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

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

**MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE
ACTIVITIES (JUNE 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 June 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 0830 hours, June 1, 2023, through approximately 0800 hours, July 3, 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 31 days in this reporting period during which the treatment system experienced no 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, RW-4 and RW-5 recovery wells were operational during the month of June.

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 (June 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 June activities is further provided in the plant operator's daily logbook.

Maintenance and project activities undertaken during the June 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 (Pawel Mecinski)
- CPC 5-4 Project Support Logbook (site)
- CPC 5-8 Site Supervisor's Daily Logbook (Pawel Mecinski).

Except for log CPC 5-7, the completed logbooks associated with the project have been scanned, all are in storage at OU5, and are available for review.

2. TECHNICAL SUPPORT ACTIVITIES

2.1 GES/Ramboll Personnel

- GES maintained the system throughout the period.

2.2 NYSDEC Personnel, Sub - contractors, and Other Visitors

- On June 22, 2023, Plainview Fire Dept. inspectors on site to conduct fire alarm/ fire extinguisher checks.

2.3 Deliveries

- On June 1 and 2, 2023, FedEx delivered sampling coolers and material 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 May 2023 quarterly GW elevation recording task. This database is available for review. The next set of synoptic water level measurements will be scheduled for August 2023 and will be conducted by Ramboll.

6. TREATMENT SYSTEM FLOWS

During the June 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 normally 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 had seized and broke off between the motor and pump connection.

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

The total volume of treated water discharged from ~0830 hours June 1 to ~0800 hours July 3 was approximately 32,310,000 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 June 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 June 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 June 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 June 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. The waste container was last emptied on May 17, 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 June 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.

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 June 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 June sampling activities included:

- The June PD data was processed and submitted.
- Monthly and quarterly system sampling was completed on June 2, 2023.

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

The June 2023 average pH measurement was 7.36 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 June 2023 readings from the AS tower are provided in **Table 10**.

Other routine data collected in June 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 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.

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 May 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

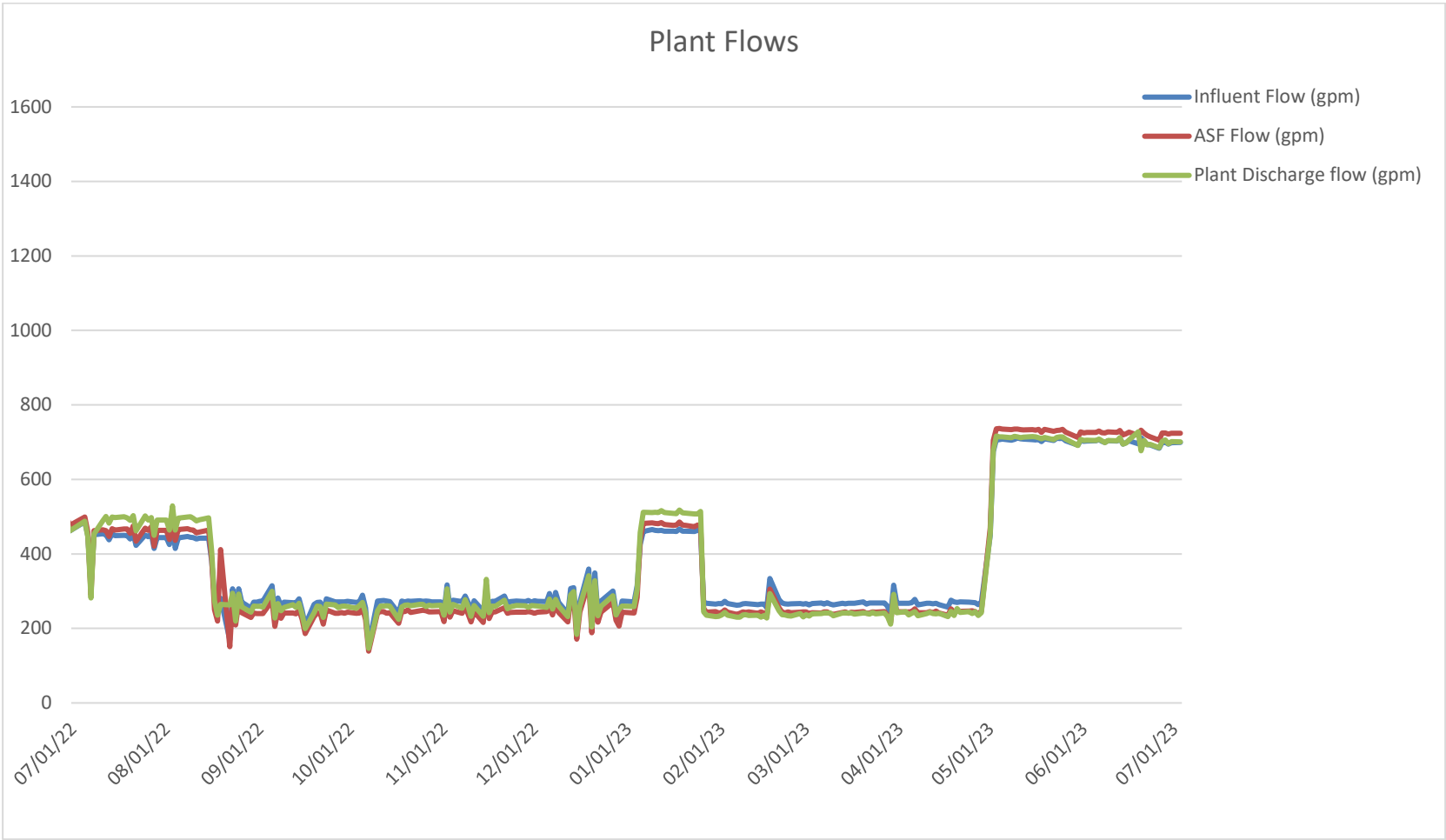
- Well field, and recharge basin inspections continue.

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.	Plant Operator and US Water	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 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	GES Mechanical Support	Less water is treated	Confined space entry required to do work in vault

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
	notice.			
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 system	Fans cannot be manually operated	Once the methane monitoring system is online, the fans can be operated
Plant discharge drain	Leak in Victaulic fitting	Drain line on plant discharge intermittently leaks. Parts are in-house. Not pressing
ASF pump isolation valve	Valve P1 has failed open	Not needed at this time

Equipment	Fault	Status
PFF pump isolation valve	Valve P3 has vailed 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

Acronyms: gal - gallons gpm – gallons per minute

Table 3
Plant Daily Totalizer Readings

June 2023 Flows						
Plant Influent			Plant Discharge		RW Discharge	
Date	Volume	Avg. Flow	Volume	Avg. Flow	Volume	Avg. Flow
06/01/23	-	728	-	707	-	705
06/02/23	1,022,000	725	993,000	704	990,000	702
06/05/23	3,138,000	726	3,046,000	705	3,038,000	703
06/06/23	1,046,000	726	1,015,000	705	1,013,000	703
06/07/23	1,073,000	730	1,041,000	708	1,039,000	707
06/08/23	1,023,000	726	992,000	704	990,000	702
06/09/23	978,000	724	943,000	699	944,000	699
06/12/23	3,208,000	727	3,108,000	705	3,102,000	703
06/13/23	1,046,000	726	1,013,000	703	1,012,000	703
06/14/23	1,119,000	731	1,089,000	712	1,087,000	710
06/15/23	971,000	719	938,000	695	938,000	695
06/16/23	1,062,000	722	1,026,000	698	1,027,000	699
06/19/23	3,118,000	727	3,029,000	706	3,018,000	703
06/20/23	1,034,000	718	1,048,000	728	1,002,000	696
06/21/23	1,054,000	732	975,000	677	1,025,000	712
06/22/23	1,043,000	724	1,014,000	704	1,012,000	703
06/23/23	1,034,000	718	997,000	692	999,000	694
06/26/23	3,087,000	715	2,997,000	694	2,991,000	692
06/27/23	1,016,000	706	986,000	685	984,000	683
06/28/23	1,044,000	725	1,011,000	702	1,007,000	699
06/29/23	1,044,000	725	1,017,000	706	1,008,000	700
06/30/23	1,039,000	722	1,002,000	696	1,001,000	695
07/03/23	3,127,000	724	3,030,000	701	3,018,000	699
June Total Plant Influent (Gal)			33,326,000			
June Total Plant Effluent (Gal)			32,310,000			
June Total RW Discharge (Gal)			32,245,000			

Acronyms: gal - gallons

gpm – gallons per minute

Table 4
Pump System Flow Readings

June	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	46,050	205	304,290	9,433,000
RW-4	46,047	256	380,839	11,806,000
RW-5	46,050	240	356,452	11,050,000
RW Totals	46,050	700	1,040,161	32,245,000
Plant Influent	46,050	724	1,075,032	33,326,000
Plant Effluent	46,050	702	1,042,258	32,310,000

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

The treatment process was online 31 days during this period with 0 minutes of downtime. 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
June 2, 2023

Parameters	Discharge Limitations (SPDES)	Units	Results
<i>pH (range)</i>	6.5 – 8.5	<i>su</i>	7.36
1,1,1-Trichloroethane	5	ug/l	U
1,1-Dichloroethane	5	ug/l	U
1,1-Dichloroethylene	5	ug/l	U
1,2- Dichloroethane	0.6	ug/l	U
Benzene	0.7	ug/l	U
Chlorobenzene	5	ug/l	U
Chloroform	7	ug/l	U
CIS 1,2-Dichloroethylene	5	ug/l	U
Ethylbenzene	5	ug/l	U
Methylene Chloride	5	ug/l	U
Tert-butyl alcohol (TBA)	Not indicated	ug/l	U
Tert-Butyl-Methyl ether (MTBA)	5	ug/l	U
Tetrachloroethylene (PCE)	5	ug/l	U
Toluene	5	ug/l	U
Trans 1,2-Dichloroethylene	5	ug/l	U
Trichloroethylene (TCE)	5	ug/l	U
Bis(2-ethylhexyl) phthalate	5	ug/l	U
Di-n-butyl phthalate	50	ug/l	U
Nitro Benzene	0.4	ug/l	U
Antimony, Total recoverable	3	ug/l	U
Arsenic, Total recoverable	50	ug/l	U
Barium, Total recoverable	2000	ug/l	81
Chromium, Hexavalent	100	ug/l	U
Lead, Total recoverable	50	ug/l	U
Iron, Total recoverable	600	ug/l	69
Manganese, Total recoverable	600	ug/l	140
Mercury	Not indicated	ug/l	U
Zinc	Not indicated	mg/l	18
Nitrogen, Total (as N)	10	mg/l	7.8
Selenium, Total recoverable	40	ug/l	U
Solids, Total Dissolved	1000	mg/l	270
Chloride Ion	NL	mg/l	110
Cyanide	Not indicated	ug/l	U
Fluoride Ion	NL	mg/l	U

Parameters	Discharge Limitations (SPDES)	Units	Results
Sulfate Ion	NL	mg/l	17
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
June 2, 2023

Parameters	Guidance Values	Units	Influent Results	Effluent Results
Perfluorooctanoic acid (PFOA)	10 ¹	ng/l	35 / 35	35 / 35
Perfluorooctanesulfonic acid (PFOS)	10 ¹	ng/l	15 / 15	15 / 15
1,4-Dioxane	1 ²	ug/l	20 / 19	18 / 18
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)
06/05/2023	7.06	15.8
06/12/2023	7.60	16.2
06/19/2023	7.69	15.6
06/30/2023	7.09	17.9
June Average	7.36 su	16.3 °C

Table 9
Plant Discharge Monthly Average pH

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

Month	pH(su)
Jan '23	7.24
Feb '23	7.36
Mar '23	7.56
Apr '23	7.28
May '23	7.56
June'23	7.36

Plant Discharge Monthly Average pH Readings

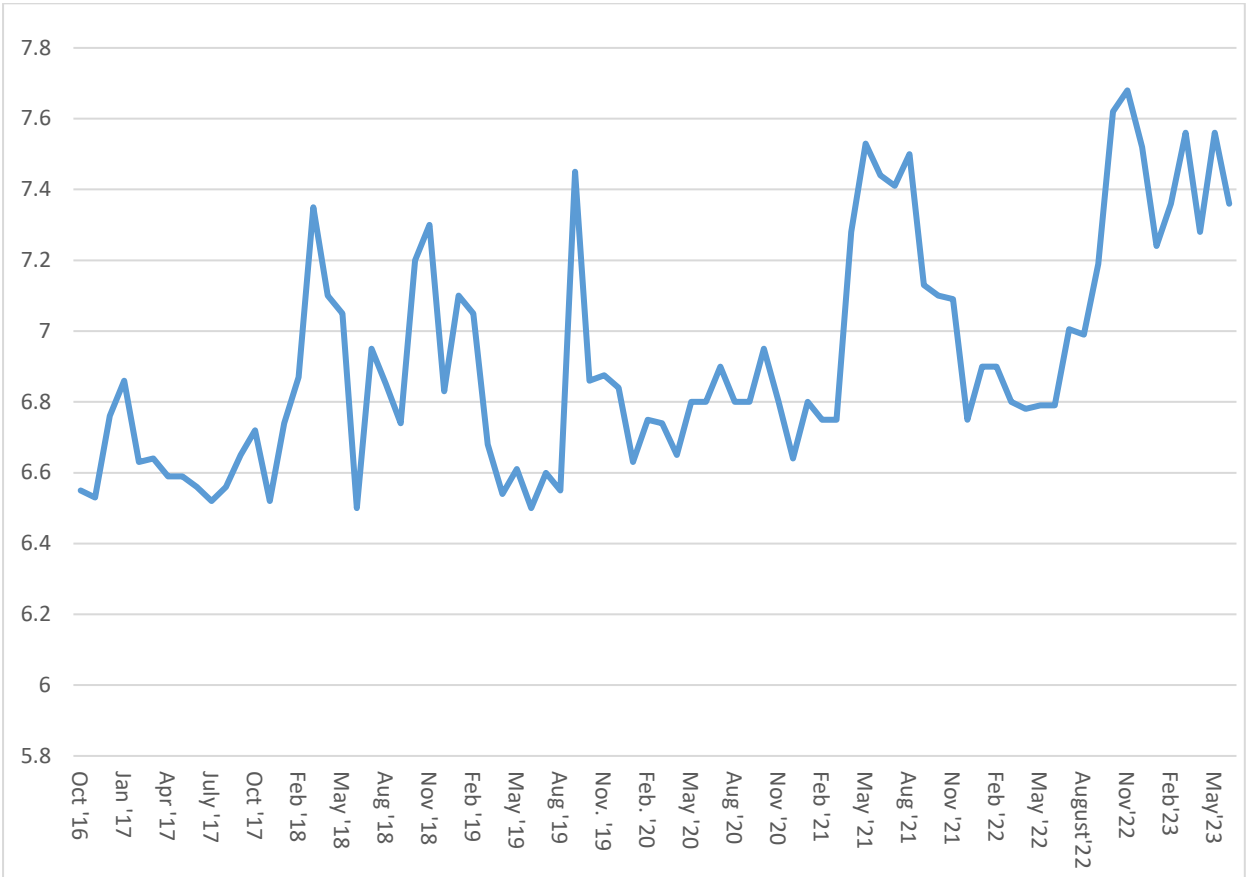


Table 10
AS Tower Air Monitoring Readings

Recorded Date	Port B (ppm)
06/05/2023	0.1
06/12/2023	0.1
06/19/2023	0.0
06/29/2023	0.0

ATTACHMENT 1
QUARTERLY O&M SAMPLING ANALYTICAL RESULTS –JUNE 2, 2023

July 5, 2023

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

Project Location: Old Bethpage, New York
Client Job Number:
Project Number: 130015
Laboratory Work Order Number: 23F0351

Enclosed are results of analyses for samples as received by the laboratory on June 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. 413/525-2332

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

REPORT DATE: 7/5/2023

PURCHASE ORDER NUMBER: 144165

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0351

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

PROJECT LOCATION: Old Bethpage, New York

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
ASF-CP-00-060223	23F0351-01	Ground Water		SM 21-23 5310B SM21-23 2540D SW-846 6010D SW-846 7470A SW-846 8260D SW-846 8270E	
ASF-CP-01-060223	23F0351-02	Ground Water		SM 21-23 5310B SW-846 6010D SW-846 7470A SW-846 8270E	
PD-CP-00-060223	23F0351-03	Ground Water		300, Rev. 2.1 EPA 300.0 SM19-23 4500-N Org B,C-NH3 C SM21-23 2540C SM21-23 4500 CN E SW-846 6010D SW-846 7196A SW-846 7470A SW-846 8260D SW-846 8270E	New York Certification# NY10478
PD-CP-01-060223	23F0351-04	Ground Water		300, Rev. 2.1 EPA 300.0 SM19-23 4500-N Org B,C-NH3 C SM21-23 2540C SM21-23 4500 CN E SW-846 7196A SW-846 8260D SW-846 8270E	New York Certification# NY10478
RW3-CP-00-060223	23F0351-05	Ground Water		SM21-23 2540D SW-846 6010D SW-846 7470A SW-846 8260D	
RW3-CP-01-060223	23F0351-06	Ground Water		SM21-23 2540D	
RW4-CP-00-060223	23F0351-07	Ground Water		SM21-23 2540D SW-846 6010D SW-846 7470A SW-846 8260D	

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

REPORT DATE: 7/5/2023

PURCHASE ORDER NUMBER: 144165

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0351

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

PROJECT LOCATION: Old Bethpage, New York

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
RW5-CP-00-060223	23F0351-08	Ground Water		SM21-23 2540D	
				SW-846 6010D	
				SW-846 7470A	
				SW-846 8260D	
TB-060223	23F0351-09	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

EPA 300.0**Qualifications:****MS-07**

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

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

23F0351-03[PD-CP-00-060223], B344095-MS1, B344095-MSD1

MS-11

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

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

23F0351-03[PD-CP-00-060223], B344094-MS1, B344094-MSD1

SM 21-23 5310B**Qualifications:****MS-12**

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

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

23F0351-01[ASF-CP-00-060223], B342334-MS1, B342334-MSD1

W-18

Test replicates show more than 10% difference between values.

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

B342334-MS1, B342334-MSD1

SW-846 6010D**Qualifications:****B**

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

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

B343404-BS2, B343404-BSD2, B343404-MS3, B343404-MS4, B343404-MSD2, B343404-MSD3, B343404-MSD4

B-05

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

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

23F0351-01[ASF-CP-00-060223], 23F0351-02[ASF-CP-01-060223], 23F0351-03[PD-CP-00-060223], 23F0351-05[RW3-CP-00-060223], B343404-BLK2

SW-846 7196A**Qualifications:****H-01**

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

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

23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223]

SW-846 8260D**Qualifications:**

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

L-07

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

Analyte & Samples(s) Qualified:**trans-1,4-Dichloro-2-butene**B342358-BS1

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:**1,2-Dichloropropane**

B342358-MS1, B342358-MSD1

2,2-Dichloropropane

B342358-MS1, B342358-MSD1

Carbon Disulfide

B342358-MS1, B342358-MSD1

Chloromethane

B342358-MS1, B342358-MSD1

Methyl AcetateB342358-MS1, B342358-MSD1

MS-22

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

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

B342358-MS1

NaphthaleneB342358-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**1,4-Dioxane**

B342358-MS1, B342358-MSD1

trans-1,4-Dichloro-2-buteneB342358-MS1, B342358-MSD1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:**tert-Butyl Alcohol (TBA)**B342358-MSD1

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:**Bromoform**

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, S088950-CCV1

Tetrahydrofuran

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, S088950-CCV1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:**1,4-Dioxane**

23F0351-03[PD-CP-00-060223], B342358-MS1, B342358-MSD1

trans-1,4-Dichloro-2-butene

23F0351-03[PD-CP-00-060223], B342358-MS1, B342358-MSD1

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V-05

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

Analyte & Samples(s) Qualified:**1,2-Dibromo-3-chloropropane (DBCP)**

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, S088950-CCV1

Hexachlorobutadiene

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, S088950-CCV1

Naphthalene

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, S088950-CCV1

trans-1,4-Dichloro-2-butene

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, S088950-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:**Dichlorodifluoromethane (Freon 12)**

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], 23F0351-04[PD-CP-01-060223], 23F0351-05[RW3-CP-00-060223], 23F0351-07[RW4-CP-00-060223], 23F0351-08[RW5-CP-00-060223], 23F0351-09[TB-060223], B342358-BLK1, B342358-BS1, B342358-BSD1, B342358-MS1, B342358-MSD1, S088950-CCV1

SW-846 8270E**Qualifications:**

L-04

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

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

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1

1,3-Dichlorobenzene

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1

1,4-Dichlorobenzene

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1

Benzidine

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1

Hexachlorobutadiene

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1

Hexachloroethane

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1

L-07A

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

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

B342641-BSD1

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:**1,2-Dichlorobenzene**

B342641-BS1

1,3-Dichlorobenzene

B342641-BS1, B342641-BSD1

1,4-Dichlorobenzene

B342641-BS1, B342641-BSD1

2-Chlorophenol

B342641-BS1, B342641-BSD1

Bis(2-chloroethyl)ether

B342641-BS1, B342641-BSD1

Bis(2-chloroisopropyl)ether

B342641-BS1, B342641-BSD1

N-NitrosodimethylamineB342641-BS1, B342641-BSD1

S-07

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

Analyte & Samples(s) Qualified:**2,4,6-Tribromophenol**

B342641-BLK1, B342641-BS1

p-Terphenyl-d14B342641-BLK1

V-04

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

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

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-CCV1

4,6-Dinitro-2-methylphenol

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-CCV1

Benzidine

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-CCV1

Bis(2-Ethylhexyl)phthalate

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-CCV1

Di-n-octylphthalate23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-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**

23F0351-01[ASF-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1

Benzoic Acid

23F0351-03[PD-CP-00-060223], S089272-CCV1

Di-n-octylphthalate23F0351-03[PD-CP-00-060223], S089272-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:**Benzidine**

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-CCV1

Butylbenzylphthalate

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223], B342641-BLK1, B342641-BS1, B342641-BSD1, S089061-CCV1, S089272-CCV1, S089845-CCV1

Z-01

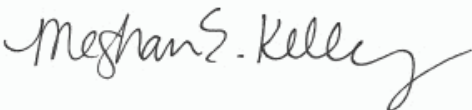
Samples re-extracted due to batch QC failures. Re-extracted samples were on a batch that exhibited similar QC failures. Original results reported.

