

Intended for

New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233

Document type

Report

Date

December 2024

# MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE ACTIVITIES (NOVEMBER 2024)

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



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

Project no. **1087815.1940101703** 

Recipient New York State Department of Environmental Conservation

Document type **Report** Version [1]

Date December 11, 2024

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#### LIST OF ACRONYMS AND ABBRIEVIATIONS

AS Air Stripper
A/V Air and Vacuum
ASF Air Stripper feed

BNA Base Neutral & Acid Extractables

CPC Claremont Polychemical CSE Confined Space Entry

DOSR Daily Operations Summary Report

EE Electrical Engineer

GAC Granular Activated Carbon

GES Groundwater & Environmental Services, Inc.

GPM Gallons Per Minute

GWTS Groundwater extraction, treatment, and reinjection system

HDR Henningson, Durham & Richardson Architecture and Engineering, P.C.

HMI Human Machine Interface

HVAC Heating, Ventilation, and Air Conditioning

MTBA Tert-Butyl-Methyl ether

MW Monitoring Well

NYSDEC New York State Department of Environmental Conservation

O&M Operation and Maintenance

OU4 Operable Unit 4
OU5 Operable Unit 5
PD Plant Discharge

PDB Passive Diffusion Bag

PFAS Per- and polyfluoroalkyl substances

PFOS Perfluorooctanesulfonic acid
PFOA Perfluorooctanoic acid
PID Photoionization Detector
PFF Pressure Filter Feed

PLC Programmable Logic Controller

ppm parts per million PW Process Water

Ramboll Americas Engineering Solutions, Inc.

RW Recovery Well, Process Well

SPEDES State Pollutant Discharge Elimination System

SSHP Site Safety and Health Plan

SU Standard pH Units

SVOCs Semi-Volatile Organic Compounds

TBA Tert-butyl alcohol
TDS Total Dissolved Solids
TKN Total Kjeldahl Nitrogen
TOC Total Organic Carbon

TOGS Technical and Operational Guidance Series

TSS Total Suspended Solids

USEPA United States Environmental Protection Agency

US Water 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 November 2024. In addition, former Operable Unit (OU4) was inspected once per month to ensure security and building code compliance. For this report every time plant is mentioned it refers to OU5. OU4 will be referred to as such whenever discussed. This report covers the O&M activities for the system during the period defined as beginning at approximately 0800 hours, November 1, 2024, through approximately 0800 hours, December 2, 2024. O&M conducted during this reporting period was guided by the site O&M Manual.

The GWTS – treatment plant, grounds, and well systems - were maintained for the 31 days in this reporting period during which the treatment system experienced 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. The RW-4 and RW-5 recovery wells were functional and fully operational during the month of November. RW-3 pump motor controls malfunctioned between November 1 through November 17, and were subsequently replaced.

#### 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 (November 24 Database.xlsx)
- NYSDEC Log-in Sheet Entry/Exit Log with COVID-19 Acknowledgement

#### 1.2 Summary of Maintenance Activities

The operation and maintenance of the treatment system, facility, and associated equipment is performed in accordance with the site O&M Manual. These tasks and inspections incorporate the equipment manufacturers' recommendations, operations experience, and good engineering and maintenance practices. A detailed accounting of the November activities is further provided in the plant operator's daily logbook.

Maintenance and project activities undertaken during the November period included:

- Routine and general maintenance tasks were conducted at the plant, on the grounds, and in the well fields.
- Single Air Stripper Feed (ASF) pumps were placed into hand mode and frequently switched to cycle their activity.
- The monthly process equipment tests were conducted.
- The Operable Unit 4 (OU4) comprehensive inspections were completed.
- The monthly Process/Recovery Well (RW) system inspection was completed.
- · Basin 33 was inspected.
- Basin 1 was inspected.
- The ASF pumps were lubricated, and the seals tightened.
- The OU5 comprehensive inspections were completed.
- The PFF pumps were lubricated, and the seals tightened.
- The fire alarm system components were inspected.
- The monthly electrical device survey was completed.
- The SUNY wellfield was inspected.
- The motor controls at RW-3 pump house were replaced.

#### 1.3 Maintenance Logs

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

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

# 2. TECHNICAL SUPPORT ACTIVITIES

#### 2.1 GES/Ramboll Personnel

• GES maintained the system throughout the period.

# 2.2 NYSDEC Personnel, Sub - contractors, and Other Visitors

• No visitors during November reporting period.

#### 2.3 Deliveries

• No deliveries during November reporting period.

## 3. HEALTH AND SAFETY

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

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

# 4. PLANNED ACTIVITIES AND SCHEDULES

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

Upcoming tasks include:

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

# 5. MONITORING WELL WATER ELEVATIONS

The monitoring well system's groundwater elevation data table was updated after the October 2024 quarterly GW elevation recording task. This database is available for review. The next set of synoptic water level measurements will be scheduled for February 2025 and will be conducted by Ramboll.

# 6. TREATMENT SYSTEM FLOWS

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

During the month of November 2024, recovery wells RW-4 through RW-5 operated normally. RW-3 pump was shut down between November 1 through 18, 2024 due to malfunctioning motor starter. A replacement unit was taken from RW-2 and installed at RW-3 control panel on November 18, 2024. The pump has been fully operational since then.

Both RW-1 and RW-2 recovery pumps are currently inoperable as both motor control starters from these pumps were installed at RW-5, RW-3, respectively, as a temporary repair measure.

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

The total volume of treated water discharged from ~0800 hours November 1, 2024 to ~0800 hours December 2, 2024 was approximately 29,183,000 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 November 2024 are provided in **Table 3**, both following the text of this report.

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

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

# 7. CHEMICAL CONSUMPTION

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

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

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

# 8. WASTE DISPOSALS

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

# 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 November 5, 2024 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

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

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

The pump in recovery well RW-3 experienced an electric malfunction on March 3, 2024. The pump was replaced and put back into operation on April 5, 2024. The motor controls malfunctioned on November 1, 2024 and were subsequently replaced on November 18, 2024. The pump has been fully operational since then.

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

The status of key aspects of OU4 are as follows:

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

# 11. PLANT DOCUMENTS

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

# 12. MONITORING RESULTS

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

#### 12.1 Off-site Analytical Data Results

Monthly Plant Discharge (PD) samples are taken for organic analysis in compliance with the NYSDEC discharge permit. Quarterly groundwater samples are taken for organic analysis, and quarterly process water (PW) samples are taken for organic, inorganic, and generic analysis. At the direction of the NYSDEC in an August 17, 2022 email, analysis of Per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane were added to monthly sampling for both influent and

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

The November sampling activities included:

- The November PD data was processed and submitted.
- Monthly system sampling was completed on November 5, 2024.

#### 12.2 Field Data

#### 12.2.1 Plant Discharge pH and Temperature

The treatment plant effluent is monitored for pH and temperature on a weekly basis to obtain a monthly average in compliance with the NYSDEC discharge permit requirements. These measurements are taken from the plant effluent at a controlled point with a calibrated portable meter. The plant discharge readings for November 2024 can be found in **Table 8** following the text of this report.

The November 2024 average pH measurement was 7.01 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 November 2024 readings from the AS tower are provided in **Table 10**.

Other routine data collected in November 2024 included:

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

## 13. PROCESS ANALYSIS AND SYSTEM STATUS

The treatment system is currently operated 24/7 in the automatic mode. It is remotely monitored as necessary. The GAC system was operational from April 25, 2024 through September 17, 2024. The entire GAC system was fully disassembled and removed offsite on October 3, 2024.

#### 13.1 Extraction (RW) Processes

The monthly system inspection was completed.

