanoic acid (PFDA)	25.7	0.99	ng/L	23.7		108	52-147			
Perfluoroundecanoic acid (PFUnA)	26.3	0.99	ng/L	23.7		111	48-159			
Perfluorododecanoic acid (PFDoA)	25.9	0.99	ng/L	23.7		109	64-142			
Perfluorotridecanoic acid (PFTTrDA)	25.8	0.99	ng/L	23.7		109	49-148			
Perfluorotetradecanoic acid (PFTeDA)	26.3	0.99	ng/L	23.7		111	47-161			
Perfluorobutanesulfonic acid (PFBS)	21.9	0.99	ng/L	21.1		104	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.9	0.99	ng/L	22.3		107	59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.6	0.99	ng/L	21.7		99.6	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.6	0.99	ng/L	22.6		104	55-152			
Perfluorooctanesulfonic acid (PFOS)	21.8	0.99	ng/L	22.0		99.0	58-149			
Perfluorononanesulfonic acid (PFNS)	24.1	0.99	ng/L	22.9		106	52-148			
Perfluorodecanesulfonic acid (PFDS)	22.6	0.99	ng/L	22.9		98.6	51-147			
Perfluorododecanesulfonic acid (PFDoS)	22.0	0.99	ng/L	23.0		95.3	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102	4.0	ng/L	89.0		115	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	91.4	4.0	ng/L	90.2		101	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	97.4	4.0	ng/L	91.4		107	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.4	0.99	ng/L	23.7		103	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	24.8	0.99	ng/L	23.7		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 B354159 - Draft Method 1633
LCS (B354159-BS1)

Prepared & Analyzed: 10/10/23

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.8	0.99	ng/L	23.7		104	65-139			
N-MeFOSAA (NMeFOSAA)	24.8	0.99	ng/L	23.7		104	58-144			
N-EtFOSAA (NEtFOSAA)	26.4	0.99	ng/L	23.7		111	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	234	9.9	ng/L	237		98.6	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	235	9.9	ng/L	237		98.8	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	97.7	4.0	ng/L	95.0		103	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	93.9	4.0	ng/L	89.6		105	68-146			
9Cl-PF3ONS (F53B Minor)	90.0	4.0	ng/L	89.0		101	56-156			
11Cl-PF3OUdS (F53B Major)	84.3	4.0	ng/L	89.6		94.0	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	222	9.9	ng/L	237		93.5	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1130	49	ng/L	1190		95.4	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1080	49	ng/L	1190		90.7	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	52.6	2.0	ng/L	42.3		124	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	52.6	2.0	ng/L	47.5		111	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	61.3	2.0	ng/L	47.5		129	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	54.8	2.0	ng/L	47.5		115	48-161			
Surrogate: 13C4-PFBA	77.9		ng/L	98.9		78.8	10-130			
Surrogate: 13C5-PFPeA	37.1		ng/L	49.5		74.9	35-150			
Surrogate: 13C5-PFHxA	18.9		ng/L	24.7		76.5	55-150			
Surrogate: 13C4-PFHpA	19.4		ng/L	24.7		78.4	55-150			
Surrogate: 13C8-PFOA	18.8		ng/L	24.7		76.1	60-140			
Surrogate: 13C9-PFNA	9.39		ng/L	12.4		76.0	55-140			
Surrogate: 13C6-PFDA	9.62		ng/L	12.4		77.8	50-140			
Surrogate: 13C7-PFUnA	8.44		ng/L	12.4		68.2	30-140			
Surrogate: 13C2-PFDoA	8.66		ng/L	12.4		70.0	10-150			
Surrogate: 13C2-PFTeDA	8.46		ng/L	12.4		68.4	10-130			
Surrogate: 13C3-PFBS	19.1		ng/L	24.7		77.0	55-150			
Surrogate: 13C3-PFHxS	19.9		ng/L	24.7		80.4	55-150			
Surrogate: 13C8-PFOS	18.9		ng/L	24.7		76.4	45-140			
Surrogate: 13C2-4:2FTS	33.5		ng/L	49.5		67.6	60-200			
Surrogate: 13C2-6:2FTS	37.4		ng/L	49.5		75.5	60-200			
Surrogate: 13C2-8:2FTS	38.0		ng/L	49.5		76.8	50-200			
Surrogate: 13C8-PFOSA	17.9		ng/L	24.7		72.2	30-130			
Surrogate: D3-NMeFOSA	14.2		ng/L	24.7		57.6	15-130			
Surrogate: D5-NEtFOSA	15.0		ng/L	24.7		60.6	10-130			
Surrogate: D3-NMeFOSAA	35.7		ng/L	49.5		72.2	45-200			
Surrogate: D5-NEtFOSAA	32.9		ng/L	49.5		66.5	10-200			
Surrogate: D7-NMeFOSE	182		ng/L	247		73.5	10-150			
Surrogate: D9-NEtFOSE	185		ng/L	247		74.9	10-150			
Surrogate: 13C3-HFPO-DA	77.7		ng/L	98.9		78.5	25-160			