Analyte & Samples(s) Qualified:

23F0351-01[ASF-CP-00-060223], 23F0351-03[PD-CP-00-060223]

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

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



Meghan E. Kelley
Reporting Specialist

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

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	6/6/23	6/6/23 23:47	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1-Dichloroethylene	2.0	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
cis-1,2-Dichloroethylene	1.7	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

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	6/6/23	6/6/23 23:47	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Tetrachloroethylene	8.0	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Trichloroethylene	45	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:47	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	87.1	70-130							
Toluene-d8	109	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, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

Sample Matrix: Ground Water

Sample Flags: Z-01

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Acenaphthylene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Acetophenone	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Aniline	ND	18	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Anthracene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzidine	ND	18	µg/L	1	L-04, V-04, V-05, V-35	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzo(a)anthracene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzo(a)pyrene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzo(b)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzo(g,h,i)perylene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzo(k)fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Benzoic Acid	ND	18	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Bis(2-chloroethoxy)methane	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Bis(2-chloroethyl)ether	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Bis(2-chloroisopropyl)ether	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.0	µg/L	1	V-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4-Bromophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Butylbenzylphthalate	ND	9.0	µg/L	1	V-35	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Carbazole	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4-Chloroaniline	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4-Chloro-3-methylphenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2-Chloronaphthalene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2-Chlorophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4-Chlorophenylphenylether	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Chrysene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Dibenz(a,h)anthracene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Dibenzofuran	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Di-n-butylphthalate	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1,2-Dichlorobenzene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1,3-Dichlorobenzene	ND	4.5	µg/L	1	L-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1,4-Dichlorobenzene	ND	4.5	µg/L	1	L-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
3,3-Dichlorobenzidine	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,4-Dichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Diethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,4-Dimethylphenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Dimethylphthalate	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4,6-Dinitro-2-methylphenol	ND	18	µg/L	1	V-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,4-Dinitrophenol	ND	9.0	µg/L	1	V-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,4-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,6-Dinitrotoluene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Di-n-octylphthalate	ND	9.0	µg/L	1	V-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1,2-Diphenylhydrazine/Azobenzene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Fluoranthene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

Sample Matrix: Ground Water

Sample Flags: Z-01

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fluorene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Hexachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Hexachlorobutadiene	ND	9.0	µg/L	1	L-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Hexachlorocyclopentadiene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Hexachloroethane	ND	9.0	µg/L	1	L-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Isophorone	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2-Methylnaphthalene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
3/4-Methylphenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Naphthalene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
3-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4-Nitroaniline	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Nitrobenzene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
4-Nitrophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
N-Nitrosodimethylamine	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
N-Nitrosodi-n-propylamine	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Pentachloronitrobenzene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Pentachlorophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Phenanthrene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Phenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Pyrene	ND	4.5	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
Pyridine	ND	18	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
1,2,4-Trichlorobenzene	ND	4.5	µg/L	1	L-04	SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,4,5-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL
2,4,6-Trichlorophenol	ND	9.0	µg/L	1		SW-846 8270E	6/8/23	6/12/23 20:59	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	45.9	15-110	
Phenol-d6	32.8	15-110	
Nitrobenzene-d5	66.6	30-130	
2-Fluorobiphenyl	78.9	30-130	
2,4,6-Tribromophenol	88.6	15-110	
p-Terphenyl-d14	103	30-130	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

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	20	0.20	µg/L	1		SW-846 8270E	6/7/23	6/10/23 12:55	SPF
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	28.6	15-110						6/10/23 12:55	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Antimony	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Barium	0.081	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Cadmium	ND	0.0040	mg/L	1	B-05	SW-846 6010D	6/15/23	6/17/23 19:08	HNN
Calcium	9.5	0.50	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Chromium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Copper	0.11	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Iron	0.072	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Lead	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/17/23 19:08	HNN
Magnesium	5.8	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Manganese	0.14	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	6/9/23	6/12/23 13:00	AAJ
Nickel	0.032	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Potassium	8.2	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Selenium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/17/23 19:08	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Sodium	67	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Thallium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP
Zinc	0.041	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 16:31	ATP

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-01

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Organic Carbon	1.9	1.0	mg/L	1	MS-12	SM 21-23 5310B	6/6/23	6/6/23 23:10	IS
Total Suspended Solids	ND	1.0	mg/L	1		SM21-23 2540D	6/7/23	6/7/23 14:21	LL

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-01-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-02

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	19	0.20	µg/L	1		SW-846 8270E	6/7/23	6/14/23 16:32	SPF
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	27.4	15-110						6/14/23 16:32	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-01-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-02

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Antimony	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Barium	0.083	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Cadmium	ND	0.0040	mg/L	1	B-05	SW-846 6010D	6/15/23	6/17/23 20:00	HNN
Calcium	9.6	0.50	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Chromium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Copper	0.074	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Iron	0.053	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Lead	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/17/23 20:00	HNN
Magnesium	5.9	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Manganese	0.14	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	6/9/23	6/12/23 13:01	AAJ
Nickel	0.016	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Potassium	8.4	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Selenium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/17/23 20:00	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Sodium	68	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Thallium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP
Zinc	0.025	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:12	ATP

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: ASF-CP-01-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0351-02

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Organic Carbon	1.8	1.0	mg/L	1		SM 21-23 5310B	6/7/23	6/7/23 0:04	IS

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	R-06, V-05	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,4-Dioxane	ND	100	µg/L	1	R-06	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:13	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	86.2	70-130							
Toluene-d8	107	70-130							
4-Bromofluorobenzene	96.4	70-130							

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

Sample Flags: Z-01

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Acenaphthylene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Acetophenone	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Aniline	ND	20	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Anthracene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzidine	ND	20	µg/L	1	L-04, V-04, V-35	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzo(a)anthracene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzo(a)pyrene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzo(b)fluoranthene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzo(g,h,i)perylene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzo(k)fluoranthene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Benzoic Acid	ND	20	µg/L	1	V-05	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Bis(2-chloroethoxy)methane	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Bis(2-chloroethyl)ether	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Bis(2-chloroisopropyl)ether	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.8	µg/L	1	V-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4-Bromophenylphenylether	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Butylbenzylphthalate	ND	9.8	µg/L	1	V-35	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Carbazole	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4-Chloroaniline	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4-Chloro-3-methylphenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2-Chloronaphthalene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2-Chlorophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4-Chlorophenylphenylether	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Chrysene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Dibenz(a,h)anthracene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Dibenzofuran	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Di-n-butylphthalate	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1,2-Dichlorobenzene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1,3-Dichlorobenzene	ND	4.9	µg/L	1	L-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1,4-Dichlorobenzene	ND	4.9	µg/L	1	L-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
3,3-Dichlorobenzidine	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,4-Dichlorophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Diethylphthalate	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,4-Dimethylphenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Dimethylphthalate	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4,6-Dinitro-2-methylphenol	ND	20	µg/L	1	V-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,4-Dinitrophenol	ND	9.8	µg/L	1	V-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,4-Dinitrotoluene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,6-Dinitrotoluene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Di-n-octylphthalate	ND	9.8	µg/L	1	V-04, V-05	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1,2-Diphenylhydrazine/Azobenzene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Fluoranthene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Fluorene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

Sample Flags: Z-01

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Hexachlorobutadiene	ND	9.8	µg/L	1	L-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Hexachlorocyclopentadiene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Hexachloroethane	ND	9.8	µg/L	1	L-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Indeno(1,2,3-cd)pyrene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Isophorone	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1-Methylnaphthalene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2-Methylnaphthalene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2-Methylphenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
3/4-Methylphenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Naphthalene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2-Nitroaniline	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
3-Nitroaniline	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4-Nitroaniline	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Nitrobenzene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2-Nitrophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
4-Nitrophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
N-Nitrosodimethylamine	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
N-Nitrosodi-n-propylamine	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Pentachloronitrobenzene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Pentachlorophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Phenanthrene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Phenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Pyrene	ND	4.9	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Pyridine	ND	20	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
1,2,4-Trichlorobenzene	ND	4.9	µg/L	1	L-04	SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,4,5-Trichlorophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
2,4,6-Trichlorophenol	ND	9.8	µg/L	1		SW-846 8270E	6/8/23	6/16/23 14:50	BGL
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	54.8	15-110							
Phenol-d6	37.4	15-110							
Nitrobenzene-d5	79.5	30-130							
2-Fluorobiphenyl	83.2	30-130							
2,4,6-Tribromophenol	104	15-110							
p-Terphenyl-d14	117	30-130							

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

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	6/7/23	6/10/23 12:35	SPF
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	30.0	15-110						6/10/23 12:35	

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Antimony	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Barium	0.081	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Cadmium	ND	0.0040	mg/L	1	B-05	SW-846 6010D	6/15/23	6/17/23 19:29	HNN
Calcium	9.5	0.50	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Chromium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Copper	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Iron	0.069	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Lead	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/17/23 19:29	HNN
Magnesium	5.8	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Manganese	0.14	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	6/9/23	6/12/23 13:03	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Potassium	8.2	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Selenium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/17/23 19:29	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Sodium	67	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Thallium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP
Zinc	0.018	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:04	ATP

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	110	5.0	mg/L	5	MS-11	EPA 300.0	6/22/23	6/22/23 16:51	is
Cyanide	ND	0.010	mg/L	1		SM21-23 4500 CN E	6/7/23	6/8/23 12:28	DET/MMH
Hexavalent Chromium	ND	0.0040	mg/L	1	H-01	SW-846 7196A	6/3/23	6/3/23 13:30	EC
Sulfate	17	5.0	mg/L	5	MS-07	EPA 300.0	6/22/23	6/22/23 16:51	IS
Total Kjeldahl Nitrogen	7.8	1.0	mg/L	1		SM19-23 4500-N Org B,C-NH3 C	6/21/23	6/23/23 9:34	IS

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Dissolved Solids	270	10	mg/L	1		SM21-23 2540C	6/6/23	6/6/23 10:59	LL

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-03

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
See Attached Sub Report	-	-	mg/L	1		300, Rev. 2.1			PALI

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 0:39	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	87.2	70-130							
Toluene-d8	107	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, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-04

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	18	0.20	µg/L	1		SW-846 8270E	6/7/23	6/13/23 8:35	SPF
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	27.2	15-110						6/13/23 8:35	

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-04

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Chloride	110	5.0	mg/L	5		EPA 300.0	6/22/23	6/22/23 19:05	is
Cyanide	ND	0.010	mg/L	1		SM21-23 4500 CN E	6/7/23	6/8/23 12:28	DET/MMH
Hexavalent Chromium	ND	0.0040	mg/L	1	H-01	SW-846 7196A	6/3/23	6/3/23 13:30	EC
Sulfate	17	5.0	mg/L	5		EPA 300.0	6/22/23	6/22/23 19:05	IS
Total Kjeldahl Nitrogen	6.7	1.0	mg/L	1		SM19-23 4500-N Org B,C-NH3 C	6/21/23	6/23/23 10:01	IS

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-04

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Dissolved Solids	260	10	mg/L	1		SM21-23 2540C	6/6/23	6/6/23 10:59	LL

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0351-04

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
See Attached Sub Report	-	-	mg/L	1		300, Rev. 2.1			PAL

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW3-CP-00-060223

Sampled: 6/2/2023 08:45

Sample ID: 23F0351-05

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	6/6/23	6/7/23 1:05	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
cis-1,2-Dichloroethylene	1.3	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW3-CP-00-060223

Sampled: 6/2/2023 08:45

Sample ID: 23F0351-05

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	6/6/23	6/7/23 1:05	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Tetrachloroethylene	5.3	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Trichloroethylene	40	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:05	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	82.9	70-130						6/7/23 1:05	
Toluene-d8	106	70-130						6/7/23 1:05	
4-Bromofluorobenzene	95.2	70-130						6/7/23 1:05	

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW3-CP-00-060223

Sampled: 6/2/2023 08:45

Sample ID: 23F0351-05

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Antimony	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Barium	0.053	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Cadmium	ND	0.0040	mg/L	1	B-05	SW-846 6010D	6/15/23	6/17/23 20:08	HNN
Calcium	7.4	0.50	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Chromium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Copper	0.012	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Iron	0.42	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Lead	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/17/23 20:08	HNN
Magnesium	5.4	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Manganese	0.20	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	6/9/23	6/12/23 13:05	AAJ
Nickel	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Potassium	13	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Selenium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/17/23 20:08	HNN
Silver	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Sodium	84	2.0	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Thallium	ND	0.050	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP
Zinc	ND	0.010	mg/L	1		SW-846 6010D	6/15/23	6/16/23 17:20	ATP

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW3-CP-00-060223

Sampled: 6/2/2023 08:45

Sample ID: 23F0351-05

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	1.0	mg/L	1		SM21-23 2540D	6/7/23	6/7/23 12:47	QH

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW3-CP-01-060223

Sampled: 6/2/2023 08:45

Sample ID: 23F0351-06

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	1.0	mg/L	1		SM21-23 2540D	6/7/23	6/7/23 12:47	QH

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW4-CP-00-060223

Sampled: 6/2/2023 09:00

Sample ID: 23F0351-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
cis-1,2-Dichloroethylene	1.9	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW4-CP-00-060223

Sampled: 6/2/2023 09:00

Sample ID: 23F0351-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Tetrachloroethylene	7.3	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Trichloroethylene	28	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:31	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	82.0	70-130							
Toluene-d8	103	70-130							
4-Bromofluorobenzene	96.0	70-130							

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW4-CP-00-060223

Sampled: 6/2/2023 09:00

Sample ID: 23F0351-07

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:20	ATP
Antimony	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:26	HNN
Barium	0.077	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Calcium	11	0.50	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:26	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Copper	0.011	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Iron	0.13	0.050	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:20	ATP
Lead	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 15:56	NC
Magnesium	6.6	0.050	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:26	HNN
Manganese	0.082	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	6/8/23	6/13/23 11:12	AV
Nickel	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Potassium	7.8	2.0	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Selenium	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Silver	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Sodium	64	2.0	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Thallium	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC
Zinc	0.014	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:16	NC

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW4-CP-00-060223

Sampled: 6/2/2023 09:00

Sample ID: 23F0351-07

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	1.0	mg/L	1		SM21-23 2540D	6/6/23	6/6/23 10:56	LL

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW5-CP-00-060223

Sampled: 6/2/2023 09:20

Sample ID: 23F0351-08

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	6/6/23	6/7/23 1:57	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1-Dichloroethylene	3.6	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
cis-1,2-Dichloroethylene	2.0	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW5-CP-00-060223

Sampled: 6/2/2023 09:20

Sample ID: 23F0351-08

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	6/6/23	6/7/23 1:57	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Tetrachloroethylene	9.5	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1,1-Trichloroethane	1.3	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Trichloroethylene	59	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/7/23 1:57	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	83.4	70-130							
Toluene-d8	110	70-130							
4-Bromofluorobenzene	101	70-130							

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW5-CP-00-060223

Sampled: 6/2/2023 09:20

Sample ID: 23F0351-08

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:28	ATP
Antimony	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Arsenic	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:32	HNN
Barium	0.11	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Beryllium	ND	0.0040	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Cadmium	ND	0.0040	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Calcium	11	0.50	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:32	HNN
Chromium	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Cobalt	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Copper	0.021	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Iron	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:28	ATP
Lead	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:02	NC
Magnesium	6.2	0.050	mg/L	1		SW-846 6010D	6/9/23	6/11/23 15:32	HNN
Manganese	0.17	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Mercury	ND	0.00020	mg/L	1		SW-846 7470A	6/8/23	6/13/23 11:14	AV
Nickel	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Potassium	6.1	2.0	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Selenium	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Silver	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Sodium	61	2.0	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Thallium	ND	0.050	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Vanadium	ND	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC
Zinc	0.035	0.010	mg/L	1		SW-846 6010D	6/9/23	6/10/23 16:24	NC

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Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: RW5-CP-00-060223

Sampled: 6/2/2023 09:20

Sample ID: 23F0351-08

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	1.0	mg/L	1		SM21-23 2540D	6/7/23	6/7/23 12:47	QH

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: TB-060223

Sampled: 6/2/2023 10:00

Sample ID: 23F0351-09

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	6/6/23	6/6/23 23:20	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Bromoform	ND	1.0	µg/L	1	R-05	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Carbon Disulfide	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-34	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,3-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH

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

Project Location: Old Bethpage, New York

Sample Description:

Work Order: 23F0351

Date Received: 6/3/2023

Field Sample #: TB-060223

Sampled: 6/2/2023 10:00

Sample ID: 23F0351-09

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	6/6/23	6/6/23 23:20	EEH
1,4-Dioxane	ND	100	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Hexachlorobutadiene	ND	1.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Methyl Acetate	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Methyl Cyclohexane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260D	6/6/23	6/6/23 23:20	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	85.8	70-130						6/6/23 23:20	
Toluene-d8	105	70-130						6/6/23 23:20	
4-Bromofluorobenzene	94.7	70-130						6/6/23 23:20	

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

Sample Extraction Data**Prep Method:**EPA 300.0 **Analytical Method:**EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-03 [PD-CP-00-060223]	B344094	10.0	10.0	06/22/23
23F0351-04 [PD-CP-01-060223]	B344094	10.0	10.0	06/22/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-03 [PD-CP-00-060223]	B344095	10.0	10.0	06/22/23
23F0351-04 [PD-CP-01-060223]	B344095	10.0	10.0	06/22/23

SM 21-23 5310B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B342334	50.0	50.0	06/06/23
23F0351-02 [ASF-CP-01-060223]	B342334	50.0	50.0	06/07/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-03 [PD-CP-00-060223]	B343940	25.0	25.0	06/21/23
23F0351-04 [PD-CP-01-060223]	B343940	25.0	25.0	06/21/23

SM21-23 2540C

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0351-03 [PD-CP-00-060223]	B342349	50.0	06/06/23
23F0351-04 [PD-CP-01-060223]	B342349	50.0	06/06/23

SM21-23 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0351-07 [RW4-CP-00-060223]	B342351	500	06/06/23

SM21-23 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0351-05 [RW3-CP-00-060223]	B342490	500	06/07/23
23F0351-06 [RW3-CP-01-060223]	B342490	500	06/07/23
23F0351-08 [RW5-CP-00-060223]	B342490	500	06/07/23

SM21-23 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B342492	500	06/07/23

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Sample Extraction Data

Prep Method:SM4500 CN C Analytical Method:SM21-23 4500 CN E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-03 [PD-CP-00-060223]	B342517	50.0	50.0	06/07/23
23F0351-04 [PD-CP-01-060223]	B342517	50.0	50.0	06/07/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-07 [RW4-CP-00-060223]	B342799	50.0	50.0	06/09/23
23F0351-08 [RW5-CP-00-060223]	B342799	50.0	50.0	06/09/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B343404	50.0	50.0	06/15/23
23F0351-02 [ASF-CP-01-060223]	B343404	50.0	50.0	06/15/23
23F0351-03 [PD-CP-00-060223]	B343404	50.0	50.0	06/15/23
23F0351-05 [RW3-CP-00-060223]	B343404	50.0	50.0	06/15/23