- The vault space heating units will be reactivated in December 2024.
- The recovery well pump system is remotely controlled and monitored, it operates in the auto mode.
- The pump at RW-3 stopped working on March 3, 2024 due to a suspected electrical or mechanical issue. The pump, pump motor and down well wiring were replaced on April 5, 2024. The RW-3 motor controls malfunctioned on November 1, 2024 and were subsequently replaced with RW-2 motor controls (motor starter and relay overload) on November 18, 2024. The pump has been fully operational since then.
- RW-4 pump experienced electrical issues and shut down on May 21, 2024. It has been subsequently placed back online, however, it continues to experience randomized shut downs.
   Upon further testing, GES plans to replace the motor starter and relay overload at the controls of RW-4.
- Pump flow readouts are transmitted to the plant and the totalizers for pumps RW-3, and RW-4 are fully functional. The local flow meter for RW-5 occasionally stops transmitting.
- Air/Vacuum (A/V) valve at station 33+96 encountered a leak in May 2023 that required the vault to be pumped out and have its air/vacuum valve removed. Currently a stopper has been fitted to the pit that allows water to flow through the system.
- The Air/Vacuum (A/V) valve at station 16+57 and 17+10 remain isolated from the transmission line.
- RW-1 and RW-2 are offline and periodically run for preventative maintenance purposes. Their flow meters are not transmitting through the PLC. When repairs were made at RW-1 in November 2021, stones were removed from the flow meterhousing. There was a thick coating of iron salt deposits on the housing and impeller. Both RW-1 and RW-2 are isolated from the process pipeline throughout the operating period. On a monthly basis, the isolation valves are actuated open and pumps are run for five minutes to rotate the motors. The RW-1 pump was tested operational last as of June 2024. The motor controls (motor starter with relay overload) were taken from RW-1 and installed at RW-5 on June 18, 2024 due to these parts being obsolete. RW-1 will remain offline and inoperative until suitable replacement can be obtained.
- RW-2 pump was last tested operational in November 2024. The motor starter and relay overload were removed on November 18, 2024 and installed at RW-3. RW-2 will remain offline and inoperative until suitable replacemen parts can be obtained.

#### 13.2 AS Process

- The three OU5 ASF pumps in the AS Process are fully functional.
- Motors and seals were lubricated on a bi-weekly schedule. Seals were tightened and the drains were cleared as necessary.
- The AS tower main drain valve's manual actuator is not functional (fail open).
- The tower media appears clean as the pressure differential between the top and bottom ports remains relatively constant. The lower section of media has been visually inspected.
- The discharge valves for ASF P1 and P2 appear to be frozen in the open position.
- Two floats in the ASF wet vault were replaced on November 1, 2024.

#### 13.3 GAC Monitoring

The GAC treatment system was turned off on September 17, 2024, at the completion of the pilot study, and dismantled and subsequently removed from the Site on October 3, 2024.

#### 13.4 PD Process

- The plant discharge flow is directed intermittently to Recharge Basin 1 and Recharge Basin 33 based on RB33 liquid level.
- Pump PF-1 was historically taken out of service due to excessive noise and vibration. A full evaluation is required.
- Pump PF-2 and PF-3 remain fully functional.
- The motors and seals were lubricated as necessary.
- The discharge valve for PFF P-3 has failed open.

#### 13.5 Other

- The plant's first bank of lights is wired to the emergency-light recharging system. The circuit is kept on 24/7. The lamps appear burnt out. The second bank of lights provides sufficient lighting for general tasks. Additional work lights were installed around the plant area to further illuminate work areas.
- The potential for leaks in the water supply line running through the plant will continue to be monitored.

# 14. GROUNDS

#### 14.1 Plant Perimeter

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

#### 14.2 Well Field

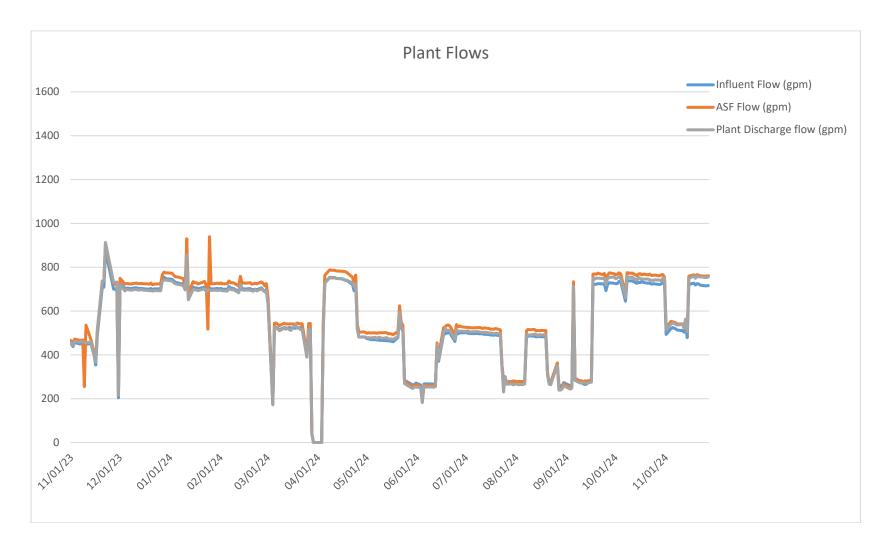
Well field, and recharge basin inspections continue. Quarterly groundskeeping activities are
performed to clear vegetation and poison ivy from around all well fields in anticipation of
quarterly groundwater sampling events. In addition, the entrance to Recharge Basin 33 is
maintained for ease of access.

#### 14.3 Other

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

# **FIGURE**

Figure 1
Plant Discharge Daily Flow



# **TABLES**

Table 1
Claremont Corrective Actions Summary

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
The RW Discharge Manifold integrity is suspect	The condition of the various devices on the RW discharge manifold are suspect.	Plant staff and outside contractors	Possible shutdown	May require a Confined Space Entry (CSE)
	The Air Vent valve in the vault on the N-side of the 6 <sup>th</sup> fairway is leaking from the influent nipple. <b>The shut-off valve was closed and the device isolated.</b>			
	The air-vent valve in the vault to the east of the 6 <sup>th</sup> green is leaking. <b>The shut-off valve was closed</b> 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.			
AS Tower main drain valve is not controlled	The valve does not respond to manipulation of its actuator.	Operator	Plant will need to be shut down to change out the valve	None
	This valve should be replaced.			
	No further action is planned at this time.			

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
OU4 fire alarm system is not functioning	The Nassau County Fire Code indicates that the sprinkler system must have central monitoring for flow and valve tampering.	Plant operator, Electrical Engineer (EE) and outside	None at this time	Fire code violations. High altitude tasks, safety code
Central monitoring of the fire alarm system or fire	The fire alarm system needs to be replaced and centrally monitored.	vender		violations
suppression system does not exist	Several contractors have been at the site to propose options for the system.			
OU4 electrical system has been unstable	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.			
Several leaks were observed in the plant overhead water supply line	Adjacent to the north door a clam-shell type clamp was applied.	Outside plumbing contractor	None	Sanitary water may be shut off during repairs
	The second leak observed above the AS Blower is not readily accessible. It is not problematic.			
	Repair work may require evaluation and outside resources. Currently the situation is controlled.			
The float controls for the PFF pump system have intermittently shorted out causing the system to not properly control the pumping	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.	Plant operator and GES resources	Plant shut down is required	Possible Confined Space Entry work
operation	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			

Condition to be Corrected	Condition to be Corrected Status and Actions		Plant Ops Impact	Health & Safety Impacts
	past, they were spliced outside the box.  The float switches have been replaced and spliced above the sump but there remains a problem with the L2 circuit.  The output from the W-2 relay was moved to the output for the W-1 relay. This has stopped the short cycling.  The control wiring should be changed and moved above grade. Currently the second splices to the floats are above ground outside the vault.			
PFF P1 has failed PFF P2 has failed	The pump when activated immediately makes a lot of noise, and the pump drop pipe shakes. Smoke/ fumes emanated at the Motor-shaft connection. The motor appears to be good.  The pump was removed from service, February 24, 2020.  Pump PF-2 has failed and is currently pending electrical troubleshooting. Repaired on August 7, 2024  It is recommended that the motor be disconnected, lifted, and the mechanical	Outside contractors	Less water is being treated.	To be determined
As the ASF pumps cycle off/on, the check valves have started to slam closed. When reactivating, the motor starter contact is rather violent. Both actions tend to rattle the piping and fixtures	connection checked.  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.  This will need further investigation. Soft-start	Plant operator and EE support	If replacement or repairs are necessary, a plant shutdown will be required as the units can- not be isolated	To be determined

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
	equipment and variable frequency controls were discussed.			
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.	EE support	To be determined	none
	The system needs further investigation to determine if any changes are warranted.			
EF-4 is not operable	The fan is controlled through the mezzanine thermostat, but it does not appear to be operating.	EE support	Only in an emergency	Only in an emergency
	The fan requires electrical testing.			
	The system was checked, it appears that the fan is not functioning. The fan should be replaced.			
Wiring nests in main control console	The wiring in the main control console needs to be cleaned up and labeled, to facilitate problem troubleshooting and process improvements.	EE support	A shut down may be necessary	Electrical work
Pressure Filter Feed pump controls	With P1 out of service, the sequencing of pumps allows for the PFF vault to reach HHL conditions in certain circumstances.	EE support	To be determined	To be determined
	Reprogram the sequencing to eliminate the position of P1.			