MRL Check (B354159-MRL1)

Prepared & Analyzed: 10/10/23

Perfluorobutanoic acid (PFBA)	10.7	4.0	ng/L	7.92		136	44-157			
Perfluoropentanoic acid (PFPeA)	4.71	2.0	ng/L	3.96		119	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 B354159 - Draft Method 1633										
MRL Check (B354159-MRL1)				Prepared & Analyzed: 10/10/23						
Perfluorohexanoic acid (PFHxA)	2.25	0.99	ng/L	1.98		114	62-149			
Perfluoroheptanoic acid (PFHpA)	2.04	0.99	ng/L	1.98		103	56-150			
Perfluorooctanoic acid (PFOA)	2.26	0.99	ng/L	1.98		114	57-161			
Perfluorononanoic acid (PFNA)	2.21	0.99	ng/L	1.98		112	53-157			
Perfluorodecanoic acid (PFDA)	1.96	0.99	ng/L	1.98		99.2	43-158			
Perfluoroundecanoic acid (PFUnA)	2.29	0.99	ng/L	1.98		115	50-155			
Perfluorododecanoic acid (PFDoA)	2.08	0.99	ng/L	1.98		105	60-141			
Perfluorotridecanoic acid (PFTrDA)	2.04	0.99	ng/L	1.98		103	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.19	0.99	ng/L	1.98		111	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.92	0.99	ng/L	1.76		110	63-145			
Perfluoropentanesulfonic acid (PFPeS)	2.03	0.99	ng/L	1.86		109	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.91	0.99	ng/L	1.81		106	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.13	0.99	ng/L	1.89		113	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.11	0.99	ng/L	1.84		115	43-162			
Perfluorononanesulfonic acid (PFNS)	2.09	0.99	ng/L	1.90		109	46-151			
Perfluorodecanesulfonic acid (PFDS)	2.07	0.99	ng/L	1.91		108	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.87	0.99	ng/L	1.92		97.7	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.15	4.0	ng/L	7.42		110	52-158			Z-01a
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	7.96	4.0	ng/L	7.52		106	48-158			Z-01a
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.16	4.0	ng/L	7.62		107	46-165			
Perfluorooctanesulfonamide (PFOSA)	2.08	0.99	ng/L	1.98		105	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.33	0.99	ng/L	1.98		118	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.26	0.99	ng/L	1.98		114	49-156			
N-MeFOSAA (NMeFOSAA)	2.10	0.99	ng/L	1.98		106	32-160			
N-EtFOSAA (NEtFOSAA)	2.19	0.99	ng/L	1.98		111	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	22.2	9.9	ng/L	19.8		112	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	21.9	9.9	ng/L	19.8		111	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.36	4.0	ng/L	7.92		106	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.81	4.0	ng/L	7.47		105	61-148			
9Cl-PF3ONS (F53B Minor)	7.42	4.0	ng/L	7.42		99.9	44-167			
11Cl-PF3OUDS (F53B Major)	7.05	4.0	ng/L	7.47		94.3	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	19.1	9.9	ng/L	19.8		96.7	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	97.8	49	ng/L	99.0		98.9	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	91.4	49	ng/L	99.0		92.4	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	4.24	2.0	ng/L	3.52		120	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.94	2.0	ng/L	3.96		99.6	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.73	2.0	ng/L	3.96		119	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.58	2.0	ng/L	3.96		116	47-160			
Surrogate: 13C4-PFBA	63.5		ng/L	99.0		64.2	10-130			
Surrogate: 13C5-PFPeA	30.8		ng/L	49.5		62.3	35-150			
Surrogate: 13C5-PFHxA	15.7		ng/L	24.7		63.3	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 B354159 - Draft Method 1633
MRL Check (B354159-MRL1)