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-03 [PD-CP-00-060223]	B342187	50.0	50.0	06/03/23
23F0351-04 [PD-CP-01-060223]	B342187	50.0	50.0	06/03/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-07 [RW4-CP-00-060223]	B342660	10.0	10.0	06/08/23
23F0351-08 [RW5-CP-00-060223]	B342660	10.0	10.0	06/08/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B342784	10.0	10.0	06/09/23
23F0351-02 [ASF-CP-01-060223]	B342784	10.0	10.0	06/09/23
23F0351-03 [PD-CP-00-060223]	B342784	10.0	10.0	06/09/23
23F0351-05 [RW3-CP-00-060223]	B342784	10.0	10.0	06/09/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B342358	5	5.00	06/06/23
23F0351-03 [PD-CP-00-060223]	B342358	5	5.00	06/06/23
23F0351-04 [PD-CP-01-060223]	B342358	5	5.00	06/06/23
23F0351-05 [RW3-CP-00-060223]	B342358	5	5.00	06/06/23
23F0351-07 [RW4-CP-00-060223]	B342358	5	5.00	06/06/23
23F0351-08 [RW5-CP-00-060223]	B342358	5	5.00	06/06/23
23F0351-09 [TB-060223]	B342358	5	5.00	06/06/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B342524	1010	1.00	06/07/23
23F0351-02 [ASF-CP-01-060223]	B342524	1020	1.00	06/07/23
23F0351-03 [PD-CP-00-060223]	B342524	1030	1.00	06/07/23
23F0351-04 [PD-CP-01-060223]	B342524	1020	1.00	06/07/23

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0351-01 [ASF-CP-00-060223]	B342641	111	1.00	06/08/23
23F0351-03 [PD-CP-00-060223]	B342641	102	1.00	06/08/23

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342358 - SW-846 5030B										
Blank (B342358-BLK1)				Prepared & Analyzed: 06/06/23						
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
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							R-05
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
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							
2-Chloroethyl Vinyl Ether	ND	10	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
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							V-34
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
Dichlorofluoromethane (Freon 21)	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							
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							
Difluorochloromethane (Freon 22)	ND	1.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethanol	ND	50	µg/L							
Ethyl Acetate	ND	10	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 B342358 - SW-846 5030B
Blank (B342358-BLK1)

Prepared & Analyzed: 06/06/23

Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							V-05
2-Hexanone (MBK)	ND	10	µg/L							
Iodomethane	ND	20	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-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							R-05
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							
1,2,3-Trimethylbenzene	ND	0.50	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Acetate	ND	20	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	21.8		µg/L	25.0		87.0	70-130			
Surrogate: Toluene-d8	27.5		µg/L	25.0		110	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		µg/L	25.0		94.7	70-130			

LCS (B342358-BS1)

Prepared & Analyzed: 06/06/23

Acetone	96.1	50	µg/L	100		96.1	70-160			†
Acrolein	111	10	µg/L	100		111	70-130			
Acrylonitrile	9.57	5.0	µg/L	10.0		95.7	70-130			
tert-Amyl Methyl Ether (TAME)	9.73	0.50	µg/L	10.0		97.3	70-130			
Benzene	9.58	1.0	µg/L	10.0		95.8	70-130			
Bromobenzene	8.96	1.0	µg/L	10.0		89.6	70-130			
Bromochloromethane	12.0	1.0	µg/L	10.0		120	70-130			
Bromodichloromethane	9.62	0.50	µg/L	10.0		96.2	70-130			
Bromoform	7.51	1.0	µg/L	10.0		75.1	70-130			R-05
Bromomethane	12.2	2.0	µg/L	10.0		122	40-160			†
2-Butanone (MEK)	99.2	20	µg/L	100		99.2	40-160			†
tert-Butyl Alcohol (TBA)	111	20	µg/L	100		111	40-160			†

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342358 - SW-846 5030B										
LCS (B342358-BS1)				Prepared & Analyzed: 06/06/23						
n-Butylbenzene	9.58	1.0	µg/L	10.0		95.8	70-130			
sec-Butylbenzene	8.96	1.0	µg/L	10.0		89.6	70-130			
tert-Butylbenzene	9.15	1.0	µg/L	10.0		91.5	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.73	0.50	µg/L	10.0		97.3	70-130			
Carbon Disulfide	107	5.0	µg/L	100		107	70-130			
Carbon Tetrachloride	9.52	5.0	µg/L	10.0		95.2	70-130			
Chlorobenzene	9.35	1.0	µg/L	10.0		93.5	70-130			
Chlorodibromomethane	11.2	0.50	µg/L	10.0		112	70-130			
Chloroethane	9.82	2.0	µg/L	10.0		98.2	70-130			
2-Chloroethyl Vinyl Ether	101	10	µg/L	100		101	70-130			
Chloroform	9.98	2.0	µg/L	10.0		99.8	70-130			
Chloromethane	8.23	2.0	µg/L	10.0		82.3	40-160			†
2-Chlorotoluene	8.98	1.0	µg/L	10.0		89.8	70-130			
4-Chlorotoluene	9.09	1.0	µg/L	10.0		90.9	70-130			
Cyclohexane	9.66	5.0	µg/L	10.0		96.6	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.39	5.0	µg/L	10.0		73.9	70-130			V-05
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107	70-130			
Dibromomethane	9.13	1.0	µg/L	10.0		91.3	70-130			
1,2-Dichlorobenzene	8.72	1.0	µg/L	10.0		87.2	70-130			
1,3-Dichlorobenzene	9.34	1.0	µg/L	10.0		93.4	70-130			
1,4-Dichlorobenzene	8.57	1.0	µg/L	10.0		85.7	70-130			
trans-1,4-Dichloro-2-butene	6.93	2.0	µg/L	10.0		69.3 *	70-130			L-07, V-05
Dichlorodifluoromethane (Freon 12)	9.86	2.0	µg/L	10.0		98.6	40-160			V-34 †
1,1-Dichloroethane	9.24	1.0	µg/L	10.0		92.4	70-130			
1,2-Dichloroethane	9.35	1.0	µg/L	10.0		93.5	70-130			
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
cis-1,2-Dichloroethylene	9.72	1.0	µg/L	10.0		97.2	70-130			
trans-1,2-Dichloroethylene	9.90	1.0	µg/L	10.0		99.0	70-130			
Dichlorofluoromethane (Freon 21)	10.7	1.0	µg/L	10.0		107	70-130			
1,2-Dichloropropane	10.2	1.0	µg/L	10.0		102	70-130			
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130			
2,2-Dichloropropane	9.69	1.0	µg/L	10.0		96.9	40-130			†
1,1-Dichloropropene	9.50	2.0	µg/L	10.0		95.0	70-130			
cis-1,3-Dichloropropene	9.78	0.50	µg/L	10.0		97.8	70-130			
trans-1,3-Dichloropropene	9.60	0.50	µg/L	10.0		96.0	70-130			
Diethyl Ether	9.83	2.0	µg/L	10.0		98.3	70-130			
Difluorochloromethane (Freon 22)	9.28	1.0	µg/L	10.0		92.8	70-130			
Diisopropyl Ether (DIPE)	10.2	0.50	µg/L	10.0		102	70-130			
1,4-Dioxane	112	50	µg/L	100		112	40-130			†
Ethanol	115	50	µg/L	100		115	40-160			
Ethyl Acetate	9.31	10	µg/L	10.0		93.1	70-130			
Ethylbenzene	9.49	1.0	µg/L	10.0		94.9	70-130			
Hexachlorobutadiene	8.00	0.60	µg/L	10.0		80.0	70-130			V-05
2-Hexanone (MBK)	110	10	µg/L	100		110	70-160			†
Iodomethane	101	20	µg/L	100		101	70-130			
Isopropylbenzene (Cumene)	9.06	1.0	µg/L	10.0		90.6	70-130			
p-Isopropyltoluene (p-Cymene)	8.93	1.0	µg/L	10.0		89.3	70-130			
Methyl Acetate	9.73	1.0	µg/L	10.0		97.3	70-130			
Methyl tert-Butyl Ether (MTBE)	9.45	1.0	µg/L	10.0		94.5	70-130			
Methyl Cyclohexane	10.4	1.0	µg/L	10.0		104	70-130			
Methylene Chloride	9.96	5.0	µg/L	10.0		99.6	70-130			
4-Methyl-2-pentanone (MIBK)	111	10	µg/L	100		111	70-160			†

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B342358 - SW-846 5030B
LCS (B342358-BS1)

Prepared & Analyzed: 06/06/23

Naphthalene	7.36	2.0	µg/L	10.0		73.6	40-130			V-05 †
n-Propylbenzene	9.97	1.0	µg/L	10.0		99.7	70-130			
Styrene	8.72	1.0	µg/L	10.0		87.2	70-130			
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1,2,2-Tetrachloroethane	9.62	0.50	µg/L	10.0		96.2	70-130			
Tetrachloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
Tetrahydrofuran	9.27	10	µg/L	10.0		92.7	70-130			R-05
Toluene	11.4	1.0	µg/L	10.0		114	70-130			
1,2,3-Trichlorobenzene	8.66	5.0	µg/L	10.0		86.6	70-130			
1,2,4-Trichlorobenzene	8.32	1.0	µg/L	10.0		83.2	70-130			
1,3,5-Trichlorobenzene	8.79	1.0	µg/L	10.0		87.9	70-130			
1,1,1-Trichloroethane	9.54	1.0	µg/L	10.0		95.4	70-130			
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Trichlorofluoromethane (Freon 11)	11.2	2.0	µg/L	10.0		112	70-130			
1,2,3-Trichloropropane	10.7	2.0	µg/L	10.0		107	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.6	1.0	µg/L	10.0		116	70-130			
1,2,3-Trimethylbenzene	8.79	0.50	µg/L	10.0		87.9	70-130			
1,2,4-Trimethylbenzene	8.59	1.0	µg/L	10.0		85.9	70-130			
1,3,5-Trimethylbenzene	8.97	1.0	µg/L	10.0		89.7	70-130			
Vinyl Acetate	119	20	µg/L	100		119	70-130			
Vinyl Chloride	9.48	2.0	µg/L	10.0		94.8	40-160			†
m+p Xylene	18.0	2.0	µg/L	20.0		90.2	70-130			
o-Xylene	8.58	1.0	µg/L	10.0		85.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	22.7		µg/L	25.0		90.6	70-130			
Surrogate: Toluene-d8	27.8		µg/L	25.0		111	70-130			
Surrogate: 4-Bromofluorobenzene	23.5		µg/L	25.0		93.9	70-130			

LCS Dup (B342358-BS1)

Prepared & Analyzed: 06/06/23

Acetone	109	50	µg/L	100		109	70-160	12.3	25	†
Acrolein	119	10	µg/L	100		119	70-130	6.90	25	
Acrylonitrile	10.5	5.0	µg/L	10.0		105	70-130	9.08	25	
tert-Amyl Methyl Ether (TAME)	10.2	0.50	µg/L	10.0		102	70-130	4.91	25	
Benzene	9.30	1.0	µg/L	10.0		93.0	70-130	2.97	25	
Bromobenzene	9.09	1.0	µg/L	10.0		90.9	70-130	1.44	25	
Bromochloromethane	11.4	1.0	µg/L	10.0		114	70-130	5.14	25	
Bromodichloromethane	10.2	0.50	µg/L	10.0		102	70-130	6.15	25	
Bromoform	9.91	1.0	µg/L	10.0		99.1	70-130	27.6 *	25	R-05
Bromomethane	13.4	2.0	µg/L	10.0		134	40-160	9.61	25	†
2-Butanone (MEK)	108	20	µg/L	100		108	40-160	8.76	25	†
tert-Butyl Alcohol (TBA)	107	20	µg/L	100		107	40-160	4.32	25	†
n-Butylbenzene	9.35	1.0	µg/L	10.0		93.5	70-130	2.43	25	
sec-Butylbenzene	9.03	1.0	µg/L	10.0		90.3	70-130	0.778	25	
tert-Butylbenzene	9.34	1.0	µg/L	10.0		93.4	70-130	2.06	25	
tert-Butyl Ethyl Ether (TBEE)	10.3	0.50	µg/L	10.0		103	70-130	5.30	25	
Carbon Disulfide	113	5.0	µg/L	100		113	70-130	5.24	25	
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102	70-130	7.09	25	
Chlorobenzene	9.64	1.0	µg/L	10.0		96.4	70-130	3.05	25	
Chlorodibromomethane	10.6	0.50	µg/L	10.0		106	70-130	5.79	25	
Chloroethane	9.88	2.0	µg/L	10.0		98.8	70-130	0.609	25	
2-Chloroethyl Vinyl Ether	103	10	µg/L	100		103	70-130	1.42	25	
Chloroform	11.0	2.0	µg/L	10.0		110	70-130	9.90	25	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342358 - SW-846 5030B										
LCS Dup (B342358-BS1)				Prepared & Analyzed: 06/06/23						
Chloromethane	9.03	2.0	µg/L	10.0		90.3	40-160	9.27	25	†
2-Chlorotoluene	9.10	1.0	µg/L	10.0		91.0	70-130	1.33	25	
4-Chlorotoluene	8.96	1.0	µg/L	10.0		89.6	70-130	1.44	25	
Cyclohexane	10.2	5.0	µg/L	10.0		102	70-130	5.05	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.64	5.0	µg/L	10.0		86.4	70-130	15.6	25	V-05
1,2-Dibromoethane (EDB)	11.6	0.50	µg/L	10.0		116	70-130	7.36	25	
Dibromomethane	10.6	1.0	µg/L	10.0		106	70-130	15.2	25	
1,2-Dichlorobenzene	9.34	1.0	µg/L	10.0		93.4	70-130	6.87	25	
1,3-Dichlorobenzene	9.88	1.0	µg/L	10.0		98.8	70-130	5.62	25	
1,4-Dichlorobenzene	9.82	1.0	µg/L	10.0		98.2	70-130	13.6	25	
trans-1,4-Dichloro-2-butene	7.81	2.0	µg/L	10.0		78.1	70-130	11.9	25	V-05
Dichlorodifluoromethane (Freon 12)	11.0	2.0	µg/L	10.0		110	40-160	10.5	25	V-34 †
1,1-Dichloroethane	9.39	1.0	µg/L	10.0		93.9	70-130	1.61	25	
1,2-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130	9.18	25	
1,1-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	2.60	25	
cis-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	3.83	25	
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	5.88	25	
Dichlorofluoromethane (Freon 21)	11.5	1.0	µg/L	10.0		115	70-130	7.01	25	
1,2-Dichloropropane	10.2	1.0	µg/L	10.0		102	70-130	0.883	25	
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130	4.41	25	
2,2-Dichloropropane	9.21	1.0	µg/L	10.0		92.1	40-130	5.08	25	†
1,1-Dichloropropene	10.3	2.0	µg/L	10.0		103	70-130	8.37	25	
cis-1,3-Dichloropropene	9.35	0.50	µg/L	10.0		93.5	70-130	4.50	25	
trans-1,3-Dichloropropene	10.0	0.50	µg/L	10.0		100	70-130	4.08	25	
Diethyl Ether	11.1	2.0	µg/L	10.0		111	70-130	12.0	25	
Difluorochloromethane (Freon 22)	9.29	1.0	µg/L	10.0		92.9	70-130	0.108	25	
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0		104	70-130	1.75	25	
1,4-Dioxane	91.6	50	µg/L	100		91.6	40-130	20.3	50	† ‡
Ethanol	113	50	µg/L	100		113	40-160	2.37	25	
Ethyl Acetate	8.84	10	µg/L	10.0		88.4	70-130	5.18	25	
Ethylbenzene	10.0	1.0	µg/L	10.0		100	70-130	5.43	25	
Hexachlorobutadiene	10.0	0.60	µg/L	10.0		100	70-130	22.4	25	V-05
2-Hexanone (MBK)	119	10	µg/L	100		119	70-160	8.32	25	†
Iodomethane	110	20	µg/L	100		110	70-130	7.93	25	
Isopropylbenzene (Cumene)	9.80	1.0	µg/L	10.0		98.0	70-130	7.85	25	
p-Isopropyltoluene (p-Cymene)	10.0	1.0	µg/L	10.0		100	70-130	11.8	25	
Methyl Acetate	11.6	1.0	µg/L	10.0		116	70-130	17.9	25	
Methyl tert-Butyl Ether (MTBE)	9.79	1.0	µg/L	10.0		97.9	70-130	3.53	25	
Methyl Cyclohexane	10.6	1.0	µg/L	10.0		106	70-130	1.43	25	
Methylene Chloride	10.5	5.0	µg/L	10.0		105	70-130	5.66	25	
4-Methyl-2-pentanone (MIBK)	112	10	µg/L	100		112	70-160	0.368	25	†
Naphthalene	7.42	2.0	µg/L	10.0		74.2	40-130	0.812	25	V-05 †
n-Propylbenzene	10.0	1.0	µg/L	10.0		100	70-130	0.600	25	
Styrene	8.93	1.0	µg/L	10.0		89.3	70-130	2.38	25	
1,1,1,2-Tetrachloroethane	9.81	1.0	µg/L	10.0		98.1	70-130	4.48	25	
1,1,2,2-Tetrachloroethane	9.42	0.50	µg/L	10.0		94.2	70-130	2.10	25	
Tetrachloroethylene	12.0	1.0	µg/L	10.0		120	70-130	14.0	25	
Tetrahydrofuran	12.1	10	µg/L	10.0		121	70-130	26.6 *	25	R-05
Toluene	12.2	1.0	µg/L	10.0		122	70-130	6.59	25	
1,2,3-Trichlorobenzene	9.39	5.0	µg/L	10.0		93.9	70-130	8.09	25	
1,2,4-Trichlorobenzene	9.76	1.0	µg/L	10.0		97.6	70-130	15.9	25	
1,3,5-Trichlorobenzene	8.87	1.0	µg/L	10.0		88.7	70-130	0.906	25	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B342358 - SW-846 5030B
LCS Dup (B342358-BSD1)

Prepared & Analyzed: 06/06/23

1,1,1-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130	11.2	25	
1,1,2-Trichloroethane	11.9	1.0	µg/L	10.0		119	70-130	9.67	25	
Trichloroethylene	11.3	1.0	µg/L	10.0		113	70-130	4.34	25	
Trichlorofluoromethane (Freon 11)	12.0	2.0	µg/L	10.0		120	70-130	6.64	25	
1,2,3-Trichloropropane	10.6	2.0	µg/L	10.0		106	70-130	0.753	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.3	1.0	µg/L	10.0		123	70-130	6.04	25	
1,2,3-Trimethylbenzene	9.32	0.50	µg/L	10.0		93.2	70-130	5.85	25	
1,2,4-Trimethylbenzene	8.59	1.0	µg/L	10.0		85.9	70-130	0.00	25	
1,3,5-Trimethylbenzene	9.55	1.0	µg/L	10.0		95.5	70-130	6.26	25	
Vinyl Acetate	107	20	µg/L	100		107	70-130	11.1	25	
Vinyl Chloride	10.4	2.0	µg/L	10.0		104	40-160	9.16	25	†
m+p Xylene	19.4	2.0	µg/L	20.0		97.2	70-130	7.47	25	
o-Xylene	8.83	1.0	µg/L	10.0		88.3	70-130	2.87	25	
Surrogate: 1,2-Dichloroethane-d4	21.9		µg/L	25.0		87.5	70-130			
Surrogate: Toluene-d8	28.4		µg/L	25.0		114	70-130			
Surrogate: 4-Bromofluorobenzene	23.9		µg/L	25.0		95.6	70-130			