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
Air vacuum valve removal	On May 22, 2022 RW-4 was shut down due to a leak detected in the field near an air/vacuum valve pit. On May 24 2022 through May 25, 2022 water was pumped out of the vault and on May 31, 2022 a confined space entry was made to attempt to tighten the valve in an effort to stop the leak. This tightening was unsuccessful, and the valve was removed entirely and replaced with a blank flange until further notice.	GES Mechanical Support	Less water is treated	Confined space entry required to do work in vault
Plant Electric Heater UH-3 failure and HVAC system performance	During sub-20 deg.F weather, the emergency electric heater failed. The HVAC system struggled to produce heat and the plant temperatures dipped to around mid-30's during that time.	Outside contractor	Water lines freezing	Equipment damage
RW-3 has failed	On March 3, 2024 the pump motor failed and remains offline until replacement activities can occur. Pump and motor were replaced on April 5, 2024. Motor Starter malfunction occurred on November 1 and the unit was replaced on November 18, 2024.	Plant Operator and Ramboll	Less water is treated	To be determined
RW-4 has failed	On May 21, 2024 the pump motor experience unexpected shut downs. The pump was tested to be operational, but full electrical testing is needed.	Outside contractor	Less water is treated	To be determined
RW-5 has failed	On May 28, 2024 the pump motor controls experienced electrical issues. Electric motor starter and relay overload were replaced on June 18, 2024 and the pump was placed online.	GES Mechanical Support	Less water is treated	Electrical shock

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

- The methane detection system is offline. **To function, it will need a technical inspection and maintenance**. However, methane does not currently appear to be a hazard. A Town of Oyster Bay contractor completed plant and surrounding area testing for methane gas on March 25, 2024.
- It has been determined that intrinsically safe components are no longer required in the plant.

• There has been no need for acid washing of the AS Tower media, the hydrochloric acid feed and storage system have not been operated. The tanks have not been filled and the level monitoring system has not been operated.

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

Equipment	Fault	Status
Plant electric heater UH-1	Needs transformer	Heater is not needed
Plant electric heater UH-2	Needs relay timer and wiring repairs	Heater is not needed
Recovery well pump pressure switch assembly	Units are unwieldy and subject to vibration, corrosion, and leaks	Each unit requires assessment and disposition
NaOH sump pump	Pump is not operating	No water or chemicals stored in vault.  Portable submersible pump in sump should suffice
Plant lights are wired to the emergency light charging system	Un-segregated light cannot be shut off. Several of the lamps may have burnt out	The bank of lights appear to have failed/burnt out. The second bank of lights are sufficient
Plant exhaust fans are part of methane system	Fans cannot be manually operated	Once the methane monitoring system is online, the fans can be operated
Plant discharge drain	Leak in Victaulic fitting	Drain line on plant discharge intermittently leaks. Parts are in-house. Not pressing
ASF pump isolation valve	Valve P1 has failed open	Not needed at this time
PFF pump isolation valve	Valve P3 has 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
Q3 2023	560	806,666	72,430,000	102	130,998
Q4 2023	572	818,838	75,728,000	1,733	129,307
Q1 2024	642	915,413	79,922,000	1,336	123,944
Q2 2024	498	656,134	62,091,000	8,998*	126,218
Q3 2024	440	633,318	57,658,000	35	132,445
October 2024	750	949,742	29,442,000	5,457	39,246
November 2024	654	941,387	29,183,000	0	44,640

Acronyms: gal – gallons

gpm – gallons per minute,

RW-3 pump motor controls malfunctioned on November 1, 2024. Pump was offline until repairs were made on November 18, 2024 and remained online for the remainder of the period.

<sup>\*</sup> Planned system shut down to conduct system re-piping and install of GAC vessel bypass lines.

Table 3
Plant Daily Totalizer Readings

November 2024 F						
	Plant I	nfluent	Plant Di	scharge	RW Dis	charge
Date	Volume	Avg. Flow	Volume	Avg. Flow	Volume	Avg. Flow
11/01/24	-	1417	-	1390	-	1351
11/04/24	2,256,000	522	2,216,000	513	2,132,000	494
11/05/24	796,000	553	778,000	540	748,000	519
11/06/24	793,000	551	785,000	545	755,000	524
11/07/24	790,000	549	784,000	544	751,000	522
11/08/24	786,000	546	776,000	539	746,000	518
11/11/24	2,337,000	541	2,316,000	536	2,216,000	513
11/12/24	780,000	542	777,000	540	736,000	511
11/13/24	761,000	528	749,000	520	725,000	503
11/14/24	811,000	563	810,000	563	765,000	531
11/15/24	728,000	506	728,000	506	689,000	478
11/18/24	3,279,000	759	3,232,000	748	3,114,000	721
11/19/24	1,102,000	765	1,096,000	761	1,048,000	728
11/20/24	1,095,000	760	1,079,000	749	1,035,000	719
11/21/24	1,102,000	765	1,092,000	758	1,044,000	725
11/22/24	1,100,000	764	1,090,000	757	1,042,000	724
11/25/24	3,284,000	760	3,265,000	756	3,103,000	718
11/26/24	1,098,000	763	1,088,000	756	1,037,000	720
11/27/24	1,094,000	760	1,084,000	753	1,030,000	715
12/02/24	5,483,000	762	5,438,000	755	5,154,000	716
Nove	ember Total Plant	Influent (Gal)		29,475,000		
	November Total Plant <b>Effluent</b> (Gal)			29,183,000		
Nove	mber Total <b>RW</b>	oischarge (Gal)		27,870,000		

**Acronyms:** gal - gallons gpm – gallons per minute

Table 4 **Pump System Flow Readings** 

November	On-Time Minutes (actual)	Avg. Flow (gpm)	Avg. Flow (gpd)	Total Flow (gal)
RW-1*	0	NR	0	0
RW-2*	5	NR	0	~1,045
RW-3	20,160	300	194,871	6,041,000
RW-4	44,640	261	376,226	11,663,000
RW-5	44,640	241	347,387	10,769,000
RW Totals	44,640	624	899,032	27,870,000
Plant Influent	44,640	660	950,806	29,475,000
Plant Effluent	44,640	654	941,387	29,183,000

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.

The treatment system processed less water due to RW-3 motor controls failure, which resulted in RW-3 pump being offline between November 1 through November 18, 2024.

\* 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

	Sampling Location				
Measurement / Analyte	System Influent	Plant Discharge	Recovery Wells	Monitoring Wells	
Flow	Daily	Daily	Daily	NA	
рН	Quarterly	Weekly	Quarterly	Quarterly	
VOCs (+Tert-Butyl-Methyl ether (MTBA) & Tert-butyl alcohol (TBA))	Quarterly	Monthly	Quarterly	Quarterly	
Semi-Volatile Organic Compound (SVOC) Base Neutral & Acid Extractables (BNA)	Quarterly	Monthly	NS	NS	
Per- and polyfluoroalkyl substances (PFAS)	Bi-Monthly	Bi-Monthly	NS	Quarterly <sup>(1)</sup>	
1,4-Dioxane	Monthly	Monthly	NS	Quarterly <sup>(1)</sup>	
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
November 5, 2024