Prepared & Analyzed: 10/10/23

Surrogate: 13C4-PFHpA	16.0		ng/L	24.7		64.8	55-150			
Surrogate: 13C8-PFOA	14.9		ng/L	24.7		60.1	60-140			
Surrogate: 13C9-PFNA	7.59		ng/L	12.4		61.4	55-140			
Surrogate: 13C6-PFDA	8.02		ng/L	12.4		64.8	50-140			
Surrogate: 13C7-PFUnA	7.01		ng/L	12.4		56.7	30-140			
Surrogate: 13C2-PFDoA	7.30		ng/L	12.4		59.0	10-150			
Surrogate: 13C2-PFTeDA	7.08		ng/L	12.4		57.2	10-130			
Surrogate: 13C3-PFBS	14.9		ng/L	24.7		60.3	55-150			
Surrogate: 13C3-PFHxS	16.1		ng/L	24.7		65.0	55-150			
Surrogate: 13C8-PFOS	15.1		ng/L	24.7		61.0	45-140			
Surrogate: 13C2-4:2FTS	24.1		ng/L	49.5		48.6 *	60-200			Z-01a
Surrogate: 13C2-6:2FTS	28.8		ng/L	49.5		58.3 *	60-200			Z-01a
Surrogate: 13C2-8:2FTS	29.0		ng/L	49.5		58.6	50-200			
Surrogate: 13C8-PFOSA	14.8		ng/L	24.7		59.7	30-130			
Surrogate: D3-NMeFOSA	11.9		ng/L	24.7		48.1	15-130			
Surrogate: D5-NEtFOSA	12.3		ng/L	24.7		49.8	10-130			
Surrogate: D3-NMeFOSAA	29.7		ng/L	49.5		60.0	45-200			
Surrogate: D5-NEtFOSAA	28.6		ng/L	49.5		57.7	10-200			
Surrogate: D7-NMeFOSE	149		ng/L	247		60.4	10-150			
Surrogate: D9-NEtFOSE	155		ng/L	247		62.7	10-150			
Surrogate: 13C3-HFPO-DA	64.6		ng/L	99.0		65.3	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 B354049 - Draft Method 1633
Blank (B354049-BLK1)

Prepared & Analyzed: 10/05/23

Total Suspended Solids	ND	5.0	mg/L
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LCS (B354049-BS1)

Prepared & Analyzed: 10/05/23

Total Suspended Solids	180	5.0	mg/L	200	90.0	64.1-125
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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.
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
Z-01	Analyte detected in method blank >1/3 MRL
Z-01a	Extracted internal standard outside of control limits. Analyte is a known difficult compound.

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
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NH-P,PA,WV
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	NH-P,NY,PA,WV
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV

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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	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Ramboll
 Project NYSDEC Claremont Polychemical Site Q4 Sys Samples
 MCP/RCP Required _____
 Deliverable Package Requirement Level 2 and 3
 Location Old Bethpage, New York
 PWSID# (When Applicable) N/A
 Arrival Method:
 Courier ☒ Fed Ex ☐ Walk In ☐ Other ☐
 Received By / Date / Time AAH 10/3/23 0850
 Back-Sheet By / Date / Time STM 10/3/23 1509
 Temperature Method BUN # 5
 Temp ☒ < 6° C Actual Temperature 3.2
 Rush Samples: Yes / ☒ No Notify _____
 Short Hold: Yes / ☒ No Notify _____

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

	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>	☐	☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

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

Qualtrax ID: 120836

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Sample	Soils Jars (Circle Amb/Clear)				Ambers				Plastics								VOA Vials					Other / Fill in					
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	1 Liter	250mL	100mL	1 Liter	500mL	250mL					Unpreserved	HCl	MeOH	D.I. Water	Bisulfate	Col/Bact							
										Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric													HCl
1																											
2																											
3																											
4																											
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