Matrix Spike (B342358-MS1)
Source: 23F0351-03

Prepared: 06/06/23 Analyzed: 06/07/23

Acetone	97.6	50	µg/L	100	ND	97.6	70-130			
Acrolein	76.7	10	µg/L	100	ND	76.7	70-130			
Acrylonitrile	9.15	5.0	µg/L	10.0	ND	91.5	70-130			
tert-Amyl Methyl Ether (TAME)	8.93	0.50	µg/L	10.0	ND	89.3	70-130			
Benzene	8.66	1.0	µg/L	10.0	ND	86.6	70-130			
Bromobenzene	9.28	1.0	µg/L	10.0	ND	92.8	70-130			
Bromochloromethane	9.31	1.0	µg/L	10.0	ND	93.1	70-130			
Bromodichloromethane	8.87	0.50	µg/L	10.0	ND	88.7	70-130			
Bromoform	7.83	1.0	µg/L	10.0	ND	78.3	70-130			
Bromomethane	8.19	2.0	µg/L	10.0	ND	81.9	70-130			
2-Butanone (MEK)	94.7	20	µg/L	100	ND	94.7	70-130			
tert-Butyl Alcohol (TBA)	123	20	µg/L	100	ND	123	70-130			
n-Butylbenzene	9.07	1.0	µg/L	10.0	ND	90.7	70-130			
sec-Butylbenzene	9.05	1.0	µg/L	10.0	ND	90.5	70-130			
tert-Butylbenzene	9.96	1.0	µg/L	10.0	ND	99.6	70-130			
tert-Butyl Ethyl Ether (TBEE)	8.54	0.50	µg/L	10.0	ND	85.4	70-130			
Carbon Disulfide	59.2	5.0	µg/L	100	ND	59.2	* 70-130			MS-07A
Carbon Tetrachloride	8.78	5.0	µg/L	10.0	ND	87.8	70-130			
Chlorobenzene	9.34	1.0	µg/L	10.0	ND	93.4	70-130			
Chlorodibromomethane	9.41	0.50	µg/L	10.0	ND	94.1	70-130			
Chloroethane	8.94	2.0	µg/L	10.0	ND	89.4	70-130			
Chloroform	10.0	2.0	µg/L	10.0	ND	100	70-130			
Chloromethane	6.64	2.0	µg/L	10.0	ND	66.4	* 70-130			MS-07A
2-Chlorotoluene	8.60	1.0	µg/L	10.0	ND	86.0	70-130			
4-Chlorotoluene	8.43	1.0	µg/L	10.0	ND	84.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.27	5.0	µg/L	10.0	ND	82.7	70-130			
1,2-Dibromoethane (EDB)	9.91	0.50	µg/L	10.0	ND	99.1	70-130			
Dibromomethane	9.85	1.0	µg/L	10.0	ND	98.5	70-130			
1,2-Dichlorobenzene	8.53	1.0	µg/L	10.0	ND	85.3	70-130			
1,3-Dichlorobenzene	9.70	1.0	µg/L	10.0	ND	97.0	70-130			
1,4-Dichlorobenzene	8.98	1.0	µg/L	10.0	ND	89.8	70-130			
trans-1,4-Dichloro-2-butene	4.84	2.0	µg/L	10.0	ND	48.4	* 70-130			MS-23, R-06
Dichlorodifluoromethane (Freon 12)	7.85	2.0	µg/L	10.0	ND	78.5	70-130			V-34
1,1-Dichloroethane	9.15	1.0	µg/L	10.0	ND	91.5	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
Batch B342358 - SW-846 5030B										
Matrix Spike (B342358-MS1)	Source: 23F0351-03			Prepared: 06/06/23 Analyzed: 06/07/23						
1,2-Dichloroethane	8.75	1.0	µg/L	10.0	ND	87.5	70-130			
1,1-Dichloroethylene	9.31	1.0	µg/L	10.0	ND	93.1	70-130			
cis-1,2-Dichloroethylene	8.17	1.0	µg/L	10.0	ND	81.7	70-130			
trans-1,2-Dichloroethylene	8.55	1.0	µg/L	10.0	ND	85.5	70-130			
1,2-Dichloropropane	1.41	1.0	µg/L	10.0	ND	14.1 *	70-130			MS-07A
1,3-Dichloropropane	10.2	0.50	µg/L	10.0	ND	102	70-130			
2,2-Dichloropropane	6.32	1.0	µg/L	10.0	ND	63.2 *	70-130			MS-07A
1,1-Dichloropropene	8.57	2.0	µg/L	10.0	ND	85.7	70-130			
cis-1,3-Dichloropropene	7.65	0.50	µg/L	10.0	ND	76.5	70-130			
trans-1,3-Dichloropropene	7.74	0.50	µg/L	10.0	ND	77.4	70-130			
Diethyl Ether	8.89	2.0	µg/L	10.0	ND	88.9	70-130			
Diisopropyl Ether (DIPE)	9.18	0.50	µg/L	10.0	ND	91.8	70-130			
1,4-Dioxane	146	50	µg/L	100	ND	146 *	70-130			MS-23, R-06
Ethylbenzene	8.76	1.0	µg/L	10.0	ND	87.6	70-130			
Hexachlorobutadiene	6.88	0.60	µg/L	10.0	ND	68.8 *	70-130			MS-22
2-Hexanone (MBK)	103	10	µg/L	100	ND	103	70-130			
Isopropylbenzene (Cumene)	9.05	1.0	µg/L	10.0	ND	90.5	70-130			
p-Isopropyltoluene (p-Cymene)	8.89	1.0	µg/L	10.0	ND	88.9	70-130			
Methyl Acetate	6.76	1.0	µg/L	10.0	ND	67.6 *	70-130			MS-07A
Methyl tert-Butyl Ether (MTBE)	8.80	1.0	µg/L	10.0	ND	88.0	70-130			
Methyl Cyclohexane	8.47	1.0	µg/L	10.0	ND	84.7	70-130			
Methylene Chloride	8.50	5.0	µg/L	10.0	ND	85.0	70-130			
4-Methyl-2-pentanone (MIBK)	103	10	µg/L	100	ND	103	70-130			
Naphthalene	7.64	2.0	µg/L	10.0	ND	76.4	70-130			
n-Propylbenzene	9.94	1.0	µg/L	10.0	ND	99.4	70-130			
Styrene	8.79	1.0	µg/L	10.0	ND	87.9	70-130			
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0	ND	102	70-130			
1,1,2,2-Tetrachloroethane	9.41	0.50	µg/L	10.0	ND	94.1	70-130			
Tetrachloroethylene	9.92	1.0	µg/L	10.0	ND	99.2	70-130			
Tetrahydrofuran	10.3	10	µg/L	10.0	ND	103	70-130			
Toluene	11.0	1.0	µg/L	10.0	ND	110	70-130			
1,2,3-Trichlorobenzene	8.62	5.0	µg/L	10.0	ND	86.2	70-130			
1,2,4-Trichlorobenzene	8.36	1.0	µg/L	10.0	ND	83.6	70-130			
1,3,5-Trichlorobenzene	8.06	1.0	µg/L	10.0	ND	80.6	70-130			
1,1,1-Trichloroethane	8.94	1.0	µg/L	10.0	ND	89.4	70-130			
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0	ND	103	70-130			
Trichloroethylene	10.6	1.0	µg/L	10.0	ND	106	70-130			
Trichlorofluoromethane (Freon 11)	10.2	2.0	µg/L	10.0	ND	102	70-130			
1,2,3-Trichloropropane	10.3	2.0	µg/L	10.0	ND	103	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	µg/L	10.0	ND	112	70-130			
1,2,4-Trimethylbenzene	8.06	1.0	µg/L	10.0	ND	80.6	70-130			
1,3,5-Trimethylbenzene	8.77	1.0	µg/L	10.0	ND	87.7	70-130			
Vinyl Chloride	7.57	2.0	µg/L	10.0	ND	75.7	70-130			
m+p Xylene	17.6	2.0	µg/L	20.0	ND	88.2	70-130			
o-Xylene	8.59	1.0	µg/L	10.0	ND	85.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	21.3		µg/L	25.0		85.4	70-130			
Surrogate: Toluene-d8	26.6		µg/L	25.0		107	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.0	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 B342358 - SW-846 5030B										
Matrix Spike Dup (B342358-MSD1)		Source: 23F0351-03		Prepared: 06/06/23 Analyzed: 06/07/23						
Acetone	95.2	50	µg/L	100	ND	95.2	70-130	2.42	30	
Acrolein	81.9	10	µg/L	100	ND	81.9	70-130	6.46	30	
Acrylonitrile	9.34	5.0	µg/L	10.0	ND	93.4	70-130	2.06	30	
tert-Amyl Methyl Ether (TAME)	9.30	0.50	µg/L	10.0	ND	93.0	70-130	4.06	30	
Benzene	8.78	1.0	µg/L	10.0	ND	87.8	70-130	1.38	30	
Bromobenzene	8.13	1.0	µg/L	10.0	ND	81.3	70-130	13.2	30	
Bromochloromethane	11.6	1.0	µg/L	10.0	ND	116	70-130	22.3	30	
Bromodichloromethane	9.18	0.50	µg/L	10.0	ND	91.8	70-130	3.43	30	
Bromoform	7.93	1.0	µg/L	10.0	ND	79.3	70-130	1.27	30	
Bromomethane	9.47	2.0	µg/L	10.0	ND	94.7	70-130	14.5	30	
2-Butanone (MEK)	93.3	20	µg/L	100	ND	93.3	70-130	1.44	30	
tert-Butyl Alcohol (TBA)	132	20	µg/L	100	ND	132	* 70-130	6.85	30	MS-24
n-Butylbenzene	8.98	1.0	µg/L	10.0	ND	89.8	70-130	0.997	30	
sec-Butylbenzene	9.27	1.0	µg/L	10.0	ND	92.7	70-130	2.40	30	
tert-Butylbenzene	9.72	1.0	µg/L	10.0	ND	97.2	70-130	2.44	30	
tert-Butyl Ethyl Ether (TBEE)	9.23	0.50	µg/L	10.0	ND	92.3	70-130	7.77	30	
Carbon Disulfide	60.8	5.0	µg/L	100	ND	60.8	* 70-130	2.67	30	MS-07A
Carbon Tetrachloride	8.78	5.0	µg/L	10.0	ND	87.8	70-130	0.00	30	
Chlorobenzene	9.15	1.0	µg/L	10.0	ND	91.5	70-130	2.06	30	
Chlorodibromomethane	10.1	0.50	µg/L	10.0	ND	101	70-130	7.27	30	
Chloroethane	8.29	2.0	µg/L	10.0	ND	82.9	70-130	7.54	30	
Chloroform	9.75	2.0	µg/L	10.0	ND	97.5	70-130	2.83	30	
Chloromethane	6.66	2.0	µg/L	10.0	ND	66.6	* 70-130	0.301	30	MS-07A
2-Chlorotoluene	8.85	1.0	µg/L	10.0	ND	88.5	70-130	2.87	30	
4-Chlorotoluene	8.84	1.0	µg/L	10.0	ND	88.4	70-130	4.75	30	
1,2-Dibromo-3-chloropropane (DBCP)	7.65	5.0	µg/L	10.0	ND	76.5	70-130	7.79	30	
1,2-Dibromoethane (EDB)	9.70	0.50	µg/L	10.0	ND	97.0	70-130	2.14	30	
Dibromomethane	9.57	1.0	µg/L	10.0	ND	95.7	70-130	2.88	30	
1,2-Dichlorobenzene	8.88	1.0	µg/L	10.0	ND	88.8	70-130	4.02	30	
1,3-Dichlorobenzene	9.93	1.0	µg/L	10.0	ND	99.3	70-130	2.34	30	
1,4-Dichlorobenzene	9.72	1.0	µg/L	10.0	ND	97.2	70-130	7.91	30	
trans-1,4-Dichloro-2-butene	7.27	2.0	µg/L	10.0	ND	72.7	70-130	40.1	* 30	MS-23, R-06
Dichlorodifluoromethane (Freon 12)	7.89	2.0	µg/L	10.0	ND	78.9	70-130	0.508	30	V-34
1,1-Dichloroethane	9.46	1.0	µg/L	10.0	ND	94.6	70-130	3.33	30	
1,2-Dichloroethane	8.72	1.0	µg/L	10.0	ND	87.2	70-130	0.343	30	
1,1-Dichloroethylene	9.42	1.0	µg/L	10.0	ND	94.2	70-130	1.17	30	
cis-1,2-Dichloroethylene	8.89	1.0	µg/L	10.0	ND	88.9	70-130	8.44	30	
trans-1,2-Dichloroethylene	9.27	1.0	µg/L	10.0	ND	92.7	70-130	8.08	30	
1,2-Dichloropropane	1.56	1.0	µg/L	10.0	ND	15.6	* 70-130	10.1	30	MS-07A
1,3-Dichloropropane	9.72	0.50	µg/L	10.0	ND	97.2	70-130	4.82	30	
2,2-Dichloropropane	6.05	1.0	µg/L	10.0	ND	60.5	* 70-130	4.37	30	MS-07A
1,1-Dichloropropene	8.74	2.0	µg/L	10.0	ND	87.4	70-130	1.96	30	
cis-1,3-Dichloropropene	8.30	0.50	µg/L	10.0	ND	83.0	70-130	8.15	30	
trans-1,3-Dichloropropene	9.00	0.50	µg/L	10.0	ND	90.0	70-130	15.1	30	
Diethyl Ether	9.28	2.0	µg/L	10.0	ND	92.8	70-130	4.29	30	
Diisopropyl Ether (DIPE)	9.08	0.50	µg/L	10.0	ND	90.8	70-130	1.10	30	
1,4-Dioxane	105	50	µg/L	100	ND	105	70-130	33.2	* 30	MS-23, R-06
Ethylbenzene	9.23	1.0	µg/L	10.0	ND	92.3	70-130	5.23	30	
Hexachlorobutadiene	9.13	0.60	µg/L	10.0	ND	91.3	70-130	28.1	30	
2-Hexanone (MBK)	95.2	10	µg/L	100	ND	95.2	70-130	7.53	30	
Isopropylbenzene (Cumene)	9.12	1.0	µg/L	10.0	ND	91.2	70-130	0.770	30	
p-Isopropyltoluene (p-Cymene)	8.56	1.0	µg/L	10.0	ND	85.6	70-130	3.78	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 B342358 - SW-846 5030B										
Matrix Spike Dup (B342358-MSD1)		Source: 23F0351-03			Prepared: 06/06/23 Analyzed: 06/07/23					
Methyl Acetate	6.92	1.0	µg/L	10.0	ND	69.2 *	70-130	2.34	30	MS-07A
Methyl tert-Butyl Ether (MTBE)	9.04	1.0	µg/L	10.0	ND	90.4	70-130	2.69	30	
Methyl Cyclohexane	8.57	1.0	µg/L	10.0	ND	85.7	70-130	1.17	30	
Methylene Chloride	8.91	5.0	µg/L	10.0	ND	89.1	70-130	4.71	30	
4-Methyl-2-pentanone (MIBK)	95.1	10	µg/L	100	ND	95.1	70-130	8.24	30	
Naphthalene	6.87	2.0	µg/L	10.0	ND	68.7 *	70-130	10.6	30	MS-22
n-Propylbenzene	9.96	1.0	µg/L	10.0	ND	99.6	70-130	0.201	30	
Styrene	8.83	1.0	µg/L	10.0	ND	88.3	70-130	0.454	30	
1,1,1,2-Tetrachloroethane	10.8	1.0	µg/L	10.0	ND	108	70-130	6.01	30	
1,1,2,2-Tetrachloroethane	9.69	0.50	µg/L	10.0	ND	96.9	70-130	2.93	30	
Tetrachloroethylene	10.0	1.0	µg/L	10.0	ND	100	70-130	0.803	30	
Tetrahydrofuran	10.9	10	µg/L	10.0	ND	109	70-130	5.85	30	
Toluene	10.5	1.0	µg/L	10.0	ND	105	70-130	4.85	30	
1,2,3-Trichlorobenzene	8.65	5.0	µg/L	10.0	ND	86.5	70-130	0.347	30	
1,2,4-Trichlorobenzene	9.90	1.0	µg/L	10.0	ND	99.0	70-130	16.9	30	
1,3,5-Trichlorobenzene	8.11	1.0	µg/L	10.0	ND	81.1	70-130	0.618	30	
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0	ND	102	70-130	13.2	30	
1,1,2-Trichloroethane	9.97	1.0	µg/L	10.0	ND	99.7	70-130	2.87	30	
Trichloroethylene	9.37	1.0	µg/L	10.0	ND	93.7	70-130	11.9	30	
Trichlorofluoromethane (Freon 11)	10.5	2.0	µg/L	10.0	ND	105	70-130	3.38	30	
1,2,3-Trichloropropane	9.43	2.0	µg/L	10.0	ND	94.3	70-130	8.72	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.7	1.0	µg/L	10.0	ND	117	70-130	4.01	30	
1,2,4-Trimethylbenzene	8.74	1.0	µg/L	10.0	ND	87.4	70-130	8.10	30	
1,3,5-Trimethylbenzene	8.77	1.0	µg/L	10.0	ND	87.7	70-130	0.00	30	
Vinyl Chloride	7.59	2.0	µg/L	10.0	ND	75.9	70-130	0.264	30	
m+p Xylene	17.3	2.0	µg/L	20.0	ND	86.4	70-130	2.12	20	
o-Xylene	8.42	1.0	µg/L	10.0	ND	84.2	70-130	2.00	30	
Surrogate: 1,2-Dichloroethane-d4	23.2		µg/L	25.0		92.7	70-130			
Surrogate: Toluene-d8	28.1		µg/L	25.0		112	70-130			
Surrogate: 4-Bromofluorobenzene	23.8		µg/L	25.0		95.0	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 B342641 - SW-846 3510C
Blank (B342641-BLK1)

Prepared: 06/08/23 Analyzed: 06/12/23

Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Aniline	ND	20	µg/L							
Anthracene	ND	5.0	µg/L							
Benzidine	ND	20	µg/L							L-04, V-04, V-05, V-35
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	20	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							V-04
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							V-35
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							L-04
1,4-Dichlorobenzene	ND	5.0	µg/L							L-04
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	20	µg/L							V-04
2,4-Dinitrophenol	ND	10	µg/L							V-04
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							V-04
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							L-04
Hexachlorocyclopentadiene	ND	10	µg/L							
Hexachloroethane	ND	10	µg/L							L-04
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 B342641 - SW-846 3510C
Blank (B342641-BLK1)

Prepared: 06/08/23 Analyzed: 06/12/23

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							
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	20	µg/L							
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							L-04
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	272		µg/L	400		67.9	15-110			
Surrogate: Phenol-d6	210		µg/L	400		52.4	15-110			
Surrogate: Nitrobenzene-d5	176		µg/L	200		88.2	30-130			
Surrogate: 2-Fluorobiphenyl	180		µg/L	200		90.2	30-130			
Surrogate: 2,4,6-Tribromophenol	491		µg/L	400		123 *	15-110			S-07
Surrogate: p-Terphenyl-d14	266		µg/L	200		133 *	30-130			S-07

LCS (B342641-BS1)