Parameters	Discharge Limitations (SPDES)	Units	Results
pH (range)	6.5 - 8.5	su	7.01
1,1,1-Trichloroethane	5	ug/l	U
1,1-Dichloroethane	5	ug/l	U
1,1-Dichloroethylene	5	ug/l	U
1,2- Dichloroethane	0.6	ug/l	U
Benzene	0.7	ug/l	U
Chlorobenzene	5	ug/l	U
Chloroform	7	ug/l	U
CIS 1,2-Dichloroethylene	5	ug/l	U
Ethylbenzene	5	ug/l	U
Methylene Chloride	5	ug/l	U
Tert-butyl alcohol (TBA)	Not indicated	ug/l	U
Tert-Butyl-Methyl ether (MTBA)	5	ug/l	U
Tetrachloroethylene (PCE)	5	ug/l	U
Toluene	5	ug/l	U
Trans 1,2-Dichloroethylene	5	ug/l	U
Trichloroethylene (TCE)	5	ug/l	U
Bis(2-ethylhexyl) phthalate	5	ug/l	U
Di-n-butyl phthalate	50	ug/l	U
Nitro Benzene	0.4	ug/l	U
Antimony, Total recoverable	3	ug/l	NS
Arsenic, Total recoverable	50	ug/l	NS
Barium, Total recoverable	2000	ug/l	NS
Chromium, Hexavalent	100	ug/l	NS
Lead, Total recoverable	50	ug/l	NS
Iron, Total recoverable	600	ug/l	NS
Manganese, Total recoverable	600	ug/l	NS
Mercury	Not indicated	ug/l	NS
Zinc	Not indicated	mg/l	NS
Nitrogen, Total (as N)	10	mg/l	NS
Selenium, Total recoverable	40	ug/l	NS
Solids, Total Dissolved	1000	mg/l	NS
Chloride Ion	NL	mg/l	NS
Cyanide	Not indicated	ug/l	NS
Fluoride Ion	NL	mg/l	NS

Parameters	Discharge Limitations (SPDES)	Units	Results
Sulfate Ion	NL	mg/l	NS

J – Estimated value U – Analyzed but not detected NL – Monitor only NS– Not sampled SPDES – State Pollutant Discharge Elimination System

ug/I – micrograms per liter ng/I – nanograms per liter mg/I – milligrams per liter

Discharge limitations updates as per the water discharge permit.

Note: Parameters shaded in gray are analyzed quarterly with results generally being provided March,

June, October, and December.

Table 7
Emerging Contaminant Analytical Results
November 5, 2024

Parameters	Guidance Values	Units	Influent Results	Effluent Results
PFOA	6.7 <sup>1</sup>	ng/l	47	45
PFOS	2.7 <sup>1</sup>	ng/l	16	15
1,4-Dioxane	0.35 <sup>1</sup>	ug/l	14	15

**J** – Estimated value **U** – Analyzed but not detected  $\mathbf{ug/I}$  – micrograms per liter  $\mathbf{ng/I}$  – nanograms per liter  $\mathbf{x}$  /  $\mathbf{x}$  – indicates primary/duplicate results **PFOA** – Perfluorooctanoic acid **PFOS** – Perfluorooctanesulfonic acid

 $<sup>^{1}</sup>$  NYSDEC - 2023 Addendum to June 1998 Division of Water Technical and Operational Guidance Series (TOGS) N0. 1.1.1.

Table 8
Effluent pH and Temperature Readings

Date	pH (su)	Temp (°C)
11/08/24	7.01	15.7
11/12/24	7.10	14.5
11/19/24	6.98	16.9
11/27/24	6.95	16.4
November Average	7.01 su	15.9 °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 <b>`</b> 20	6.63
Feb '20	6.75
Mar '20	6.74
Apr \20	6.65
May '20	6.8
June '20	6.8
July '20	6.9
Aug `20	6.8
Sept '20	6.8
Oct. '20	6.95
Nov '20	6.8
Dec '20	6.64
Jan '21	6.8
Feb '21	6.75
Mar `21	6.76
Apr `21	7.28
May '21	7.53
June '21	7.44
July '21	7.41
Aug `21	7.42
Sept '21	7.13
Oct '21	7.10
Nov '21	7.09
Dec '21	7.01
Jan '22	6.90
Feb `22	6.90
Mar '22	6.80
Apr '22	6.78
May \22	6.79
June '22	6.79
July '22	7.01
Aug `22	6.99
Sept '22	7.19
Oct '22	7.62
Nov `22	7.68
Dec `22	7.52

Month	pH(su)
Jan '23	7.24
Feb '23	7.36
Mar `23	7.56
Apr \23	7.28
May `23	7.56
June'23	7.36
July`23	7.39
Aug`23	7.24
Sept`23	7.25
Oct`23	7.22
Nov`23	6.99
Dec`23	6.94
Jan`24	6.81
Feb`24	6.94
Mar`24	7.00
Apr`24	7.23
May`24	7.20
Jun`24	7.28
July`24	7.21
Aug`24	7.11
Sep`24	7.21
Oct`24	7.06
Nov`24	7.01

# Plant Discharge Monthly Average pH Reading

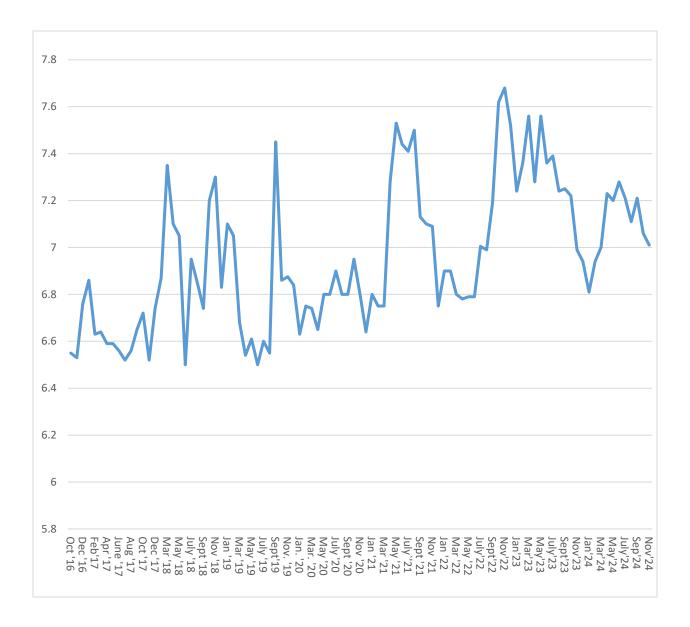


Table 10
AS Tower Air Monitoring Readings

Recorded Date	Port B (ppm)
11/08/24	0.0
11/12/24	0.0
11/19/24	0.0
11/27/24	0.0

Ramboll - Monthly	Report of the	Operations & Maintena	nce Activities (Nove	mher 2024)

ATTACHMENT 1
MONTHLY O&M SAMPLING ANALYTICAL RESULTS -NOVEMBER 5, 2024

December 4, 2024

Payson Long NYDEC\_Ramboll US Consulting, Inc. - Syracuse 333 West Washington Street, PO Box 4873 Syracuse, NY 13202

Project Location: Old Bethpage, NY

Client Job Number: Project Number: 130015

Laboratory Work Order Number: 24K0480

Myle Murray

Enclosed are results of analyses for samples as received by the laboratory on November 6, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kyle A. Murray Project Manager

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REPORT DATE: 12/4/2024



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

PURCHASE ORDER NUMBER: 151811

Syracuse, NY 13202

ATTN: Payson Long

PROJECT NUMBER: 130015

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24K0480

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

PROJECT LOCATION: Old Bethpage, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PD-CP-00-110524	24K0480-01	Ground Water		Draft Method 1633	
				SW-846 8260D	
				SW-846 8270E	
PD-CP-01-110524	24K0480-02	Ground Water		Draft Method 1633	
				SW-846 8260D	
				SW-846 8270E	
ASF-CP-00-110524	24K0480-03	Ground Water		Draft Method 1633	
				SW-846 8270E	
ASF-CP-01-110524	24K0480-04	Ground Water		Draft Method 1633	
				SW-846 8270E	
TB-110524	24K0480-05	Trip Blank Water		SW-846 8260D	



#### 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:**

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and

bias is on the high side.

Analyte & Samples(s) Qualified:

D7-NMeFOSE

S114844-CCB5

D9-NEtFOSE

S114844-CCB5

N-ethylperfluorooctanesulfonamidoethanol (NEtFO)

S114844-CCB5

N-methylperfluorooctanesulfonamidoethanol(NMeF

S114844-CCB5

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

D3-NMeFOSAA

24K0480-04RE1[ASF-CP-01-110524]

N-MeFOSAA (NMeFOSAA)

24K0480-04RE1[ASF-CP-01-110524]

Z-01

Extracted internal standard is outside of control limits, matrix interference suspected. Reanalysis yielded similar extracted internal standard

non-conformance.
Analyte & Samples(s) Qualified:

D7-NMeFOSE

S114844-CCV5

D9-NEtFOSE

S114844-CCV5

N-ethylperfluorooctanesulfonamidoethanol (NEtFO:

S114844-CCV5

N-methylperfluorooctanesulfonamidoethanol(NMeF

S114844-CCV5

SW-846 8260D

#### Qualifications:

L-02

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

Analyte & Samples(s) Qualified:

Methyl Acetate

B391682-BS1, B391682-BSD1, B391682-MS1, B391682-MSD1

MS-09

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

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene

24K0480-01[PD-CP-00-110524], B391682-MS1, B391682-MSD1

24K0480-01[PD-CP-00-110524], B391682-MS1, B391682-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:

1,2,3-Trichlorobenzene

B391682-MSD1



#### V-05

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

#### Analyte & Samples(s) Qualified:

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], 24K0480-05[TB-110524], B391682-BLK1, B391682-BS1, B391682-BSD1, B391682-MS1, B391682-MSD1, S113641-CCV1

#### Naphthalene

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], 24K0480-05[TB-110524], B391682-BLK1, B391682-BS1, B391682-BSD1, B391682-MS1, B391682-MSD1, S113641-CCV1

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

Analyte & Samples(s) Qualified:

#### Bromomethane

B391682-BS1, B391682-BSD1, B391682-MS1, B391682-MSD1, S113641-CCV1

#### Methyl Acetate

B391682-BS1, B391682-BSD1, B391682-MS1, B391682-MSD1, S113641-CCV1

#### SW-846 8270E

#### Qualifications:

В

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

#### Analyte & Samples(s) Qualified:

#### 1,4-Dioxane

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], 24K0480-03[ASF-CP-00-110524], 24K0480-04[ASF-CP-01-110524], B391943-BLK1, B391943-BS1, B301943-BS1, B30194-BS1, B30194-B391943-BSD1

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

#### Analyte & Samples(s) Qualified:

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], 24K0480-03[ASF-CP-00-110524], 24K0480-04[ASF-CP-01-110524], 24K048

## L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side. Analyte & Samples(s) Qualified:

#### Caprolactam

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, B391695-BSD1, B391695-BSD1,

#### L-07

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

#### Analyte & Samples(s) Qualified:

#### Hexachloroethane

B391693-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

B391693-BLK1, B391693-BS1



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

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113594-CCV1, S113934-CCV1

Dibenz(a,h)anthracene

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113594-CCV1, S113934-CCV1

Di-n-octylphthalate

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113594-CCV1, S113934-CCV1

Indeno(1,2,3-cd)pyrene

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113594-CCV1, S113934-CCV1, S11394-CCV1, S113

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:

2,4-Dinitrophenol

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113594-CCV1, S113934-CCV1

4-Nitrophenol

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], S113934-CCV1

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113594-CCV1, S113934-CCV1, S11394-CCV1, S1139

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], S113934-CCV1

V-06

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

Analyte & Samples(s) Qualified:

Pyrene

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], S113934-CCV1

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

estimated.
Analyte & Samples(s) Qualified:

Pyridine

24K0480-01[PD-CP-00-110524], 24K0480-02[PD-CP-01-110524], B391693-BLK1, B391693-BS1, B391693-BSD1, S113334-ICV1, S113594-CCV1, S113934-CCV1, S114725-ICV1

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.

Technical Representative

na Warrlington



Sample Description:

Sampled: 11/5/2024 09:30

Project Location: Old Bethpage, NY

Date Received: 11/6/2024

Field Sample #: PD-CP-00-110524

Sample ID: 24K0480-01 Sample Matrix: Ground Water

Work Order: 24K0480

#### Volatile Organic Compounds by GC/MS

			Volatile Organic Co	mpounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Benzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Bromochloromethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Bromodichloromethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Bromoform	ND	1.0	μg/L	1	V-05	SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Bromomethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
2-Butanone (MEK)	ND	20	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
sec-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
tert-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Carbon Disulfide	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Carbon Tetrachloride	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Chlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Chlorodibromomethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Chloroethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Chloroform	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Chloromethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Cyclohexane	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2-Dibromoethane (EDB)	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,3-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,4-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,1-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,1-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
cis-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
trans-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2-Dichloropropane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
cis-1,3-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
trans-1,3-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Ethylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
2-Hexanone (MBK)	ND	10	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Isopropylbenzene (Cumene)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Methyl Acetate	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Methyl Cyclohexane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Methylene Chloride	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Naphthalene	ND	2.0	μg/L	1	V-05, MS-09	SW-846 8260D	11/7/24	11/8/24 13:18	MFF
n-Propylbenzene	ND	1.0	μg/L	1	. 00,1115 07	SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Styrene	ND	1.0	μg/L μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
•	110	0	## <u>-</u>			5 5.0 0200D	Ι	Page 8 (	

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Project Location: Old Bethpage, NY

Date Received: 11/6/2024

Field Sample #: PD-CP-00-110524

Sample ID: 24K0480-01 Sample Matrix: Ground Water Sample Description:

Work Order: 24K0480

Sampled: 11/5/2024 09:30

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Tetrachloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Toluene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2,3-Trichlorobenzene	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	MS-09	SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,1,1-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,1,2-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Trichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2,3-Trichloropropane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,2,4-Trimethylbenzene	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Vinyl Chloride	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
m+p Xylene	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
o-Xylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Xylenes (total)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:18	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1.0 D' 11 4 14		101	70 120					11/0/04 12 10	

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		11/8/24 13:18
Toluene-d8	96.4	70-130		11/8/24 13:18
4-Bromofluorobenzene	86.1	70-130		11/8/24 13:18



Project Location: Old Bethpage, NY

Date Received: 11/6/2024

Field Sample #: PD-CP-00-110524

Sample ID: 24K0480-01 Sample Matrix: Ground Water Sample Description:

Work Order: 24K0480

Sampled: 11/5/2024 09:30

Semivolatile Organic Compounds by GC/MS										
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst	
2,3,4,6-Tetrachlorophenol	ND	18	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Atrazine	ND	18	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Benzaldehyde	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Biphenyl	ND	18	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Caprolactam	ND	8.9	μg/L	1	L-04	SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Acenaphthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Acenaphthylene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Acetophenone	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Aniline	ND	18	$\mu g/L$	1	V-05	SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Anthracene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Benzo(a)anthracene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Benzo(a)pyrene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Benzo(b)fluoranthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Benzo(g,h,i)perylene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Benzo(k)fluoranthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Bis(2-chloroethoxy)methane	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Bis(2-chloroethyl)ether	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2,2'-oxybis(1-Chloropropane)	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Bis(2-Ethylhexyl)phthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
4-Bromophenylphenylether	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Butylbenzylphthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Carbazole	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
4-Chloroaniline	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
4-Chloro-3-methylphenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2-Chloronaphthalene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2-Chlorophenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
4-Chlorophenylphenylether	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Chrysene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Dibenz(a,h)anthracene	ND	4.5	μg/L	1	V-04	SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Dibenzofuran	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Di-n-butylphthalate	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
3,3-Dichlorobenzidine	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2,4-Dichlorophenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Diethylphthalate	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2,4-Dimethylphenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Dimethylphthalate	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
4,6-Dinitro-2-methylphenol	ND	18	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2,4-Dinitrophenol	ND	8.9	μg/L	1	V-04, V-05	SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2,4-Dinitrotoluene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
2,6-Dinitrotoluene	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Di-n-octylphthalate	ND	8.9	$\mu g/L$	1	V-04	SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Fluoranthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Fluorene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	
Hexachlorobenzene	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL	

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Work Order: 24K0480



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

Project Location: Old Bethpage, NY Sample Description:

70.3

90.6

Date Received: 11/6/2024

Field Sample #: PD-CP-00-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-01
Sample Matrix: Ground Water

2,4,6-Tribromophenol

p-Terphenyl-d14

Semivolatile Organic Compounds by GC/MS	s

Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9		1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	4.5	μg/L	1	V-04	SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1	V-05	SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	4.5	$\mu g/L$	1	V-06	SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	18	μg/L	1	V-05, V-34	SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:20	BGL
	% Recovery	Recovery Limits	1	Flag/Qual				
	38.7	15-110					11/14/24 10:20	
	ND N	ND 8.9 ND 8.9 ND 8.9 ND 4.5 ND 8.9 ND 4.5 ND 4.5 ND 8.9 ND 4.5 ND 8.9	ND 8.9 μg/L ND 8.9 μg/L ND 8.9 μg/L ND 8.9 μg/L ND 4.5 μg/L ND 4.5 μg/L ND 4.5 μg/L ND 8.9 μg/L	ND 8.9 μg/L 1 ND 8.9 μg/L 1 ND 8.9 μg/L 1 ND 4.5 μg/L 1 ND 4.5 μg/L 1 ND 4.5 μg/L 1 ND 4.5 μg/L 1 ND 8.9 μg/L 1	ND 8.9 μg/L 1 ND 8.9 μg/L 1 ND 8.9 μg/L 1 ND 8.9 μg/L 1 ND 4.5 μg/L 1 ND 4.5 μg/L 1 ND 4.5 μg/L 1 ND 8.9 μg/L 1 N	ND   8.9	New Note	New   New