Prepared: 06/08/23 Analyzed: 06/12/23

Acenaphthene	77.0	5.0	µg/L	100		77.0	40-140			
Acenaphthylene	84.9	5.0	µg/L	100		84.9	40-140			
Acetophenone	90.7	10	µg/L	100		90.7	40-140			
Aniline	67.3	20	µg/L	100		67.3	40-140			
Anthracene	87.7	5.0	µg/L	100		87.7	40-140			
Benzidine	7.56	20	µg/L	100		7.56 *	40-140			L-04, V-04, V-05, V-35
Benzo(a)anthracene	85.6	5.0	µg/L	100		85.6	40-140			
Benzo(a)pyrene	83.6	5.0	µg/L	100		83.6	40-140			
Benzo(b)fluoranthene	90.6	5.0	µg/L	100		90.6	40-140			
Benzo(g,h,i)perylene	92.7	5.0	µg/L	100		92.7	40-140			
Benzo(k)fluoranthene	93.3	5.0	µg/L	100		93.3	40-140			
Benzoic Acid	41.5	20	µg/L	100		41.5	10-130			†
Bis(2-chloroethoxy)methane	89.2	10	µg/L	100		89.2	40-140			
Bis(2-chloroethyl)ether	92.1	10	µg/L	100		92.1	40-140			R-05
Bis(2-chloroisopropyl)ether	89.4	10	µg/L	100		89.4	40-140			R-05
Bis(2-Ethylhexyl)phthalate	86.3	10	µg/L	100		86.3	40-140			V-04
4-Bromophenylphenylether	84.4	10	µg/L	100		84.4	40-140			
Butylbenzylphthalate	105	10	µg/L	100		105	40-140			V-35
Carbazole	88.8	10	µg/L	100		88.8	40-140			
4-Chloroaniline	87.7	10	µg/L	100		87.7	40-140			
4-Chloro-3-methylphenol	85.5	10	µg/L	100		85.5	30-130			
2-Chloronaphthalene	58.8	10	µg/L	100		58.8	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 B342641 - SW-846 3510C										
LCS (B342641-BS1)										
Prepared: 06/08/23 Analyzed: 06/12/23										
2-Chlorophenol	81.4	10	µg/L	100		81.4	30-130			R-05
4-Chlorophenylphenylether	82.6	10	µg/L	100		82.6	40-140			
Chrysene	81.5	5.0	µg/L	100		81.5	40-140			
Dibenz(a,h)anthracene	92.3	5.0	µg/L	100		92.3	40-140			
Dibenzofuran	82.9	5.0	µg/L	100		82.9	40-140			
Di-n-butylphthalate	87.4	10	µg/L	100		87.4	40-140			
1,2-Dichlorobenzene	40.6	5.0	µg/L	100		40.6	40-140			R-05
1,3-Dichlorobenzene	34.6	5.0	µg/L	100		34.6	* 40-140			R-05, L-04
1,4-Dichlorobenzene	36.7	5.0	µg/L	100		36.7	* 40-140			L-04, R-05
3,3-Dichlorobenzidine	96.6	10	µg/L	100		96.6	40-140			
2,4-Dichlorophenol	86.2	10	µg/L	100		86.2	30-130			
Diethylphthalate	84.6	10	µg/L	100		84.6	40-140			
2,4-Dimethylphenol	77.4	10	µg/L	100		77.4	30-130			
Dimethylphthalate	86.7	10	µg/L	100		86.7	40-140			
4,6-Dinitro-2-methylphenol	84.1	20	µg/L	100		84.1	30-130			V-04
2,4-Dinitrophenol	74.0	10	µg/L	100		74.0	30-130			V-04
2,4-Dinitrotoluene	89.3	10	µg/L	100		89.3	40-140			
2,6-Dinitrotoluene	99.2	10	µg/L	100		99.2	40-140			
Di-n-octylphthalate	77.2	10	µg/L	100		77.2	40-140			V-04
1,2-Diphenylhydrazine/Azobenzene	89.2	10	µg/L	100		89.2	40-140			
Fluoranthene	87.4	5.0	µg/L	100		87.4	40-140			
Fluorene	84.8	5.0	µg/L	100		84.8	40-140			
Hexachlorobenzene	86.1	10	µg/L	100		86.1	40-140			
Hexachlorobutadiene	32.1	10	µg/L	100		32.1	* 40-140			L-04
Hexachlorocyclopentadiene	36.3	10	µg/L	100		36.3	30-140			†
Hexachloroethane	29.6	10	µg/L	100		29.6	* 40-140			L-04
Indeno(1,2,3-cd)pyrene	94.2	5.0	µg/L	100		94.2	40-140			
Isophorone	93.1	10	µg/L	100		93.1	40-140			
1-Methylnaphthalene	58.6	5.0	µg/L	100		58.6	40-140			
2-Methylnaphthalene	54.5	5.0	µg/L	100		54.5	40-140			
2-Methylphenol	79.6	10	µg/L	100		79.6	30-130			
3/4-Methylphenol	75.0	10	µg/L	100		75.0	30-130			
Naphthalene	49.6	5.0	µg/L	100		49.6	40-140			
2-Nitroaniline	86.9	10	µg/L	100		86.9	40-140			
3-Nitroaniline	94.8	10	µg/L	100		94.8	40-140			
4-Nitroaniline	92.5	10	µg/L	100		92.5	40-140			
Nitrobenzene	82.4	10	µg/L	100		82.4	40-140			
2-Nitrophenol	79.5	10	µg/L	100		79.5	30-130			
4-Nitrophenol	49.7	10	µg/L	100		49.7	10-130			†
N-Nitrosodimethylamine	59.6	10	µg/L	100		59.6	40-140			R-05
N-Nitrosodiphenylamine/Diphenylamine	87.1	10	µg/L	100		87.1	40-140			
N-Nitrosodi-n-propylamine	87.5	10	µg/L	100		87.5	40-140			
Pentachloronitrobenzene	93.7	10	µg/L	100		93.7	40-140			
Pentachlorophenol	78.4	10	µg/L	100		78.4	30-130			
Phenanthrene	86.1	5.0	µg/L	100		86.1	40-140			
Phenol	43.5	10	µg/L	100		43.5	20-130			†
Pyrene	85.4	5.0	µg/L	100		85.4	40-140			
Pyridine	11.4	20	µg/L	100		11.4	10-140			†
1,2,4,5-Tetrachlorobenzene	61.4	10	µg/L	100		61.4	40-140			
1,2,4-Trichlorobenzene	39.4	5.0	µg/L	100		39.4	* 40-140			L-04
2,4,5-Trichlorophenol	88.3	10	µg/L	100		88.3	30-130			
2,4,6-Trichlorophenol	86.1	10	µg/L	100		86.1	30-130			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342641 - SW-846 3510C										
LCS (B342641-BS1)										
Prepared: 06/08/23 Analyzed: 06/12/23										
Surrogate: 2-Fluorophenol	286		µg/L	400		71.5	15-110			
Surrogate: Phenol-d6	200		µg/L	400		50.1	15-110			
Surrogate: Nitrobenzene-d5	196		µg/L	200		98.0	30-130			
Surrogate: 2-Fluorobiphenyl	190		µg/L	200		94.8	30-130			
Surrogate: 2,4,6-Tribromophenol	451		µg/L	400		113	* 15-110			S-07
Surrogate: p-Terphenyl-d14	210		µg/L	200		105	30-130			
LCS Dup (B342641-BSD1)										
Prepared: 06/08/23 Analyzed: 06/12/23										
Acenaphthene	75.6	5.0	µg/L	100		75.6	40-140	1.82	20	
Acenaphthylene	81.8	5.0	µg/L	100		81.8	40-140	3.65	20	
Acetophenone	75.6	10	µg/L	100		75.6	40-140	18.2	20	
Aniline	58.2	20	µg/L	100		58.2	40-140	14.5	50	‡
Anthracene	86.0	5.0	µg/L	100		86.0	40-140	1.96	20	
Benzidine	7.35	20	µg/L	100		7.35	* 40-140	2.82	20	L-04, V-04, V-05, V-35
Benzo(a)anthracene	87.2	5.0	µg/L	100		87.2	40-140	1.87	20	
Benzo(a)pyrene	84.0	5.0	µg/L	100		84.0	40-140	0.489	20	
Benzo(b)fluoranthene	89.9	5.0	µg/L	100		89.9	40-140	0.809	20	
Benzo(g,h,i)perylene	91.9	5.0	µg/L	100		91.9	40-140	0.813	20	
Benzo(k)fluoranthene	92.7	5.0	µg/L	100		92.7	40-140	0.667	20	
Benzoic Acid	40.0	20	µg/L	100		40.0	10-130	3.70	50	† ‡
Bis(2-chloroethoxy)methane	78.8	10	µg/L	100		78.8	40-140	12.3	20	
Bis(2-chloroethyl)ether	72.3	10	µg/L	100		72.3	40-140	24.1	* 20	R-05
Bis(2-chloroisopropyl)ether	71.6	10	µg/L	100		71.6	40-140	22.0	* 20	R-05
Bis(2-Ethylhexyl)phthalate	87.8	10	µg/L	100		87.8	40-140	1.70	20	V-04
4-Bromophenylphenylether	81.8	10	µg/L	100		81.8	40-140	3.21	20	
Butylbenzylphthalate	104	10	µg/L	100		104	40-140	0.913	20	V-35
Carbazole	88.5	10	µg/L	100		88.5	40-140	0.406	20	
4-Chloroaniline	80.6	10	µg/L	100		80.6	40-140	8.50	20	
4-Chloro-3-methylphenol	83.4	10	µg/L	100		83.4	30-130	2.42	20	
2-Chloronaphthalene	60.2	10	µg/L	100		60.2	40-140	2.35	20	
2-Chlorophenol	65.0	10	µg/L	100		65.0	30-130	22.3	* 20	R-05
4-Chlorophenylphenylether	80.8	10	µg/L	100		80.8	40-140	2.14	20	
Chrysene	82.5	5.0	µg/L	100		82.5	40-140	1.24	20	
Dibenz(a,h)anthracene	91.8	5.0	µg/L	100		91.8	40-140	0.478	20	
Dibenzofuran	81.2	5.0	µg/L	100		81.2	40-140	2.01	20	
Di-n-butylphthalate	87.4	10	µg/L	100		87.4	40-140	0.0686	20	
1,2-Dichlorobenzene	32.6	5.0	µg/L	100		32.6	* 40-140	22.0	* 20	L-07A
1,3-Dichlorobenzene	25.4	5.0	µg/L	100		25.4	* 40-140	30.9	* 20	L-04, R-05
1,4-Dichlorobenzene	27.7	5.0	µg/L	100		27.7	* 40-140	27.7	* 20	L-04, R-05
3,3-Dichlorobenzidine	101	10	µg/L	100		101	40-140	4.83	20	
2,4-Dichlorophenol	78.6	10	µg/L	100		78.6	30-130	9.20	20	
Diethylphthalate	85.0	10	µg/L	100		85.0	40-140	0.424	20	
2,4-Dimethylphenol	69.0	10	µg/L	100		69.0	30-130	11.6	20	
Dimethylphthalate	86.6	10	µg/L	100		86.6	40-140	0.127	50	‡
4,6-Dinitro-2-methylphenol	83.7	20	µg/L	100		83.7	30-130	0.548	50	V-04 ‡
2,4-Dinitrophenol	77.5	10	µg/L	100		77.5	30-130	4.61	50	V-04 ‡
2,4-Dinitrotoluene	91.3	10	µg/L	100		91.3	40-140	2.17	20	
2,6-Dinitrotoluene	100	10	µg/L	100		100	40-140	0.763	20	
Di-n-octylphthalate	78.5	10	µg/L	100		78.5	40-140	1.66	20	V-04
1,2-Diphenylhydrazine/Azobenzene	87.8	10	µg/L	100		87.8	40-140	1.54	20	
Fluoranthene	86.6	5.0	µg/L	100		86.6	40-140	0.885	20	
Fluorene	83.5	5.0	µg/L	100		83.5	40-140	1.51	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 B342641 - SW-846 3510C										
LCS Dup (B342641-BSD1)										
Prepared: 06/08/23 Analyzed: 06/12/23										
Hexachlorobenzene	86.0	10	µg/L	100		86.0	40-140	0.116	20	
Hexachlorobutadiene	32.4	10	µg/L	100		32.4	* 40-140	1.05	20	L-04
Hexachlorocyclopentadiene	36.8	10	µg/L	100		36.8	30-140	1.20	50	† ‡
Hexachloroethane	22.9	10	µg/L	100		22.9	* 40-140	25.8	50	L-04 ‡
Indeno(1,2,3-cd)pyrene	93.6	5.0	µg/L	100		93.6	40-140	0.639	50	‡
Isophorone	87.2	10	µg/L	100		87.2	40-140	6.48	20	
1-Methylnaphthalene	57.4	5.0	µg/L	100		57.4	40-140	2.09	20	
2-Methylnaphthalene	52.5	5.0	µg/L	100		52.5	40-140	3.70	20	
2-Methylphenol	67.2	10	µg/L	100		67.2	30-130	16.8	20	
3/4-Methylphenol	63.2	10	µg/L	100		63.2	30-130	17.0	20	
Naphthalene	47.3	5.0	µg/L	100		47.3	40-140	4.77	20	
2-Nitroaniline	85.4	10	µg/L	100		85.4	40-140	1.76	20	
3-Nitroaniline	94.0	10	µg/L	100		94.0	40-140	0.858	20	
4-Nitroaniline	92.3	10	µg/L	100		92.3	40-140	0.249	20	
Nitrobenzene	71.8	10	µg/L	100		71.8	40-140	13.6	20	
2-Nitrophenol	67.4	10	µg/L	100		67.4	30-130	16.6	20	
4-Nitrophenol	50.2	10	µg/L	100		50.2	10-130	1.10	50	† ‡
N-Nitrosodimethylamine	47.3	10	µg/L	100		47.3	40-140	22.9	* 20	R-05
N-Nitrosodiphenylamine/Diphenylamine	85.9	10	µg/L	100		85.9	40-140	1.40	20	
N-Nitrosodi-n-propylamine	76.1	10	µg/L	100		76.1	40-140	13.9	20	
Pentachloronitrobenzene	92.2	10	µg/L	100		92.2	40-140	1.58	20	
Pentachlorophenol	77.3	10	µg/L	100		77.3	30-130	1.43	50	‡
Phenanthrene	84.4	5.0	µg/L	100		84.4	40-140	2.08	20	
Phenol	35.8	10	µg/L	100		35.8	20-130	19.4	20	†
Pyrene	85.7	5.0	µg/L	100		85.7	40-140	0.292	20	
Pyridine	13.0	20	µg/L	100		13.0	10-140	13.7	50	† ‡
1,2,4,5-Tetrachlorobenzene	58.0	10	µg/L	100		58.0	40-140	5.61	20	
1,2,4-Trichlorobenzene	39.6	5.0	µg/L	100		39.6	* 40-140	0.532	20	L-04
2,4,5-Trichlorophenol	87.8	10	µg/L	100		87.8	30-130	0.579	20	
2,4,6-Trichlorophenol	82.8	10	µg/L	100		82.8	30-130	3.99	50	‡
Surrogate: 2-Fluorophenol	197		µg/L	400		49.3	15-110			
Surrogate: Phenol-d6	149		µg/L	400		37.3	15-110			
Surrogate: Nitrobenzene-d5	149		µg/L	200		74.5	30-130			
Surrogate: 2-Fluorobiphenyl	161		µg/L	200		80.3	30-130			
Surrogate: 2,4,6-Tribromophenol	404		µg/L	400		101	15-110			
Surrogate: p-Terphenyl-d14	189		µg/L	200		94.7	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	%REC Limits	RPD	RPD Limit	Notes
Batch B342524 - SW-846 3510C										
Blank (B342524-BLK1)				Prepared: 06/07/23 Analyzed: 06/09/23						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	2.42		µg/L	10.0		24.2	15-110			
LCS (B342524-BS1)				Prepared: 06/07/23 Analyzed: 06/10/23						
1,4-Dioxane	10.1	0.20	µg/L	10.0		101	40-140			
Surrogate: 1,4-Dioxane-d8	2.68		µg/L	10.0		26.8	15-110			
LCS Dup (B342524-BSD1)				Prepared: 06/07/23 Analyzed: 06/10/23						
1,4-Dioxane	10.7	0.20	µg/L	10.0		107	40-140	5.70	30	
Surrogate: 1,4-Dioxane-d8	3.32		µg/L	10.0		33.2	15-110			

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342660 - SW-846 7470A Prep										
Blank (B342660-BLK1)				Prepared: 06/08/23 Analyzed: 06/13/23						
Mercury	ND	0.00020	mg/L							
LCS (B342660-BS1)				Prepared: 06/08/23 Analyzed: 06/13/23						
Mercury	0.00417	0.00020	mg/L	0.00402		104	80-120			
LCS Dup (B342660-BSD1)				Prepared: 06/08/23 Analyzed: 06/13/23						
Mercury	0.00425	0.00020	mg/L	0.00402		106	80-120	1.95	20	
Batch B342784 - SW-846 7470A Prep										
Blank (B342784-BLK1)				Prepared: 06/09/23 Analyzed: 06/12/23						
Mercury	ND	0.00020	mg/L							
LCS (B342784-BS1)				Prepared: 06/09/23 Analyzed: 06/12/23						
Mercury	0.00384	0.00020	mg/L	0.00402		95.4	80-120			
LCS Dup (B342784-BSD1)				Prepared: 06/09/23 Analyzed: 06/12/23						
Mercury	0.00367	0.00020	mg/L	0.00402		91.2	80-120	4.52	20	
Matrix Spike (B342784-MS1)				Source: 23F0351-01		Prepared: 06/09/23 Analyzed: 06/12/23				
Mercury	0.00372	0.00020	mg/L	0.00402	ND	92.5	75-125			
Matrix Spike (B342784-MS2)				Source: 23F0351-03		Prepared: 06/09/23 Analyzed: 06/12/23				
Mercury	0.00374	0.00020	mg/L	0.00402	ND	92.9	75-125			
Matrix Spike Dup (B342784-MSD1)				Source: 23F0351-01		Prepared: 06/09/23 Analyzed: 06/12/23				
Mercury	0.00381	0.00020	mg/L	0.00402	ND	94.9	75-125	2.52	20	
Matrix Spike Dup (B342784-MSD2)				Source: 23F0351-03		Prepared: 06/09/23 Analyzed: 06/12/23				
Mercury	0.00376	0.00020	mg/L	0.00402	ND	93.5	75-125	0.588	20	
Batch B342799 - SW-846 3005A										
Blank (B342799-BLK1)				Prepared: 06/09/23 Analyzed: 06/10/23						
Antimony	ND	0.050	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.010	mg/L							
Copper	ND	0.010	mg/L							
Manganese	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	ND	0.010	mg/L							

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342799 - SW-846 3005A										
Blank (B342799-BLK2)				Prepared: 06/09/23 Analyzed: 06/10/23						
Lead	ND	0.010	mg/L							
Blank (B342799-BLK3)				Prepared: 06/09/23 Analyzed: 06/11/23						
Arsenic	ND	0.010	mg/L							
Calcium	ND	0.50	mg/L							
Magnesium	ND	0.050	mg/L							
Blank (B342799-BLK4)				Prepared: 06/09/23 Analyzed: 06/11/23						
Aluminum	ND	0.050	mg/L							
Iron	ND	0.050	mg/L							
LCS (B342799-BS1)				Prepared: 06/09/23 Analyzed: 06/10/23						
Antimony	0.515	0.050	mg/L	0.500		103	80-120			
Barium	0.512	0.050	mg/L	0.500		102	80-120			
Beryllium	0.506	0.0040	mg/L	0.500		101	80-120			
Cadmium	0.490	0.0040	mg/L	0.500		98.0	80-120			
Chromium	0.502	0.010	mg/L	0.500		100	80-120			
Cobalt	0.501	0.010	mg/L	0.500		100	80-120			
Copper	1.00	0.010	mg/L	1.00		100	80-120			
Manganese	0.501	0.010	mg/L	0.500		100	80-120			
Nickel	0.501	0.010	mg/L	0.500		100	80-120			
Potassium	3.98	2.0	mg/L	4.00		99.5	80-120			
Selenium	0.512	0.050	mg/L	0.500		102	80-120			
Silver	0.545	0.010	mg/L	0.500		109	80-120			
Sodium	4.04	2.0	mg/L	4.00		101	80-120			
Thallium	0.484	0.050	mg/L	0.500		96.7	80-120			
Vanadium	0.506	0.010	mg/L	0.500		101	80-120			
Zinc	0.981	0.010	mg/L	1.00		98.1	80-120			
LCS (B342799-BS2)				Prepared: 06/09/23 Analyzed: 06/10/23						
Lead	0.513	0.010	mg/L	0.500		103	80-120			
LCS (B342799-BS3)				Prepared: 06/09/23 Analyzed: 06/11/23						
Arsenic	0.495	0.010	mg/L	0.500		98.9	80-120			
Calcium	4.13	0.50	mg/L	4.00		103	80-120			
Magnesium	4.18	0.050	mg/L	4.00		105	80-120			
LCS (B342799-BS4)				Prepared: 06/09/23 Analyzed: 06/11/23						
Aluminum	0.525	0.050	mg/L	0.500		105	45.3-154.7			
Iron	4.16	0.050	mg/L	4.00		104	80-120			
LCS Dup (B342799-BSD1)				Prepared: 06/09/23 Analyzed: 06/10/23						
Antimony	0.532	0.050	mg/L	0.500		106	80-120	3.25	20	
Barium	0.516	0.050	mg/L	0.500		103	80-120	0.786	20	
Beryllium	0.507	0.0040	mg/L	0.500		101	80-120	0.203	20	
Cadmium	0.501	0.0040	mg/L	0.500		100	80-120	2.21	20	
Chromium	0.510	0.010	mg/L	0.500		102	80-120	1.67	20	
Cobalt	0.511	0.010	mg/L	0.500		102	80-120	2.05	20	
Copper	1.01	0.010	mg/L	1.00		101	80-120	1.00	20	
Manganese	0.502	0.010	mg/L	0.500		100	80-120	0.281	20	
Nickel	0.511	0.010	mg/L	0.500		102	80-120	2.02	30	
Potassium	3.99	2.0	mg/L	4.00		99.8	80-120	0.322	20	
Selenium	0.518	0.050	mg/L	0.500		104	80-120	1.13	20	
Silver	0.553	0.010	mg/L	0.500		111	80-120	1.43	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B342799 - SW-846 3005A
LCS Dup (B342799-BSD1)

Prepared: 06/09/23 Analyzed: 06/10/23

Sodium	4.03	2.0	mg/L	4.00		101	80-120	0.0734	20	
Thallium	0.503	0.050	mg/L	0.500		101	80-120	3.90	20	
Vanadium	0.511	0.010	mg/L	0.500		102	80-120	1.07	20	
Zinc	0.989	0.010	mg/L	1.00		98.9	80-120	0.822	20	

LCS Dup (B342799-BSD2)

Prepared: 06/09/23 Analyzed: 06/10/23

Lead	0.501	0.010	mg/L	0.500		100	80-120	2.42	20	
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LCS Dup (B342799-BSD3)

Prepared: 06/09/23 Analyzed: 06/11/23

Arsenic	0.496	0.010	mg/L	0.500		99.2	80-120	0.282	20	
Calcium	4.11	0.50	mg/L	4.00		103	80-120	0.368	20	
Magnesium	4.14	0.050	mg/L	4.00		103	80-120	1.06	20	

LCS Dup (B342799-BSD4)

Prepared: 06/09/23 Analyzed: 06/11/23

Aluminum	0.527	0.050	mg/L	0.500		105	45.3-154.7	0.443	30	
Iron	4.15	0.050	mg/L	4.00		104	80-120	0.318	20	

Batch B343404 - SW-846 3005A
Blank (B343404-BLK1)

Prepared: 06/15/23 Analyzed: 06/16/23

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

Blank (B343404-BLK2)

Prepared: 06/15/23 Analyzed: 06/17/23

Cadmium	0.0073	0.0040	mg/L							B-05
Lead	ND	0.010	mg/L							
Selenium	ND	0.050	mg/L							

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B343404 - SW-846 3005A
LCS (B343404-BS1)

Prepared: 06/15/23 Analyzed: 06/16/23

Aluminum	0.477	0.050	mg/L	0.500		95.4	45.3-154.7			
Antimony	0.528	0.050	mg/L	0.500		106	80-120			
Arsenic	0.455	0.010	mg/L	0.500		91.0	80-120			
Barium	0.509	0.050	mg/L	0.500		102	80-120			
Beryllium	0.495	0.0040	mg/L	0.500		99.0	80-120			
Calcium	3.82	0.50	mg/L	4.00		95.6	80-120			
Chromium	0.494	0.010	mg/L	0.500		98.8	80-120			
Cobalt	0.500	0.010	mg/L	0.500		100	80-120			
Copper	1.03	0.010	mg/L	1.00		103	80-120			
Iron	3.97	0.050	mg/L	4.00		99.3	80-120			
Magnesium	3.84	0.050	mg/L	4.00		95.9	80-120			
Manganese	0.495	0.010	mg/L	0.500		99.0	80-120			
Nickel	0.498	0.010	mg/L	0.500		99.6	80-120			
Potassium	3.80	2.0	mg/L	4.00		95.1	80-120			
Silver	0.520	0.010	mg/L	0.500		104	80-120			
Sodium	3.98	2.0	mg/L	4.00		99.6	80-120			
Thallium	0.516	0.050	mg/L	0.500		103	80-120			
Vanadium	0.497	0.010	mg/L	0.500		99.5	80-120			
Zinc	0.979	0.010	mg/L	1.00		97.9	80-120			