15-110

30-130

11/14/24 10:20

11/14/24 10:20



Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: PD-CP-00-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-01
Sample Matrix: Ground Water

## 1,4-Dioxane by isotope dilution GC/MS

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
1,4-Dioxane		15	0.19	μg/L	1	B-07, B	SW-846 8270E	11/11/24	11/14/24 6:33	GJB
	Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
1,4-Dioxane-d8			20.6	15-110					11/14/24 6:33	



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

**Field Sample #: PD-CP-00-110524** Sampled: 11/5/2024 09:30

Sample ID: 24K0480-01
Sample Matrix: Ground Water

## Semivolatile Organic Compounds by - LC/MS-MS

		Ser	nivolatile Organic Cor	npounds by - I	LC/MS-MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	35	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoropentanoic acid (PFPeA)	23	2.8	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorohexanoic acid (PFHxA)	22	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoroheptanoic acid (PFHpA)	12	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorooctanoic acid (PFOA)	45	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorononanoic acid (PFNA)	42	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorodecanoic acid (PFDA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorobutanesulfonic acid (PFBS)	2.6	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoropentanesulfonic acid (PFPeS)	2.2	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorohexanesulfonic acid (PFHxS)	7.1	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorooctanesulfonic acid (PFOS)	14	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.4	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
N-methylperfluorooctanesulfonamidoethan ol(NMeFOSE)	ND	14	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	14	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
9Cl-PF3ONS (F53B Minor)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
11Cl-PF3OUdS (F53B Major)	ND	5.7	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.1	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	35	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	35	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.8	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.8	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: PD-CP-00-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-01
Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS	
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid	ND	2.8	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
(PFMBA) Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.8	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:21	AMS
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
13C4-PFBA		72.1	5-130					11/27/24 14:21	,
13C5-PFPeA		72.0	40-130					11/27/24 14:21	
13C5-PFHxA		73.8	40-130					11/27/24 14:21	
13C4-PFHpA		70.0	40-130					11/27/24 14:21	
13C8-PFOA		81.0	40-130					11/27/24 14:21	
13C9-PFNA		66.5	40-130					11/27/24 14:21	
13C6-PFDA		69.2	40-130					11/27/24 14:21	
13C7-PFUnA		65.1	30-130					11/27/24 14:21	
13C2-PFDoA		65.4	10-130					11/27/24 14:21	
13C2-PFTeDA		60.6	10-130					11/27/24 14:21	
13C3-PFBS		77.4	40-135					11/27/24 14:21	
13C3-PFHxS		76.2	40-130					11/27/24 14:21	
13C8-PFOS		71.0	40-130					11/27/24 14:21	
13C2-4:2FTS		163	40-200					11/27/24 14:21	
13C2-6:2FTS		91.9	40-200					11/27/24 14:21	
13C2-8:2FTS		73.1	40-300					11/27/24 14:21	
13C8-PFOSA		58.7	40-130					11/27/24 14:21	
D3-NMeFOSA		43.4	10-130					11/27/24 14:21	
D5-NEtFOSA		42.1	10-130					11/27/24 14:21	
D3-NMeFOSAA		54.7	40-170					11/27/24 14:21	
D5-NEtFOSAA		58.0	25-135					11/27/24 14:21	
D7-NMeFOSE		51.7	10-130					11/27/24 14:21	
D9-NEtFOSE		51.6	10-130					11/27/24 14:21	
13C3-HFPO-DA		70.6	40-130					11/27/24 14:21	

Work Order: 24K0480



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

Project Location: Old Bethpage, NY Sample Description:

Date Received: 11/6/2024

Field Sample #: PD-CP-01-110524

Sample ID: 24K0480-02 Sample Matrix: Ground Water

Sampled: 11/5/2024 09:30

## Volatile Organic Compounds by GC/MS

			Volatile Organic Co	mpounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Benzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Bromochloromethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Bromodichloromethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Bromoform	ND	1.0	μg/L	1	V-05	SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Bromomethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
2-Butanone (MEK)	ND	20	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
sec-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
tert-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Carbon Disulfide	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Carbon Tetrachloride	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Chlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Chlorodibromomethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Chloroethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Chloroform	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Chloromethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Cyclohexane	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2-Dibromoethane (EDB)	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,3-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,4-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,1-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,1-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
cis-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
trans-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2-Dichloropropane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
cis-1,3-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
trans-1,3-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Ethylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
2-Hexanone (MBK)	ND	10	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Isopropylbenzene (Cumene)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Methyl Acetate	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Methyl Cyclohexane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Methylene Chloride	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Naphthalene	ND	2.0	μg/L	1	V-05	SW-846 8260D	11/7/24	11/8/24 13:45	MFF
n-Propylbenzene	ND	1.0	μg/L	1	. 55	SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Styrene	ND	1.0	μg/L μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
V	ND	1.0	µg/ L	1		5040 02000	11///24	Page 15	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: PD-CP-01-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-02
Sample Matrix: Ground Water

4-Bromofluorobenzene

		Vol	latile Organic Com <sub>l</sub>	pounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analys
1,1,2,2-Tetrachloroethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Tetrachloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Toluene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2,3-Trichlorobenzene	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,1,1-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,1,2-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Trichloroethylene	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2,3-Trichloropropane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Vinyl Chloride	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
m+p Xylene	ND	2.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
o-Xylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Xylenes (total)	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 13:45	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4	•	102	70-130	•			•	11/8/24 13:45	
Toluene-d8		96.4	70-130					11/8/24 13:45	

70-130

83.4

11/8/24 13:45

Work Order: 24K0480



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

Project Location: Old Bethpage, NY

Date Received: 11/6/2024

Field Sample #: PD-CP-01-110524

Sampled: 11/5/2024 09:30

Sample Description:

Sample ID: 24K0480-02
Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS

			Semivolatile Organic O	Compounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,3,4,6-Tetrachlorophenol	ND	18	μg/L	1	<u> </u>	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Atrazine	ND	18	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Benzaldehyde	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Biphenyl	ND	18	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Caprolactam	ND	8.9	μg/L	1	L-04	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Acenaphthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Acenaphthylene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Acetophenone	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Aniline	ND	18	μg/L	1	V-05	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Anthracene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Benzo(a)anthracene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Benzo(a)pyrene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Benzo(b)fluoranthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Benzo(g,h,i)perylene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Benzo(k)fluoranthene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Bis(2-chloroethoxy)methane	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Bis(2-chloroethyl)ether	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,2'-oxybis(1-Chloropropane)	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Bis(2-Ethylhexyl)phthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4-Bromophenylphenylether	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Butylbenzylphthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Carbazole	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4-Chloroaniline	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4-Chloro-3-methylphenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2-Chloronaphthalene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2-Chlorophenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4-Chlorophenylphenylether	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Chrysene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Dibenz(a,h)anthracene	ND	4.5	$\mu g/L$	1	V-04	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Dibenzofuran	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Di-n-butylphthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
3,3-Dichlorobenzidine	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,4-Dichlorophenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Diethylphthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,4-Dimethylphenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Dimethylphthalate	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4,6-Dinitro-2-methylphenol	ND	18	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,4-Dinitrophenol	ND	8.9	$\mu g/L$	1	V-04, V-05	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,4-Dinitrotoluene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,6-Dinitrotoluene	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Di-n-octylphthalate	ND	8.9	$\mu g/L$	1	V-04	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Fluoranthene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Fluorene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Hexachlorobenzene	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL

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Work Order: 24K0480



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

Project Location: Old Bethpage, NY Sample Description:

Date Received: 11/6/2024

Field Sample #: PD-CP-01-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-02
Sample Matrix: Ground Water