LCS (B343404-BS2)

Prepared: 06/15/23 Analyzed: 06/17/23

Cadmium	0.487	0.0040	mg/L	0.500		97.4	80-120			B
Lead	0.522	0.010	mg/L	0.500		104	80-120			
Selenium	0.518	0.050	mg/L	0.500		104	80-120			

LCS Dup (B343404-BSD1)

Prepared: 06/15/23 Analyzed: 06/16/23

Aluminum	0.480	0.050	mg/L	0.500		96.0	45.3-154.7	0.630	30	
Antimony	0.530	0.050	mg/L	0.500		106	80-120	0.449	20	
Arsenic	0.458	0.010	mg/L	0.500		91.7	80-120	0.796	20	
Barium	0.515	0.050	mg/L	0.500		103	80-120	1.13	20	
Beryllium	0.493	0.0040	mg/L	0.500		98.7	80-120	0.312	20	
Calcium	3.80	0.50	mg/L	4.00		95.0	80-120	0.663	20	
Chromium	0.500	0.010	mg/L	0.500		100	80-120	1.21	20	
Cobalt	0.503	0.010	mg/L	0.500		101	80-120	0.648	20	
Copper	1.05	0.010	mg/L	1.00		105	80-120	2.00	20	
Iron	3.97	0.050	mg/L	4.00		99.1	80-120	0.150	20	
Magnesium	3.82	0.050	mg/L	4.00		95.5	80-120	0.484	20	
Manganese	0.493	0.010	mg/L	0.500		98.6	80-120	0.422	20	
Nickel	0.502	0.010	mg/L	0.500		100	80-120	0.865	30	
Potassium	3.78	2.0	mg/L	4.00		94.5	80-120	0.584	20	
Silver	0.527	0.010	mg/L	0.500		105	80-120	1.27	20	
Sodium	3.95	2.0	mg/L	4.00		98.7	80-120	0.931	20	
Thallium	0.524	0.050	mg/L	0.500		105	80-120	1.66	20	
Vanadium	0.504	0.010	mg/L	0.500		101	80-120	1.29	20	
Zinc	0.987	0.010	mg/L	1.00		98.7	80-120	0.834	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B343404 - SW-846 3005A
LCS Dup (B343404-BSD2)

Prepared: 06/15/23 Analyzed: 06/17/23

Cadmium	0.486	0.0040	mg/L	0.500		97.3	80-120	0.108	20	B
Lead	0.521	0.010	mg/L	0.500		104	80-120	0.227	20	
Selenium	0.514	0.050	mg/L	0.500		103	80-120	0.839	20	

Matrix Spike (B343404-MS1)
Source: 23F0351-01

Prepared: 06/15/23 Analyzed: 06/16/23

Aluminum	0.489	0.050	mg/L	0.500	ND	97.8	75-125			
Antimony	0.549	0.050	mg/L	0.500	0.0115	108	75-125			
Arsenic	0.476	0.010	mg/L	0.500	ND	95.3	75-125			
Barium	0.591	0.050	mg/L	0.500	0.0812	102	75-125			
Beryllium	0.493	0.0040	mg/L	0.500	ND	98.7	75-125			
Calcium	13.3	0.50	mg/L	4.00	9.51	94.4	75-125			
Chromium	0.496	0.010	mg/L	0.500	ND	99.1	75-125			
Cobalt	0.508	0.010	mg/L	0.500	0.00435	101	75-125			
Copper	1.17	0.010	mg/L	1.00	0.114	106	75-125			
Iron	4.07	0.050	mg/L	4.00	0.0717	100	75-125			
Magnesium	9.53	0.050	mg/L	4.00	5.82	92.6	75-125			
Manganese	0.629	0.010	mg/L	0.500	0.144	97.0	75-125			
Nickel	0.531	0.010	mg/L	0.500	0.0319	99.8	75-125			
Potassium	12.1	2.0	mg/L	4.00	8.20	97.6	75-125			
Silver	0.512	0.010	mg/L	0.500	ND	102	75-125			
Sodium	71.1	2.0	mg/L	4.00	66.8	106	75-125			
Thallium	0.512	0.050	mg/L	0.500	ND	102	75-125			
Vanadium	0.509	0.010	mg/L	0.500	ND	102	75-125			
Zinc	1.04	0.010	mg/L	1.00	0.0406	99.6	75-125			

Matrix Spike (B343404-MS2)
Source: 23F0351-03

Prepared: 06/15/23 Analyzed: 06/16/23

Aluminum	0.492	0.050	mg/L	0.500	ND	98.4	75-125			
Antimony	0.550	0.050	mg/L	0.500	0.0107	108	75-125			
Arsenic	0.474	0.010	mg/L	0.500	ND	94.9	75-125			
Barium	0.592	0.050	mg/L	0.500	0.0809	102	75-125			
Beryllium	0.494	0.0040	mg/L	0.500	ND	98.9	75-125			
Calcium	13.3	0.50	mg/L	4.00	9.50	95.7	75-125			
Chromium	0.495	0.010	mg/L	0.500	ND	99.0	75-125			
Cobalt	0.507	0.010	mg/L	0.500	0.00436	101	75-125			
Copper	1.07	0.010	mg/L	1.00	0.00660	106	75-125			
Iron	4.00	0.050	mg/L	4.00	0.0688	98.2	75-125			
Magnesium	9.56	0.050	mg/L	4.00	5.81	93.7	75-125			
Manganese	0.630	0.010	mg/L	0.500	0.143	97.3	75-125			
Nickel	0.508	0.010	mg/L	0.500	ND	102	75-125			
Potassium	12.1	2.0	mg/L	4.00	8.20	98.2	75-125			
Silver	0.510	0.010	mg/L	0.500	ND	102	75-125			
Sodium	71.3	2.0	mg/L	4.00	66.8	111	75-125			
Thallium	0.508	0.050	mg/L	0.500	ND	102	75-125			
Vanadium	0.510	0.010	mg/L	0.500	ND	102	75-125			
Zinc	1.01	0.010	mg/L	1.00	0.0176	99.2	75-125			

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B343404 - SW-846 3005A

Matrix Spike (B343404-MS3)		Source: 23F0351-01		Prepared: 06/15/23		Analyzed: 06/17/23				
Cadmium	0.488	0.0040	mg/L	0.500	ND	97.6	75-125			B
Lead	0.506	0.010	mg/L	0.500	ND	101	75-125			
Selenium	0.518	0.050	mg/L	0.500	ND	104	75-125			

Matrix Spike (B343404-MS4)		Source: 23F0351-03		Prepared: 06/15/23		Analyzed: 06/17/23				
Cadmium	0.483	0.0040	mg/L	0.500	ND	96.6	75-125			B
Lead	0.496	0.010	mg/L	0.500	ND	99.1	75-125			
Selenium	0.522	0.050	mg/L	0.500	ND	104	75-125			

Matrix Spike Dup (B343404-MSD1)		Source: 23F0351-01		Prepared: 06/15/23		Analyzed: 06/16/23				
Aluminum	0.483	0.050	mg/L	0.500	ND	96.5	75-125	1.30	20	
Antimony	0.543	0.050	mg/L	0.500	0.0115	106	75-125	1.17	20	
Arsenic	0.470	0.010	mg/L	0.500	ND	94.0	75-125	1.33	20	
Barium	0.590	0.050	mg/L	0.500	0.0812	102	75-125	0.0317	20	
Beryllium	0.493	0.0040	mg/L	0.500	ND	98.6	75-125	0.0306	20	
Calcium	13.2	0.50	mg/L	4.00	9.51	93.2	75-125	0.348	20	
Chromium	0.495	0.010	mg/L	0.500	ND	98.9	75-125	0.204	20	
Cobalt	0.505	0.010	mg/L	0.500	0.00435	100	75-125	0.575	20	
Copper	1.17	0.010	mg/L	1.00	0.114	106	75-125	0.242	20	
Iron	4.00	0.050	mg/L	4.00	0.0717	98.1	75-125	1.85	20	
Magnesium	9.50	0.050	mg/L	4.00	5.82	92.0	75-125	0.288	20	
Manganese	0.628	0.010	mg/L	0.500	0.144	96.8	75-125	0.117	20	
Nickel	0.528	0.010	mg/L	0.500	0.0319	99.2	75-125	0.641	20	
Potassium	12.1	2.0	mg/L	4.00	8.20	96.3	75-125	0.417	20	
Silver	0.509	0.010	mg/L	0.500	ND	102	75-125	0.567	20	
Sodium	69.9	2.0	mg/L	4.00	66.8	77.5	75-125	1.64	20	
Thallium	0.512	0.050	mg/L	0.500	ND	102	75-125	0.152	20	
Vanadium	0.508	0.010	mg/L	0.500	ND	102	75-125	0.358	20	
Zinc	1.03	0.010	mg/L	1.00	0.0406	99.2	75-125	0.444	20	

Matrix Spike Dup (B343404-MSD2)		Source: 23F0351-03		Prepared: 06/15/23		Analyzed: 06/16/23				
Aluminum	0.493	0.050	mg/L	0.500	ND	98.6	75-125	0.151	20	
Antimony	0.544	0.050	mg/L	0.500	0.0107	107	75-125	1.09	20	
Arsenic	0.473	0.010	mg/L	0.500	ND	94.7	75-125	0.212	20	
Barium	0.592	0.050	mg/L	0.500	0.0809	102	75-125	0.156	20	
Beryllium	0.497	0.0040	mg/L	0.500	ND	99.4	75-125	0.538	20	
Cadmium	0.453	0.0040	mg/L	0.500	ND	90.6	75-125	0.744	20	B
Calcium	13.4	0.50	mg/L	4.00	9.50	96.7	75-125	0.308	20	
Chromium	0.498	0.010	mg/L	0.500	ND	99.6	75-125	0.628	20	
Cobalt	0.502	0.010	mg/L	0.500	0.00436	99.6	75-125	0.934	20	
Copper	1.07	0.010	mg/L	1.00	0.00660	106	75-125	0.183	20	
Iron	4.03	0.050	mg/L	4.00	0.0688	99.1	75-125	0.841	20	
Magnesium	9.59	0.050	mg/L	4.00	5.81	94.3	75-125	0.281	20	
Manganese	0.632	0.010	mg/L	0.500	0.143	97.9	75-125	0.450	20	
Nickel	0.503	0.010	mg/L	0.500	ND	101	75-125	0.963	20	
Potassium	12.2	2.0	mg/L	4.00	8.20	99.0	75-125	0.256	20	
Silver	0.496	0.010	mg/L	0.500	ND	99.3	75-125	2.74	20	
Sodium	71.4	2.0	mg/L	4.00	66.8	113	75-125	0.0947	20	
Thallium	0.510	0.050	mg/L	0.500	ND	102	75-125	0.329	20	
Vanadium	0.511	0.010	mg/L	0.500	ND	102	75-125	0.120	20	
Zinc	1.02	0.010	mg/L	1.00	0.0176	100	75-125	0.822	20	

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QUALITY CONTROL
Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B343404 - SW-846 3005A
Matrix Spike Dup (B343404-MSD3)
Source: 23F0351-01

Prepared: 06/15/23 Analyzed: 06/17/23

Cadmium	0.491	0.0040	mg/L	0.500	ND	98.1	75-125	0.511	20	B
Lead	0.509	0.010	mg/L	0.500	ND	102	75-125	0.680	20	
Selenium	0.530	0.050	mg/L	0.500	ND	106	75-125	2.24	20	

Matrix Spike Dup (B343404-MSD4)
Source: 23F0351-03

Prepared: 06/15/23 Analyzed: 06/17/23

Cadmium	0.504	0.0040	mg/L	0.500	ND	101	75-125	4.13	20	B
Lead	0.510	0.010	mg/L	0.500	ND	102	75-125	2.91	20	
Selenium	0.528	0.050	mg/L	0.500	ND	106	75-125	1.10	20	

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342187 - SW-846 7196A										
Blank (B342187-BLK1)	Prepared & Analyzed: 06/03/23									
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B342187-BS1)	Prepared & Analyzed: 06/03/23									
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		102	80-120			
LCS Dup (B342187-BSD1)	Prepared & Analyzed: 06/03/23									
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		106	80-120	3.54	20	
Matrix Spike (B342187-MS1)	Source: 23F0351-03		Prepared & Analyzed: 06/03/23							
Hexavalent Chromium	0.096	0.0040	mg/L	0.100	ND	95.8	85-115			
Matrix Spike Dup (B342187-MSD1)	Source: 23F0351-03		Prepared & Analyzed: 06/03/23							
Hexavalent Chromium	0.098	0.0040	mg/L	0.100	ND	98.3	85-115	2.52	20	
Batch B342334 - SM 21-23 5310B										
Blank (B342334-BLK1)	Prepared & Analyzed: 06/06/23									
Total Organic Carbon	ND	1.0	mg/L							
LCS (B342334-BS1)	Prepared & Analyzed: 06/06/23									
Total Organic Carbon	10.7	1.0	mg/L	10.0		107	90-110			
LCS Dup (B342334-BSD1)	Prepared & Analyzed: 06/06/23									
Total Organic Carbon	9.71	1.0	mg/L	10.0		97.1	90-110	9.60	15	
MRL Check (B342334-MRL1)	Prepared & Analyzed: 06/06/23									
Total Organic Carbon	1.33	1.0	mg/L	1.00		133	0-200			
MRL Check (B342334-MRL2)	Prepared & Analyzed: 06/06/23									
Total Organic Carbon	1.26	1.0	mg/L	1.00		126	0-200			
Matrix Spike (B342334-MS1)	Source: 23F0351-01		Prepared & Analyzed: 06/06/23							
Total Organic Carbon	8.40	1.0	mg/L	5.00	1.94	129	* 85-115			MS-12, W-18
Matrix Spike Dup (B342334-MSD1)	Source: 23F0351-01		Prepared & Analyzed: 06/06/23							
Total Organic Carbon	8.46	1.0	mg/L	5.00	1.94	130	* 85-115	0.735	15	MS-12, W-18
Batch B342351 - SM21-23 2540D										
Blank (B342351-BLK1)	Prepared & Analyzed: 06/06/23									
Total Suspended Solids	ND	5.0	mg/L							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342351 - SM21-23 2540D										
LCS (B342351-BS1)				Prepared & Analyzed: 06/06/23						
Total Suspended Solids	178	5.0	mg/L	200		89.0	55.1-124			
Batch B342490 - SM21-23 2540D										
Blank (B342490-BLK1)				Prepared & Analyzed: 06/07/23						
Total Suspended Solids	ND	2.5	mg/L							
LCS (B342490-BS1)				Prepared & Analyzed: 06/07/23						
Total Suspended Solids	185	5.0	mg/L	200		92.5	55.1-124			
Batch B342492 - SM21-23 2540D										
Blank (B342492-BLK1)				Prepared & Analyzed: 06/07/23						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B342492-BS1)				Prepared & Analyzed: 06/07/23						
Total Suspended Solids	173	5.0	mg/L	200		86.5	55.1-124			
Batch B342517 - SM4500 CN C										
Blank (B342517-BLK1)				Prepared: 06/07/23 Analyzed: 06/08/23						
Cyanide	ND	0.010	mg/L							
LCS (B342517-BS1)				Prepared: 06/07/23 Analyzed: 06/08/23						
Cyanide	0.30	0.010	mg/L	0.314		95.1	65.1-117			
LCS Dup (B342517-BSD1)				Prepared: 06/07/23 Analyzed: 06/08/23						
Cyanide	0.30	0.010	mg/L	0.314		95.1	65.1-117	0.00	16.7	
Matrix Spike (B342517-MS1)				Source: 23F0351-03			Prepared: 06/07/23 Analyzed: 06/08/23			
Cyanide	0.33	0.010	mg/L	0.314	0.0088	103	58.2-134			
Matrix Spike Dup (B342517-MSD1)				Source: 23F0351-03			Prepared: 06/07/23 Analyzed: 06/08/23			
Cyanide	0.33	0.010	mg/L	0.314	0.0088	102	58.2-134	1.21	12.2	
Batch B343940 - SM4500 N Org B C										
Blank (B343940-BLK1)				Prepared: 06/21/23 Analyzed: 06/23/23						
Total Kjeldahl Nitrogen	ND	1.0	mg/L							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B343940 - SM4500 N Org B C										
LCS (B343940-BS1)				Prepared: 06/21/23 Analyzed: 06/23/23						
Total Kjeldahl Nitrogen	22	1.0	mg/L	20.0		109	84.7-115			
Matrix Spike (B343940-MS1)				Source: 23F0351-03 Prepared: 06/21/23 Analyzed: 06/23/23						
Total Kjeldahl Nitrogen	29	1.0	mg/L	20.0	7.8	106	64.9-123			
Matrix Spike Dup (B343940-MSD1)				Source: 23F0351-03 Prepared: 06/21/23 Analyzed: 06/23/23						
Total Kjeldahl Nitrogen	27	1.0	mg/L	20.0	7.8	95.2	64.9-123	8.00	20	
Batch B344094 - EPA 300.0										
Blank (B344094-BLK1)				Prepared & Analyzed: 06/22/23						
Chloride	ND	1.0	mg/L							
LCS (B344094-BS1)				Prepared & Analyzed: 06/22/23						
Chloride	9.6	1.0	mg/L	10.0		96.4	90-110			
LCS Dup (B344094-BSD1)				Prepared & Analyzed: 06/22/23						
Chloride	9.6	1.0	mg/L	10.0		96.0	90-110	0.381	20	
Matrix Spike (B344094-MS1)				Source: 23F0351-03 Prepared & Analyzed: 06/22/23						
Chloride	210	5.0	mg/L	50.0	110	196 *	80-120			MS-11
Matrix Spike Dup (B344094-MSD1)				Source: 23F0351-03 Prepared & Analyzed: 06/22/23						
Chloride	210	5.0	mg/L	50.0	110	196 *	80-120	0.106	20	MS-11
Batch B344095 - EPA 300.0										
Blank (B344095-BLK1)				Prepared & Analyzed: 06/22/23						
Sulfate	ND	1.0	mg/L							
LCS (B344095-BS1)				Prepared & Analyzed: 06/22/23						
Sulfate	9.7	1.0	mg/L	10.0		96.8	90-110			
LCS Dup (B344095-BSD1)				Prepared & Analyzed: 06/22/23						
Sulfate	9.7	1.0	mg/L	10.0		97.1	90-110	0.299	20	
Matrix Spike (B344095-MS1)				Source: 23F0351-03 Prepared & Analyzed: 06/22/23						
Sulfate	120	5.0	mg/L	50.0	17	198 *	80-120			MS-07
Matrix Spike Dup (B344095-MSD1)				Source: 23F0351-03 Prepared & Analyzed: 06/22/23						
Sulfate	120	5.0	mg/L	50.0	17	198 *	80-120	0.00905	20	MS-07

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B342349 - SM21-23 2540C
Blank (B342349-BLK1)

Prepared & Analyzed: 06/06/23

Total Dissolved Solids	ND	10	mg/L
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LCS (B342349-BS1)

Prepared & Analyzed: 06/06/23

Total Dissolved Solids	260	10	mg/L	293	87.0	67.3-113
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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
B-05	Data is not affected by elevated level in laboratory blank since sample(s) result is "Not Detected".
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-11	Matrix spike recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-12	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
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-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.
W-18	Test replicates show more than 10% difference between values.
Z-01	Samples re-extracted due to batch QC failures. Re-extracted samples were on a batch that exhibited similar QC failures. Original results reported.

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 300.0 in Water</i>	
Chloride	NC,NY,MA,VA,ME,NH,CT,RI
Sulfate	NC,NY,MA,VA,ME,NH,CT,RI
<i>SM 21-23 5310B in Water</i>	
Total Organic Carbon	CT,NH,NY,RI,NC,MA,VA
<i>SM19-23 4500-N Org B,C-NH3 C in Water</i>	
Total Kjeldahl Nitrogen	CT,MA,NH,NY,RI,NC,ME,VA
<i>SM21-23 2540C in Water</i>	
Total Dissolved Solids	CT,MA,NH,NY,RI,NC,ME,VA
<i>SM21-23 2540D in Water</i>	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
<i>SM21-23 4500 CN E in Water</i>	
Cyanide	CT,MA,NH,NY,RI,NC,ME,VA
<i>SW-846 6010D in Water</i>	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<i>SW-846 7196A in Water</i>	
Hexavalent Chromium	CT,NH,NY,NC,ME,VA
<i>SW-846 7470A in Water</i>	
Mercury	CT,NH,NY,NC,ME,VA
<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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
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
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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
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
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

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CERTIFICATIONS
Certified Analyses included in this Report

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

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
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
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

Chain of Custody / Analysis Report										Page 1 of 1					
RAMBOLL Contact: Michael Grifasi Address: 333 West Washington Street Syracuse, New York 13221-4873 Phone: (315) 956-6100 Email: michael.grifasi@ramboll.com Project: NYSDEC Claremont Polychemical Site Q2 Sys Samples Location: Old Bethpage, New York		Sampler(s): Pawel Mecinski Signature: <i>[Signature]</i>		Laboratory: Pace Analytical Services 39 Spruce St., East Longmeadow, MA 01028 Attn: RJ McCarthy Phone: 413-525-2332 Package Requirement: Level 2 and Level 3 EDD Format: EQuIS 4-file		Holding Time: 24 hr hold for Cr ⁶⁺ Field Filtered? (Y / N)		Analysis Required Preservatives: (see key at bottom)		Project Number: Job Number: Laboratory ID: Lab Sample ID:					
Sample Identification		Sample Location		Sample Type (See Key)		Sample Matrix (See Key)		Number of Containers		Grab [G] or Composite [C]		Field Filtered? (Y / N)		Preservatives: (see key at bottom)	
Unique Field Sample ID (sys_sample_code)				Date	Time										
1 ASF-CP-00-060223	ASF	6/2/2023	1045	N	WG	12	G	N	X	X	X	X	X	X	X
2 ASF-CP-01-060223	ASF	6/2/2023	1045	FD	WG	2	G	N	X	X	X	X	X	X	X
3 ASF-CP-MS-060223	ASF	6/2/2023	1045	MS	WG	2	G	N	X	X	X	X	X	X	X
4 ASF-CP-MSD-060223	ASF	6/2/2023	1045	MSD	WG	2	G	N	X	X	X	X	X	X	X
5 PD-CP-00-060223	PD	6/2/2023	1140	N	WG	19	G	N	X	X	X	X	X	X	X
6 PD-CP-01-060223	PD	6/2/2023	1140	FD	WG	18	G	N	X	X	X	X	X	X	X
7 PD-CP-MS-060223	PD	6/2/2023	1140	MS	WG	11	G	N	X	X	X	X	X	X	X
8 PD-CP-MSD-060223	PD	6/2/2023	1140	MSD	WG	11	G	N	X	X	X	X	X	X	X
9 RW3-CP-00-060223	RW3	6/2/2023	0845	N	WG	4	G	N	X	X	X	X	X	X	X
10 RW3-CP-01-060223	RW3	6/2/2023	0845	FD	WG	1	G	N	X	X	X	X	X	X	X
12 RW4-CP-00-060223	RW4	6/2/2023	0900	N	WG	4	G	N	X	X	X	X	X	X	X
13 RW5-CP-00-060223	RW5	6/2/2023	0920	N	WG	4	G	N	X	X	X	X	X	X	X
14 TB-060223		6/2/2023	1000	TB	WQ	2	G	N	X	X	X	X	X	X	X

Special Instructions: SHOOT HOLDING TIME FOR H2X CONTAMINATION.

Use the top boxes if the samples are to be shipped via courier (e.g., FedEx)				Condition:				Other comments or notes regarding condition of samples as received:	
Relinquished by: <i>[Signature]</i> Signature: GES, Inc.		Date: 6/2/23 Time: 1300		Courier Name: FedEx A/C Tracking #:		Date: 6/2/23 Time:		Custody Seals Intact? (If so, indicate the #, date, and time of the seal)	
Relinquished by: <i>[Signature]</i> Signature:		Date: Time:		Courier Name:		Date: Time:		Cooler Temperature:	
Courier Name: FedEx		Date: Time:		Tracking #:		Date: 6-3-23 Time: 0957			

Sal Type: N = Normal env. sample, FD = Field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank
 Sal Matrix: SE = Sediment, SO = Soil, WG = Groundwater, WQ = Water Quality, WS = Surface Water, WW = Waste Water, WP = Potable Water, AA = Ambient Air, Other (Specify):
 Sal Matrix Code: 0 = none, 1 = HCL, 2 = HNO₃, 3 = H₂SO₄, 4 = NaOH, 5 = MeOH, 6 = Na₂CO₃, 7 = NaHSO₄, 8 = Na₂PO₄, 9 = BenzalkoniumCl, 10 = other (H₂PO₄)

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FedEx® Tracking

**DELIVERED**

Saturday

6/3/2023 at 9:57 am

Signed for by: LOUIS

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6/3/2023 8:12 AM

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6/3/2023 8:54 AM

DELIVERED

East Longmeadow, MA US

Delivered

6/3/2023 at 9:57 AM

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39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.pacelabs.com

ENV-FRM-ELON-0001 V05__ Sample Receiving Checklist

Log In Back-Sheet

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

Client BamballProject Claremont Polychemical siteMCP/RCP Required N/ADeliverable Package Requirement N/ALocation Old Bethage, New YorkPWSID# (When Applicable) N/A

Arrival Method:

 Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐
Received By / Date / Time AAM / 6-3-23 / 0957~~Back-Sheet By / Date / Time AAM / 6-3-23 / 1046~~Temperature Method Temp. Gun # 5Temp ☒ < 6°C Actual Temperature 2.2 / 3.0 / 4.0Rush Samples: Yes / ☒ No NotifyShort Hold: ☒ Yes / No Notify Frank

Notes regarding Samples/COC outside of SOP:

PFAS 1633 was split from
work order

	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: N/A ☒		

Additional Container Notes

Sample	Soils Jars				Ambers				Plastics								VOA Vials					Other / Fill in			
	(Circle Amb/Clear)																								
	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		
1					2				1										2						
2					2																				
3					2																				
4					2														2						
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June 25, 2023

Kyle Murray

39 Spruce St
East Longmeadow, MA 01028

RE: Project: 23F0351
Pace Project No.: 70259476

Dear Kyle Murray:

Enclosed are the analytical results for sample(s) received by the laboratory on June 13, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Giovanna F. Deloca for
Matthew T. Nemeth
matthew.nemeth@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Jessica Hoffman, Con-Test
Raymond McCarthy, Pace Analytical Services - New
England



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 23F0351
Pace Project No.: 70259476

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 23F0351
Pace Project No.: 70259476

Sample: 23F0351-03		Lab ID: 70259476001	Collected: 06/02/23 11:40	Received: 06/13/23 10:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Melville						
Chloride	114	mg/L	4.0	2		06/22/23 12:44	16887-00-6	M1
Fluoride	<0.10	mg/L	0.10	1		06/21/23 21:20	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 23F0351
Pace Project No.: 70259476

Sample: 23F0351-04		Lab ID: 70259476002	Collected: 06/02/23 11:40	Received: 06/13/23 10:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Melville						
Fluoride	<0.10	mg/L	0.10	1		06/21/23 22:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 23F0351

Pace Project No.: 70259476

QC Batch:	309661	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Melville

Associated Lab Samples: 70259476001, 70259476002

METHOD BLANK: 1569945 Matrix: Water

Associated Lab Samples: 70259476001, 70259476002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	06/21/23 11:02	
Fluoride	mg/L	<0.10	0.10	06/21/23 11:02	

LABORATORY CONTROL SAMPLE: 1569946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.5	105	90-110	
Fluoride	mg/L	1	1.1	109	90-110	

MATRIX SPIKE SAMPLE: 1569947

Parameter	Units	70258844001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	17.1	10	26.7	95	90-110	
Fluoride	mg/L	<0.10	1	1.0	97	90-110	

MATRIX SPIKE SAMPLE: 1569949

Parameter	Units	70259476001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	114	10	121	63	90-110	M1
Fluoride	mg/L	<0.10	1	0.97	93	90-110	

SAMPLE DUPLICATE: 1569948

Parameter	Units	70258844001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	17.1	17.2	0	
Fluoride	mg/L	<0.10	<0.10		

SAMPLE DUPLICATE: 1569950

Parameter	Units	70259476001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	114	114	0	
Fluoride	mg/L	<0.10	<0.10		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 23F0351
Pace Project No.: 70259476

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 23F0351

Pace Project No.: 70259476

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70259476001	23F0351-03	EPA 300.0	309661		
70259476002	23F0351-04	EPA 300.0	309661		

REPORT OF LABORATORY ANALYSIS

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WO#: 70259476



70259476

CONTRACT CHAIN OF CUSTODY

Pace New England

23F0351

Table of Contents

SENDING LABORATORY:

Pace New England
39 Spruce Street
East Longmeadow, MA 01028
Phone: 413.525.2332
Fax: 413.525.6405
Project Manager: Kyle A. Murray

RECEIVING LABORATORY:

Pace Analytical Services - Long Island, NY
575 Broad Hollow Road
Melville, NY 11747
Phone : (516) 370-6000
Fax: -

Analysis	Sample Name	Due	Expires	Comments
Sample ID: 23F0351-03	PD-CP-00-060223	Water	Sampled: 06/02/23 11:40	CAT A MS/MSD
S-Fluoride by 300.0, Rev 2.1		06/19/23 17:00	06/30/23 11:40	
Containers Supplied:				
250 mL plastic Unpreservd 250 mL plastic Unpreservd 250 mL plastic Unpreservd				
Sample ID: 23F0351-04	PD-CP-01-060223	Water	Sampled: 06/02/23 11:40	CAT A
S-Fluoride by 300.0, Rev 2.1		06/19/23 17:00	06/30/23 11:40	
Containers Supplied:				
250 mL plastic Unpreservd				

Released By

Date

Received By

Date

Released By

Date

Received By

Date

Chain of Custody / Analysis Report		Page 1 of 1
RAMBOLL Contact: Michael Grifasi Address: 333 West Washington Street Syracuse, New York 13221-4873 Phone: (315) 956-6100 Email: michael.grifasi@ramboll.com Project: NYSDEC Claremont Polychemical Site Q2 Sys Samples Location: Old Bethpage, New York		Laboratory Use Only Project Number: Job Number: Laboratory ID: Lab Sample ID:
Sample Identification Unique Field Sample ID [sys_sample_code] Sample Location Date Time Sample Type (See Key) Sample Matrix (See Key)		Analysis Required Preservatives: (see key at bottom) 1 0 2 0 0 0 3 10 0 4 0 0 1633 PFAS 90128 Cyanide 100 D. Anions Cl, F, SO ₄ , CN 9060A: TOC 351.2: TKN 7195A: Hexavalent Chromium 25400: TSS 25700: TDS 7470A: TLA Metals - Mercury (60100 and level 2 and level 3) 82700: SVOCs 86200: VOCs - TBA Field Filtered? (Y / N) Grab [G] or Composite [C] Number of Containers
Holding Time: 24 hr hold for C ₂ Package Requirement: Level 2 and level 3 EDD Format: EQUIS 4-file		Condition: Other comments or notes regarding condition of samples as received: Custody Seals Intact? (if so, indicate the #, date, and time of the seal) Cooler Temperature:
Special Instructions: SHANT H ₂ O, AG Time for H ₂ O collection.		Use the top boxes if the samples are to be shipped via courier (e.g., FedEx) Relinquished by: GE5, Inc. Date: 5/12/23 Time: 13:00 Tracking #: 220C13.04 Received By: [Signature] Date: 6-3-23 Time: 09:57
Courier Name: FedEx Date: 5/12/23 Time: 13:00 Tracking #: 220C13.04 Received By: [Signature] Date: 6-3-23 Time: 09:57		Condition: Other comments or notes regarding condition of samples as received: Custody Seals Intact? (if so, indicate the #, date, and time of the seal) Cooler Temperature:

DC#_Title: ENV-FRM-MELV-0024 v4_SCUR
Effective Date: 5/23/2023

WO#: 70259476

PM: MN2

Due Date: 06/27/23

CLIENT: Pace-CON

Client Name: PAE-NEW ENGLAND Project: _____

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 7724 2210 8060

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No Temperature Blank Present: ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other Type of Ice: Wet Blue None

Thermometer Used: T1148 Correction Factor: -0.5 ☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 1.4 Cooler Temperature Corrected (°C): 1.1 Date/Time 5035A kits placed in freezer _____

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☒ No

Did samples originate from a foreign source including Hawaii and Puerto Rico? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MELV-0076) and include with SCUR/COC paperwork.

Date and Initials of person examining contents: 6/6/13/20

	COMMENTS:
Chain of Custody Present: ☒ Yes ☐ No	1.
Chain of Custody Filled Out: ☒ Yes ☐ No	2.
Chain of Custody Relinquished: ☒ Yes ☐ No	3.
Sampler Name & Signature on COC: ☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time: ☒ Yes ☐ No	5.
Short Hold Time Analysis (<72hr): ☐ Yes ☒ No	6.
Rush Turn Around Time Requested ☐ Yes ☒ No	7.
Sufficient Volume: (Triple volume provided for MS/MSD) ☒ Yes ☐ No	8.
Correct Containers Used: ☒ Yes ☐ No	9.
-Pace Containers Used: ☒ Yes ☐ No	10.
Containers Intact: ☒ Yes ☐ No	11.
Filtered-volume received for Dissolved tests: ☒ Yes ☐ No ☐ N/A	12.
Sample Labels match COC: ☒ Yes ☐ No	
-Includes date/time/ID/Analysis: Matrix: <u>SL</u> <u>WT</u> <u>OIL</u> <u>OTHER</u>	

Date and Initials of person checking preservation:

All containers needing preservation have been pH paper Lot #	13.	☐ HNO ₃ ☐ H ₂ SO ₄ ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with method recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH > 9 Sulfide, ☐ Yes ☐ No ☒ N/A)		Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).		
Per Method, VOA pH is checked after analysis		
Samples checked for dechlorination: ☐ Yes ☐ No ☒ N/A	14.	
KI starch test strips Lot #		
Residual chlorine strips Lot #		
SM 4500 CN samples checked for sul ☐ Yes ☐ No ☒ N/A	15.	
Lead Acetate Strips Lot #		
Headspace in VOA Vials (>6mm): ☐ Yes ☐ No ☒ N/A	16.	
Trip Blank Present: ☐ Yes ☐ No ☒ N/A	17.	
Trip Blank Custody Seals Present ☐ Yes ☐ No ☒ N/A		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

* PM (Project Manager) review is documented electronically in LIMS.

June 23, 2023

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

Project Location: Old Bethage, New York
Client Job Number:
Project Number: 130015
Laboratory Work Order Number: 23F0352

Enclosed are results of analyses for samples as received by the laboratory on June 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: 6/23/2023

PURCHASE ORDER NUMBER: 144165

PROJECT NUMBER: 130015

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0352

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 Bethage, New York

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
ASF-CP-00-060223	23F0352-01	Ground Water		Draft Method 1633	
ASF-CP-01-060223	23F0352-02	Ground Water		Draft Method 1633	
PD-CP-00-060223	23F0352-03	Ground Water		Draft Method 1633	
PD-CP-01-060223	23F0352-04	Ground Water		Draft Method 1633	

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.

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)**

23F0352-01[ASF-CP-00-060223], 23F0352-02[ASF-CP-01-060223], 23F0352-03[PD-CP-00-060223], 23F0352-04[PD-CP-01-060223]

Z-01

Analyte present in method blank >1/3 MRL.

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

B342305-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.



Lisa A. Worthington
Technical Representative

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0352-01

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)	24	3.7	ng/L	1	B-07	Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoropentanoic acid (PFPeA)	20	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorohexanoic acid (PFHxA)	23	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoroheptanoic acid (PFHpA)	12	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorooctanoic acid (PFOA)	35	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorononanoic acid (PFNA)	28	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorodecanoic acid (PFDA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorobutanesulfonic acid (PFBS)	4.1	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoropentanesulfonic acid (PFPeS)	2.7	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorohexanesulfonic acid (PFHxS)	8.2	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorooctanesulfonic acid (PFOS)	15	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
N-EtFOSAA (NEtFOSAA)	1.5	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.3	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
11Cl-PF3OUDS (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0352-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:10	RRB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	92.5	10-130						6/20/23 14:10	
13C5-PFPeA	87.5	35-150						6/20/23 14:10	
13C5-PFHxA	92.3	55-150						6/20/23 14:10	
13C4-PFHpA	87.2	55-150						6/20/23 14:10	
13C8-PFOA	88.6	60-140						6/20/23 14:10	
13C9-PFNA	90.2	55-140						6/20/23 14:10	
13C6-PFDA	85.5	50-140						6/20/23 14:10	
13C7-PFUnA	78.4	30-140						6/20/23 14:10	
13C2-PFDoA	69.0	10-150						6/20/23 14:10	
13C2-PFTeDA	62.0	10-130						6/20/23 14:10	
13C3-PFBS	92.4	55-150						6/20/23 14:10	
13C3-PFHxS	88.8	55-150						6/20/23 14:10	
13C8-PFOS	85.3	45-140						6/20/23 14:10	
13C2-4:2FTS	115	60-200						6/20/23 14:10	
13C2-6:2FTS	96.1	60-200						6/20/23 14:10	
13C2-8:2FTS	80.9	50-200						6/20/23 14:10	
13C8-PFOSA	67.5	30-130						6/20/23 14:10	
D3-NMeFOSA	56.3	15-130						6/20/23 14:10	
D5-NEtFOSA	56.5	10-130						6/20/23 14:10	
D3-NMeFOSAA	67.6	45-200						6/20/23 14:10	
D5-NEtFOSAA	64.2	10-200						6/20/23 14:10	
D7-NMeFOSE	53.3	10-150						6/20/23 14:10	
D9-NEtFOSE	48.3	10-150						6/20/23 14:10	
13C3-HFPO-DA	93.6	25-160						6/20/23 14:10	

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: ASF-CP-00-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0352-01

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	6/5/23	6/5/23 14:11	LL

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: ASF-CP-01-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0352-02

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)	24	3.7	ng/L	1	B-07	Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoropentanoic acid (PFPeA)	19	1.8	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorohexanoic acid (PFHxA)	23	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoroheptanoic acid (PFHpA)	12	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorooctanoic acid (PFOA)	35	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorononanoic acid (PFNA)	28	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorodecanoic acid (PFDA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorobutanesulfonic acid (PFBS)	3.8	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoropentanesulfonic acid (PFPeS)	2.5	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorohexanesulfonic acid (PFHxS)	8.5	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorooctanesulfonic acid (PFOS)	15	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluorooctanesulfonamide (PFOSA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
N-EtFOSAA (NEtFOSAA)	1.7	0.92	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.2	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.2	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
11Cl-PF3OUDS (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.2	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: ASF-CP-01-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0352-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L	1		Draft Method 1633	6/15/23	6/20/23 14:57	RRB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	92.6	10-130						6/20/23 14:57	
13C5-PFPeA	88.4	35-150						6/20/23 14:57	
13C5-PFHxA	89.9	55-150						6/20/23 14:57	
13C4-PFHpA	86.3	55-150						6/20/23 14:57	
13C8-PFOA	90.3	60-140						6/20/23 14:57	
13C9-PFNA	92.4	55-140						6/20/23 14:57	
13C6-PFDA	81.6	50-140						6/20/23 14:57	
13C7-PFUnA	73.5	30-140						6/20/23 14:57	
13C2-PFDoA	64.9	10-150						6/20/23 14:57	
13C2-PFTeDA	58.6	10-130						6/20/23 14:57	
13C3-PFBS	93.1	55-150						6/20/23 14:57	
13C3-PFHxS	87.7	55-150						6/20/23 14:57	
13C8-PFOS	87.4	45-140						6/20/23 14:57	
13C2-4:2FTS	117	60-200						6/20/23 14:57	
13C2-6:2FTS	96.7	60-200						6/20/23 14:57	
13C2-8:2FTS	81.8	50-200						6/20/23 14:57	
13C8-PFOSA	69.9	30-130						6/20/23 14:57	
D3-NMeFOSA	59.2	15-130						6/20/23 14:57	
D5-NEtFOSA	55.1	10-130						6/20/23 14:57	
D3-NMeFOSAA	69.9	45-200						6/20/23 14:57	
D5-NEtFOSAA	65.0	10-200						6/20/23 14:57	
D7-NMeFOSE	49.8	10-150						6/20/23 14:57	
D9-NEtFOSE	42.9	10-150						6/20/23 14:57	
13C3-HFPO-DA	92.3	25-160						6/20/23 14:57	

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: ASF-CP-01-060223

Sampled: 6/2/2023 10:45

Sample ID: 23F0352-02

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	6/5/23	6/5/23 14:11	LL

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0352-03

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)	25	3.7	ng/L	1	B-07	Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoropentanoic acid (PFPeA)	20	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorohexanoic acid (PFHxA)	22	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoroheptanoic acid (PFHpA)	12	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorooctanoic acid (PFOA)	35	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorononanoic acid (PFNA)	28	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorodecanoic acid (PFDA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorobutanesulfonic acid (PFBS)	3.6	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoropentanesulfonic acid (PFPeS)	2.5	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorohexanesulfonic acid (PFHxS)	8.0	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorooctanesulfonic acid (PFOS)	15	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluorooctanesulfonamide (PFOSA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
N-EtFOSAA (NEtFOSAA)	1.6	0.94	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.4	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
11Cl-PF3OUDS (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
3-Perfluoroheptyl propanoic acid (FHPrPA) (7:3FTCA)	ND	47	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0352-03