Semivolatile Organic Compounds by GC/MS									
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Hexachlorocyclopentadiene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Hexachloroethane	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	μg/L	1	V-04	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Isophorone	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
1-Methylnaphthalene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2-Methylnaphthalene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2-Methylphenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
3/4-Methylphenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Naphthalene	ND	4.5	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2-Nitroaniline	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
3-Nitroaniline	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4-Nitroaniline	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Nitrobenzene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2-Nitrophenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
4-Nitrophenol	ND	8.9	μg/L	1	V-05	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
N-Nitrosodi-n-propylamine	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Pentachlorophenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Phenanthrene	ND	4.5	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Phenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Pyrene	ND	4.5	μg/L	1	V-06	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
Pyridine	ND	18	$\mu g/L$	1	V-05, V-34	SW-846 8270E	11/7/24	11/14/24 10:41	BGL
1,2,4,5-Tetrachlorobenzene	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,4,5-Trichlorophenol	ND	8.9	μg/L	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL
2,4,6-Trichlorophenol	ND	8.9	$\mu g/L$	1		SW-846 8270E	11/7/24	11/14/24 10:41	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	53.5	15-110		11/14/24 10:41
Phenol-d6	33.6	15-110		11/14/24 10:41
Nitrobenzene-d5	88.8	30-130		11/14/24 10:41
2-Fluorobiphenyl	76.1	30-130		11/14/24 10:41
2,4,6-Tribromophenol	89.7	15-110		11/14/24 10:41
p-Terphenyl-d14	94.1	30-130		11/14/24 10:41



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: PD-CP-01-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-02
Sample Matrix: Ground Water

1.4-Dioxane	hy icotono	dilution	CC/MS

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
1,4-Dioxane		14	0.19	$\mu g/L$	1	B, B-07	SW-846 8270E	11/11/24	11/14/24 6:53	GJB
s	Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
1,4-Dioxane-d8	_		19.0	15-110		_			11/14/24 6:53	



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

**Field Sample #: PD-CP-01-110524** Sampled: 11/5/2024 09:30

Sample ID: 24K0480-02
Sample Matrix: Ground Water

## Semivolatile Organic Compounds by - LC/MS-MS

		Ser	nivolatile Organic Cor	npounds by - l	LC/MS-MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	34	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoropentanoic acid (PFPeA)	24	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorohexanoic acid (PFHxA)	22	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoroheptanoic acid (PFHpA)	12	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorooctanoic acid (PFOA)	45	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorononanoic acid (PFNA)	41	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorodecanoic acid (PFDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorobutanesulfonic acid (PFBS)	2.7	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoropentanesulfonic acid (PFPeS)	2.4	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorohexanesulfonic acid (PFHxS)	7.3	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorooctanesulfonic acid (PFOS)	15	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
acid (6:2FTS) 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
N-methylperfluorooctanesulfonamidoethan ol(NMeFOSE)	ND	15	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	15	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
9Cl-PF3ONS (F53B Minor)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
11Cl-PF3OUdS (F53B Major)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	38	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	38	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: PD-CP-01-110524

Sampled: 11/5/2024 09:30

Sample ID: 24K0480-02
Sample Matrix: Ground Water

Comizzolatila	Organia	Compounds by -	I C/MC MC

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
(PFMBA)									
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:30	AMS
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
13C4-PFBA		79.1	5-130					11/27/24 14:30	
13C5-PFPeA		77.0	40-130					11/27/24 14:30	
13C5-PFHxA		80.1	40-130					11/27/24 14:30	
13C4-PFHpA		70.9	40-130					11/27/24 14:30	
13C8-PFOA		81.2	40-130					11/27/24 14:30	
13C9-PFNA		75.1	40-130					11/27/24 14:30	
13C6-PFDA		71.6	40-130					11/27/24 14:30	
13C7-PFUnA		68.2	30-130					11/27/24 14:30	
13C2-PFDoA		67.9	10-130					11/27/24 14:30	
13C2-PFTeDA		64.1	10-130					11/27/24 14:30	
13C3-PFBS		78.3	40-135					11/27/24 14:30	
13C3-PFHxS		76.6	40-130					11/27/24 14:30	
13C8-PFOS		77.4	40-130					11/27/24 14:30	
13C2-4:2FTS		165	40-200					11/27/24 14:30	
13C2-6:2FTS		90.1	40-200					11/27/24 14:30	
13C2-8:2FTS		75.4	40-300					11/27/24 14:30	
13C8-PFOSA		63.9	40-130					11/27/24 14:30	
D3-NMeFOSA		46.8	10-130					11/27/24 14:30	
D5-NEtFOSA		43.8	10-130					11/27/24 14:30	
D3-NMeFOSAA		62.9	40-170					11/27/24 14:30	
D5-NEtFOSAA		58.0	25-135					11/27/24 14:30	
D7-NMeFOSE		56.5	10-130					11/27/24 14:30	
D9-NEtFOSE		55.7	10-130					11/27/24 14:30	
13C3-HFPO-DA		75.6	40-130					11/27/24 14:30	



Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: ASF-CP-00-110524

Sampled: 11/5/2024 09:00

Sample ID: 24K0480-03
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		14	0.19	μg/L	1	B, B-07	SW-846 8270E	11/11/24	11/14/24 7:12	GJB
	Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
1,4-Dioxane-d8	_	_	23.6	15-110					11/14/24 7:12	



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: ASF-CP-00-110524 Sampled: 11/5/2024 09:00

Sample ID: 24K0480-03
Sample Matrix: Ground Water

## Semivolatile Organic Compounds by - LC/MS-MS

		Se	mivolatile Organic Cor	npounds by - I	LC/MS-MS				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	33	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluoropentanoic acid (PFPeA)	22	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorohexanoic acid (PFHxA)	22	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluoroheptanoic acid (PFHpA)	12	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorooctanoic acid (PFOA)	47	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorononanoic acid (PFNA)	43	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorodecanoic acid (PFDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorobutanesulfonic acid (PFBS)	2.6	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluoropentanesulfonic acid (PFPeS)	2.0	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorohexanesulfonic acid (PFHxS)	7.3	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorooctanesulfonic acid (PFOS)	14	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
acid (6:2FTS) 1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
N-methylperfluorooctanesulfonamidoethan ol(NMeFOSE)	ND	15	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	15	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
9Cl-PF3ONS (F53B Minor)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
11Cl-PF3OUdS (F53B Major)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA) 3-Perfluoroheptyl propanoic acid (FHpPA)	ND ND	37 37	ng/L	1		Draft Method 1633  Draft Method 1633	11/26/24 11/26/24	11/27/24 14:40 11/27/24 14:40	AMS AMS
(7:3FTCA)  Perfluoro(2-ethoxyethane)sulfonic acid	ND ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	
(PFEESA) Perfluoro-3-methoxypropanoic acid	ND ND	3.0	ng/L	1		Draft Method 1633	11/26/24		AMS
(PFMPA)	ND	3.0	ng/L	1		Dian method 1033	11/20/24	11/27/24 14:40	AMS