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	6/15/23	6/20/23 15:13	RRB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:13	RRB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	63.1	10-130						6/20/23 15:13	
13C5-PFPeA	90.0	35-150						6/20/23 15:13	
13C5-PFHxA	93.9	55-150						6/20/23 15:13	
13C4-PFHpA	90.0	55-150						6/20/23 15:13	
13C8-PFOA	90.0	60-140						6/20/23 15:13	
13C9-PFNA	95.3	55-140						6/20/23 15:13	
13C6-PFDA	95.2	50-140						6/20/23 15:13	
13C7-PFUnA	92.1	30-140						6/20/23 15:13	
13C2-PFDoA	81.0	10-150						6/20/23 15:13	
13C2-PFTeDA	77.8	10-130						6/20/23 15:13	
13C3-PFBS	94.2	55-150						6/20/23 15:13	
13C3-PFHxS	91.9	55-150						6/20/23 15:13	
13C8-PFOS	93.6	45-140						6/20/23 15:13	
13C2-4:2FTS	119	60-200						6/20/23 15:13	
13C2-6:2FTS	102	60-200						6/20/23 15:13	
13C2-8:2FTS	89.6	50-200						6/20/23 15:13	
13C8-PFOSA	84.8	30-130						6/20/23 15:13	
D3-NMeFOSA	67.6	15-130						6/20/23 15:13	
D5-NEtFOSA	67.7	10-130						6/20/23 15:13	
D3-NMeFOSAA	84.2	45-200						6/20/23 15:13	
D5-NEtFOSAA	82.2	10-200						6/20/23 15:13	
D7-NMeFOSE	64.5	10-150						6/20/23 15:13	
D9-NEtFOSE	60.7	10-150						6/20/23 15:13	
13C3-HFPO-DA	93.1	25-160						6/20/23 15:13	

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: PD-CP-00-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0352-03

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	6/5/23	6/5/23 14:11	LL

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0352-04

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)	25	3.7	ng/L	1	B-07	Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoropentanoic acid (PFPeA)	19	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorohexanoic acid (PFHxA)	23	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoroheptanoic acid (PFHpA)	12	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorooctanoic acid (PFOA)	35	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorononanoic acid (PFNA)	28	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorodecanoic acid (PFDA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoroundecanoic acid (PFUnA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorododecanoic acid (PFDoA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorobutanesulfonic acid (PFBS)	3.5	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoropentanesulfonic acid (PFPeS)	2.5	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorohexanesulfonic acid (PFHxS)	8.3	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorooctanesulfonic acid (PFOS)	15	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorononanesulfonic acid (PFNS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
N-MeFOSAA (NMeFOSAA)	ND	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
N-EtFOSAA (NEtFOSAA)	1.8	0.93	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.3	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
9Cl-PF3ONS (F53B Minor)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
11Cl-PF3OUDS (F53B Major)	ND	3.7	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	46	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0352-04

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	6/15/23	6/20/23 15:28	RRB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L	1		Draft Method 1633	6/15/23	6/20/23 15:28	RRB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C4-PFBA	75.0	10-130						6/20/23 15:28	
13C5-PFPeA	87.8	35-150						6/20/23 15:28	
13C5-PFHxA	92.4	55-150						6/20/23 15:28	
13C4-PFHpA	88.7	55-150						6/20/23 15:28	
13C8-PFOA	87.7	60-140						6/20/23 15:28	
13C9-PFNA	91.2	55-140						6/20/23 15:28	
13C6-PFDA	89.9	50-140						6/20/23 15:28	
13C7-PFUnA	83.6	30-140						6/20/23 15:28	
13C2-PFDoA	78.2	10-150						6/20/23 15:28	
13C2-PFTeDA	75.2	10-130						6/20/23 15:28	
13C3-PFBS	90.0	55-150						6/20/23 15:28	
13C3-PFHxS	85.3	55-150						6/20/23 15:28	
13C8-PFOS	86.3	45-140						6/20/23 15:28	
13C2-4:2FTS	114	60-200						6/20/23 15:28	
13C2-6:2FTS	98.2	60-200						6/20/23 15:28	
13C2-8:2FTS	86.2	50-200						6/20/23 15:28	
13C8-PFOSA	76.3	30-130						6/20/23 15:28	
D3-NMeFOSA	63.1	15-130						6/20/23 15:28	
D5-NEtFOSA	61.5	10-130						6/20/23 15:28	
D3-NMeFOSAA	77.8	45-200						6/20/23 15:28	
D5-NEtFOSAA	79.7	10-200						6/20/23 15:28	
D7-NMeFOSE	62.2	10-150						6/20/23 15:28	
D9-NEtFOSE	59.4	10-150						6/20/23 15:28	
13C3-HFPO-DA	93.4	25-160						6/20/23 15:28	

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

Project Location: Old Bethage, New York

Sample Description:

Work Order: 23F0352

Date Received: 6/3/2023

Field Sample #: PD-CP-01-060223

Sampled: 6/2/2023 11:40

Sample ID: 23F0352-04

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	6/5/23	6/5/23 14:11	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0352-01 [ASF-CP-00-060223]	B342207	50.0	06/05/23
23F0352-02 [ASF-CP-01-060223]	B342207	50.0	06/05/23
23F0352-03 [PD-CP-00-060223]	B342207	50.0	06/05/23
23F0352-04 [PD-CP-01-060223]	B342207	50.0	06/05/23

Prep Method:Draft Method 1633**Analytical Method:Draft Method 1633****Leachates were extracted on 6/5/2023 per NO PREP in Batch B342207**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0352-01 [ASF-CP-00-060223]	B342305	540	5.00	06/15/23
23F0352-02 [ASF-CP-01-060223]	B342305	541	5.00	06/15/23
23F0352-03 [PD-CP-00-060223]	B342305	534	5.00	06/15/23
23F0352-04 [PD-CP-01-060223]	B342305	540	5.00	06/15/23

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 B342305 - Draft Method 1633										
Blank (B342305-BLK1)										
Prepared: 06/15/23 Analyzed: 06/20/23										
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							Z-01
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.98	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.98	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.98	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.98	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.98	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.98	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.98	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.98	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.98	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.98	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.98	ng/L							
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.8	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L							
4,8-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	9.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA) (5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	94.1		ng/L	98.1		95.9	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 B342305 - Draft Method 1633
Blank (B342305-BLK1)

Prepared: 06/15/23 Analyzed: 06/20/23

Surrogate: 13C5-PFPeA	47.1		ng/L	49.1		96.0	35-150			
Surrogate: 13C5-PFHxA	23.6		ng/L	24.5		96.1	55-150			
Surrogate: 13C4-PFHpA	23.4		ng/L	24.5		95.2	55-150			
Surrogate: 13C8-PFOA	23.1		ng/L	24.5		94.2	60-140			
Surrogate: 13C9-PFNA	11.4		ng/L	12.3		92.6	55-140			
Surrogate: 13C6-PFDA	11.3		ng/L	12.3		92.3	50-140			
Surrogate: 13C7-PFUnA	10.8		ng/L	12.3		87.7	30-140			
Surrogate: 13C2-PFDoA	10.2		ng/L	12.3		83.2	10-150			
Surrogate: 13C2-PFTeDA	10.5		ng/L	12.3		86.0	10-130			
Surrogate: 13C3-PFBS	24.2		ng/L	24.5		98.8	55-150			
Surrogate: 13C3-PFHxS	23.0		ng/L	24.5		93.7	55-150			
Surrogate: 13C8-PFOS	22.1		ng/L	24.5		90.3	45-140			
Surrogate: 13C2-4:2FTS	35.0		ng/L	49.1		71.4	60-200			
Surrogate: 13C2-6:2FTS	37.2		ng/L	49.1		75.9	60-200			
Surrogate: 13C2-8:2FTS	36.4		ng/L	49.1		74.2	50-200			
Surrogate: 13C8-PFOA	20.5		ng/L	24.5		83.7	30-130			
Surrogate: D3-NMeFOSA	18.0		ng/L	24.5		73.4	15-130			
Surrogate: D5-NEtFOSA	19.2		ng/L	24.5		78.2	10-130			
Surrogate: D3-NMeFOSAA	40.4		ng/L	49.1		82.4	45-200			
Surrogate: D5-NEtFOSAA	39.3		ng/L	49.1		80.0	10-200			
Surrogate: D7-NMeFOSE	196		ng/L	245		79.8	10-150			
Surrogate: D9-NEtFOSE	189		ng/L	245		77.2	10-150			
Surrogate: 13C3-HFPO-DA	97.8		ng/L	98.1		99.6	25-160			

LCS (B342305-BS1)

Prepared: 06/15/23 Analyzed: 06/20/23

Perfluorobutanoic acid (PFBA)	99.5	3.9	ng/L	93.6		106	58-148			
Perfluoropentanoic acid (PFPeA)	49.2	2.0	ng/L	46.8		105	54-152			
Perfluorohexanoic acid (PFHxA)	25.1	0.98	ng/L	23.4		107	55-152			
Perfluoroheptanoic acid (PFHpA)	24.3	0.98	ng/L	23.4		104	54-154			
Perfluorooctanoic acid (PFOA)	24.6	0.98	ng/L	23.4		105	52-161			
Perfluorononanoic acid (PFNA)	24.4	0.98	ng/L	23.4		104	59-149			
Perfluorodecanoic acid (PFDA)	24.5	0.98	ng/L	23.4		105	52-147			
Perfluoroundecanoic acid (PFUnA)	24.7	0.98	ng/L	23.4		106	48-159			
Perfluorododecanoic acid (PFDoA)	24.4	0.98	ng/L	23.4		104	64-142			
Perfluorotridecanoic acid (PFTTrDA)	25.3	0.98	ng/L	23.4		108	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.2	0.98	ng/L	23.4		108	47-161			
Perfluorobutanesulfonic acid (PFBS)	21.5	0.98	ng/L	20.8		103	62-144			
Perfluoropentanesulfonic acid (PFPeS)	24.0	0.98	ng/L	22.0		109	59-151			
Perfluorohexanesulfonic acid (PFHxS)	22.1	0.98	ng/L	21.4		103	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.3	0.98	ng/L	22.3		105	55-152			
Perfluorooctanesulfonic acid (PFOS)	21.6	0.98	ng/L	21.7		99.6	58-149			
Perfluorononanesulfonic acid (PFNS)	22.9	0.98	ng/L	22.5		102	52-148			
Perfluorodecanesulfonic acid (PFDS)	21.5	0.98	ng/L	22.6		95.4	51-147			
Perfluorododecanesulfonic acid (PFDoS)	21.8	0.98	ng/L	22.7		96.1	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	95.2	3.9	ng/L	87.8		109	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	94.6	3.9	ng/L	88.9		106	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	98.9	3.9	ng/L	90.1		110	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.6	0.98	ng/L	23.4		105	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	23.1	0.98	ng/L	23.4		98.9	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 B342305 - Draft Method 1633
LCS (B342305-BS1)

Prepared: 06/15/23 Analyzed: 06/20/23

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	22.6	0.98	ng/L	23.4		96.7	65-139			
N-MeFOSAA (NMeFOSAA)	24.0	0.98	ng/L	23.4		102	58-144			
N-EtFOSAA (NEtFOSAA)	24.1	0.98	ng/L	23.4		103	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	243	9.8	ng/L	234		104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	238	9.8	ng/L	234		102	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	101	3.9	ng/L	93.6		108	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	90.6	3.9	ng/L	88.3		103	68-146			
9Cl-PF3ONS (F53B Minor)	94.0	3.9	ng/L	87.8		107	56-156			
11Cl-PF3OUDS (F53B Major)	95.1	3.9	ng/L	88.3		108	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	236	9.8	ng/L	234		101	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1220	49	ng/L	1170		104	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1170	49	ng/L	1170		100	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	45.1	2.0	ng/L	41.7		108	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	46.5	2.0	ng/L	46.8		99.4	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	46.8	2.0	ng/L	46.8		100	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	53.8	2.0	ng/L	46.8		115	48-161			
Surrogate: 13C4-PFBA	90.4		ng/L	97.5		92.7	10-130			
Surrogate: 13C5-PFPeA	45.6		ng/L	48.8		93.5	35-150			
Surrogate: 13C5-PFHxA	22.3		ng/L	24.4		91.5	55-150			
Surrogate: 13C4-PFHpA	22.8		ng/L	24.4		93.4	55-150			
Surrogate: 13C8-PFOA	22.1		ng/L	24.4		90.7	60-140			
Surrogate: 13C9-PFNA	11.4		ng/L	12.2		93.8	55-140			
Surrogate: 13C6-PFDA	11.5		ng/L	12.2		94.4	50-140			
Surrogate: 13C7-PFUnA	11.2		ng/L	12.2		91.7	30-140			
Surrogate: 13C2-PFDoA	10.8		ng/L	12.2		88.8	10-150			
Surrogate: 13C2-PFTeDA	10.5		ng/L	12.2		85.9	10-130			
Surrogate: 13C3-PFBS	22.8		ng/L	24.4		93.5	55-150			
Surrogate: 13C3-PFHxS	22.0		ng/L	24.4		90.2	55-150			
Surrogate: 13C8-PFOS	22.0		ng/L	24.4		90.2	45-140			
Surrogate: 13C2-4:2FTS	41.8		ng/L	48.8		85.6	60-200			
Surrogate: 13C2-6:2FTS	43.2		ng/L	48.8		88.5	60-200			
Surrogate: 13C2-8:2FTS	42.1		ng/L	48.8		86.4	50-200			
Surrogate: 13C8-PFOSA	19.9		ng/L	24.4		81.6	30-130			
Surrogate: D3-NMeFOSA	18.1		ng/L	24.4		74.4	15-130			
Surrogate: D5-NEtFOSA	19.4		ng/L	24.4		79.5	10-130			
Surrogate: D3-NMeFOSAA	42.3		ng/L	48.8		86.7	45-200			
Surrogate: D5-NEtFOSAA	42.4		ng/L	48.8		87.0	10-200			
Surrogate: D7-NMeFOSE	189		ng/L	244		77.6	10-150			
Surrogate: D9-NEtFOSE	188		ng/L	244		77.1	10-150			
Surrogate: 13C3-HFPO-DA	91.1		ng/L	97.5		93.4	25-160			

MRL Check (B342305-MRL1)

Prepared: 06/15/23 Analyzed: 06/20/23

Perfluorobutanoic acid (PFBA)	9.69	3.9	ng/L	7.84		124	44-157			
Perfluoropentanoic acid (PFPeA)	4.52	2.0	ng/L	3.92		115	57-148			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B342305 - Draft Method 1633
MRL Check (B342305-MRL1)

Prepared: 06/15/23 Analyzed: 06/20/23

Perfluorohexanoic acid (PFHxA)	2.29	0.98	ng/L	1.96		117	62-149			
Perfluoroheptanoic acid (PFHpA)	2.19	0.98	ng/L	1.96		112	56-150			
Perfluorooctanoic acid (PFOA)	2.19	0.98	ng/L	1.96		112	57-161			
Perfluorononanoic acid (PFNA)	2.19	0.98	ng/L	1.96		112	53-157			
Perfluorodecanoic acid (PFDA)	2.12	0.98	ng/L	1.96		108	43-158			
Perfluoroundecanoic acid (PFUnA)	2.09	0.98	ng/L	1.96		107	50-155			
Perfluorododecanoic acid (PFDoA)	2.19	0.98	ng/L	1.96		112	60-141			
Perfluorotridecanoic acid (PFTrDA)	2.23	0.98	ng/L	1.96		114	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.17	0.98	ng/L	1.96		111	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.95	0.98	ng/L	1.74		112	63-145			
Perfluoropentanesulfonic acid (PFPeS)	2.19	0.98	ng/L	1.84		119	58-144			
Perfluorohexanesulfonic acid (PFHxS)	2.03	0.98	ng/L	1.79		113	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.97	0.98	ng/L	1.87		105	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.22	0.98	ng/L	1.82		122	43-162			
Perfluorononanesulfonic acid (PFNS)	2.05	0.98	ng/L	1.89		108	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.91	0.98	ng/L	1.89		101	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.93	0.98	ng/L	1.90		102	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.27	3.9	ng/L	7.35		112	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	8.31	3.9	ng/L	7.45		112	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.46	3.9	ng/L	7.55		112	46-165			
Perfluorooctanesulfonamide (PFOSA)	2.15	0.98	ng/L	1.96		110	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	2.28	0.98	ng/L	1.96		116	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.21	0.98	ng/L	1.96		113	49-156			
N-MeFOSAA (NMeFOSAA)	1.98	0.98	ng/L	1.96		101	32-160			
N-EtFOSAA (NEtFOSAA)	2.14	0.98	ng/L	1.96		109	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	22.3	9.8	ng/L	19.6		114	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	22.6	9.8	ng/L	19.6		116	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.61	3.9	ng/L	7.84		97.1	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.03	3.9	ng/L	7.40		95.0	61-148			
9Cl-PF3ONS (F53B Minor)	7.04	3.9	ng/L	7.35		95.8	44-167			
11Cl-PF3OUDS (F53B Major)	6.93	3.9	ng/L	7.40		93.7	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	17.3	9.8	ng/L	19.6		88.0	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	87.0	49	ng/L	98.0		88.8	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	81.5	49	ng/L	98.0		83.2	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	2.81	2.0	ng/L	3.49		80.7	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.22	2.0	ng/L	3.92		82.1	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.07	2.0	ng/L	3.92		78.3	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.30	2.0	ng/L	3.92		84.2	47-160			
Surrogate: 13C4-PFBA	88.0		ng/L	98.0		89.8	10-130			
Surrogate: 13C5-PFPeA	44.2		ng/L	49.0		90.1	35-150			
Surrogate: 13C5-PFHxA	22.3		ng/L	24.5		90.9	55-150			

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 B342305 - Draft Method 1633
MRL Check (B342305-MRL1)

Prepared: 06/15/23 Analyzed: 06/20/23

Surrogate: 13C4-PFHpA	21.5		ng/L	24.5		87.8	55-150			
Surrogate: 13C8-PFOA	21.0		ng/L	24.5		85.5	60-140			
Surrogate: 13C9-PFNA	10.5		ng/L	12.2		86.0	55-140			
Surrogate: 13C6-PFDA	10.6		ng/L	12.2		86.2	50-140			
Surrogate: 13C7-PFUnA	10.2		ng/L	12.2		83.4	30-140			
Surrogate: 13C2-PFDoA	9.46		ng/L	12.2		77.2	10-150			
Surrogate: 13C2-PFTeDA	9.75		ng/L	12.2		79.6	10-130			
Surrogate: 13C3-PFBS	22.4		ng/L	24.5		91.3	55-150			
Surrogate: 13C3-PFHxS	21.5		ng/L	24.5		87.8	55-150			
Surrogate: 13C8-PFOS	21.9		ng/L	24.5		89.4	45-140			
Surrogate: 13C2-4:2FTS	37.2		ng/L	49.0		75.9	60-200			
Surrogate: 13C2-6:2FTS	38.0		ng/L	49.0		77.7	60-200			
Surrogate: 13C2-8:2FTS	37.4		ng/L	49.0		76.3	50-200			
Surrogate: 13C8-PFOSA	19.9		ng/L	24.5		81.2	30-130			
Surrogate: D3-NMeFOSA	17.8		ng/L	24.5		72.5	15-130			
Surrogate: D5-NEtFOSA	18.6		ng/L	24.5		76.0	10-130			
Surrogate: D3-NMeFOSAA	41.9		ng/L	49.0		85.5	45-200			
Surrogate: D5-NEtFOSAA	40.9		ng/L	49.0		83.5	10-200			
Surrogate: D7-NMeFOSE	184		ng/L	245		75.0	10-150			
Surrogate: D9-NEtFOSE	182		ng/L	245		74.3	10-150			
Surrogate: 13C3-HFPO-DA	91.1		ng/L	98.0		93.0	25-160			

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B342207 - Draft Method 1633
Blank (B342207-BLK1)

Prepared & Analyzed: 06/05/23

Total Suspended Solids	ND	5.0	mg/L
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LCS (B342207-BS1)

Prepared & Analyzed: 06/05/23

Total Suspended Solids	196	5.0	mg/L	200	98.0	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 present in method blank >1/3 MRL.

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

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

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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	09/6/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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ENV-FRM-ELON-0001 V05 Sample Receiving Checklist

Log In Back-Sheet

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

Client RambollProject Claremont Polychemical siteMCP/RCP Required N/ADeliverable Package Requirement N/ALocation Old Bethpage, New YorkPWSID# (When Applicable) N/A

Arrival Method:

 Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐
Received By / Date / Time AAM / 6-3-23 / 0957~~Back Sheet By / Date / Time~~ AAM / 6-3-23 / 1046Temperature/Method Temp. Gun # 5Temp ☒ < 6° C Actual Temperature 2.2 / 3.0 / 4.0Rush Samples: Yes ☐ No ☒ NotifyShort Hold: Yes ☐ No ☒ Notify

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: N/A ☒ ☐Notes regarding Samples/COC outside of SOP:~~PFAS~~ AAM PFAS 1633 was

split from work order

Additional Container Notes

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					
1					Unpreserved	Sulfuric	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	NaOH/Zinc										
2					HCL	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved											
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