Project Location: Old Bethpage, NY Sam

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: ASF-CP-00-110524

Sampled: 11/5/2024 09:00

Sample ID: 24K0480-03
Sample Matrix: Ground Water

Comizzolatila	Organia	Compounds by -	I C/MC MC

Perfluoro4-methoxybutanoic acid (PFMBA)         ND         3.0         ng/L         1         Draft Method 1633         11/26/24         11/27/24 14:40         AMS           Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)         ND         3.0         ng/L         1         Draft Method 1633         11/26/24         11/27/24 14:40         AMS           Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)         ND         3.0         ng/L         1         Draft Method 1633         11/26/24         11/27/24 14:40         AMS           Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)         68.0         descriptions         Flag/Qual           13C4-PFBA         68.7         5-130         11/27/24         14:40           13C5-PFPEA         67.4         40-130         11/27/24         14:40           13C4-PFBA         63.2         40-130         11/27/24         14:40           13C3-PFBA         65.8         40-130         11/27/24         14:40           13C4-PFPDA         61.4         30-130         11/27/24         14:40           13C2-PFBDA         61.4         30-130         11/27/24         14:40           13C2-PFPDA         48.2         10-130         11/27/24         14:40           13C2-PFBBA         72.3         40	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nonafluero-3,6-dioxaheptanoic acid   ND   3,0   ng/L   1   Draft Method 163   11/26/24   11/27/24   14:40   NB   NB   NB   NB   NB   NB   NB   N	•	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:40	AMS
NFDHA    Surrogates	,			_						
13C4-PFBA 68.7 5-130 11/27/24 14:40 13C5-PFPeA 67.4 40-130 11/27/24 14:40 13C5-PFPEA 68.0 40-130 11/27/24 14:40 13C5-PFHAR 68.0 40-130 11/27/24 14:40 13C5-PFHAR 68.0 40-130 11/27/24 14:40 13C6-PFHAR 63.2 40-130 11/27/24 14:40 13C8-PFOA 71.3 40-130 11/27/24 14:40 13C6-PFDA 65.8 40-130 11/27/24 14:40 13C6-PFDA 66.8 40-130 11/27/24 14:40 13C6-PFDA 67.4 40-130 11/27/24 14:40 13C6-PFDA 61.4 30-130 11/27/24 14:40 13C2-PFDAA 61.4 30-130 11/27/24 14:40 13C2-PFDAA 54.3 10-130 11/27/24 14:40 13C2-PFEDAA 48.2 10-130 11/27/24 14:40 13C3-PFBS 72.3 40-135 11/27/24 14:40 13C3-PFBS 72.3 40-135 11/27/24 14:40 13C3-PFBS 71.5 40-130 11/27/24 14:40 13C3-PFBS 71.5 40-130 11/27/24 14:40 13C3-PFOS 68.0 40-130 11/27/24 14:40 13C2-2-ETS 139 40-200 11/27/24 14:40 13C2-2-ETS 139 40-200 11/27/24 14:40 13C2-2-ETS 82.4 40-200 11/27/24 14:40 13C2-2-ETS 64.2 40-300 11/27/24 14:40 13C3-PFOSA 52.3 40-130 11/27/24 14:40 13C3-PFOSA 37.3 10-130 11/27/24 14:40 13C3-PFOSA 37.3 10-130 11/27/24 14:40 13C3-PFOSA 37.3 10-130 11/27/24 14:40 13C3-PFOSA 37.2 10-130 11/27/24 14:40 13C3-PF	, 1	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/2//24 14:40	AMS
13C5-PFPeA       67.4       40-130       11/27/24 14:40         13C5-PFHAA       68.0       40-130       11/27/24 14:40         13C4-PFHpA       63.2       40-130       11/27/24 14:40         13C8-PFOA       71.3       40-130       11/27/24 14:40         13C9-PFNA       65.8       40-130       11/27/24 14:40         13C9-PFDA       67.4       40-130       11/27/24 14:40         13C7-PFUNA       61.4       30-130       11/27/24 14:40         13C2-PFDA       54.3       10-130       11/27/24 14:40         13C2-PFDA       48.2       10-130       11/27/24 14:40         13C2-PFDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFBS       71.5       40-130       11/27/24 14:40         13C3-PFDS       68.0       40-130       11/27/24 14:40         13C2-42FTS       139       40-200       11/27/24 14:40         13C2-42FTS       40-200       11/27/24 14:40         13C3-PFDSA       52.3       40-130       11/27/24 14:40         13C3-PFDSA       37.3       10-130       11/27/24 14:40         13C3-PFDSA       37.3       10-130 <td>Surrogates</td> <td></td> <td>% Recovery</td> <td>Recovery Limits</td> <td>s</td> <td>Flag/Qual</td> <td></td> <td></td> <td></td> <td></td>	Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
13C5-PFHxA       68.0       40-130       11/27/24 14:40         13C4-PFHpA       63.2       40-130       11/27/24 14:40         13C9-PFNA       71.3       40-130       11/27/24 14:40         13C9-PFNA       65.8       40-130       11/27/24 14:40         13C6-PFDA       67.4       40-130       11/27/24 14:40         13C7-PFUnA       61.4       30-130       11/27/24 14:40         13C2-PFDoA       54.3       10-130       11/27/24 14:40         13C2-PFEDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFBS       71.5       40-130       11/27/24 14:40         13C3-PFBS       71.5       40-130       11/27/24 14:40         13C2-PFCS       68.0       40-130       11/27/24 14:40         13C2-PFCS       82.4       40-200       11/27/24 14:40         13C2-PFCS       82.4       40-200       11/27/24 14:40         13C2-PFCSA       52.3       40-130       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D5-NEFOSA       37.2       10-130       11/27/24 14:40         D5-NEFOSA       45.2	13C4-PFBA		68.7	5-130					11/27/24 14:40	
13C4-PFHpA       63.2       40-130       11/27/24 14:40         13C8-PFOA       71.3       40-130       11/27/24 14:40         13C9-PFNA       65.8       40-130       11/27/24 14:40         13C7-PFUnA       67.4       40-130       11/27/24 14:40         13C7-PFUnA       61.4       30-130       11/27/24 14:40         13C2-PFDoA       54.3       10-130       11/27/24 14:40         13C2-PFTeDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFHxS       71.5       40-130       11/27/24 14:40         13C2-PFTS       68.0       40-130       11/27/24 14:40         13C2-PFTS       139       40-200       11/27/24 14:40         13C2-SEFTS       64.2       40-300       11/27/24 14:40         13C2-SEFTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       37.3       10-130       11/27/24 14:40         15-NEFOSA       37.2       10-130       11/27/24 14:40         15-NEFOSA       45.2       25-135       11/27/24 14:40         15-NIFEFOSA       44.8       10-130       11/27/24 14:40         15-NIFEFOSA       44.8<	13C5-PFPeA		67.4	40-130					11/27/24 14:40	
13C8-PFOA       71.3       40-130       11/27/24 14:40         13C9-PFNA       65.8       40-130       11/27/24 14:40         13C6-PFDA       67.4       40-130       11/27/24 14:40         13C7-PFUnA       61.4       30-130       11/27/24 14:40         13C2-PFDoA       54.3       10-130       11/27/24 14:40         13C2-PFTEDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFIXS       71.5       40-130       11/27/24 14:40         13C2-EPTS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-8:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         13C8-PFOSA       37.3       10-130       11/27/24 14:40         15-NMEFOSA       37.2       10-130       11/27/24 14:40         15-NMEFOSA       47.2       40-170       11/27/24 14:40         15-NMEFOSA       44.8       10-130       11/27/24 14:40         15-NMEFOSA       44	13C5-PFHxA		68.0	40-130					11/27/24 14:40	
13C9-PFNA       65.8       40-130       11/27/24 14:40         13C6-PFDA       67.4       40-130       11/27/24 14:40         13C7-PFUnA       61.4       30-130       11/27/24 14:40         13C2-PFDoA       54.3       10-130       11/27/24 14:40         13C2-PFEDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFBxS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-8:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEFOSA       37.2       10-130       11/27/24 14:40         D5-NEFOSAA       45.2       25-135       11/27/24 14:40         D5-NEFOSA       44.8       10-130       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D7-NMeFOSE       41.7	13C4-PFHpA		63.2	40-130					11/27/24 14:40	
13C6-PFDA       67.4       40-130       11/27/24 14:40         13C7-PFUnA       61.4       30-130       11/27/24 14:40         13C2-PFDoA       54.3       10-130       11/27/24 14:40         13C2-PFTeDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFHxS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         13C8-PFOSA       37.3       10-130       11/27/24 14:40         D5-NEIFOSA       37.2       10-130       11/27/24 14:40         D5-NEIFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEIFOSE       41.7       10-130       11/27/24 14:40         D9-NEIFOSE       41.7       10-130       11/27/24 14:40	13C8-PFOA		71.3	40-130					11/27/24 14:40	
13C7-PFUNA       61.4       30-130       11/27/24 14:40         13C2-PFDOA       54.3       10-130       11/27/24 14:40         13C2-PFTEDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFHXS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         13-NMcFOSA       37.3       10-130       11/27/24 14:40         15-NEIFOSA       47.2       40-170       11/27/24 14:40         15-NEIFOSAA       45.2       25-135       11/27/24 14:40         17-NMcFOSE       44.8       10-130       11/27/24 14:40         19-NEIFOSE       41.7       10-130       11/27/24 14:40         19-NEIFOSE       41.7       10-130       11/27/24 14:40	13C9-PFNA		65.8	40-130					11/27/24 14:40	
13C2-PFDOA       54.3       10-130       11/27/24 14:40         13C2-PFEDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFHxS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C8-PFOSA       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEIFOSA       47.2       40-170       11/27/24 14:40         D5-NEIFOSA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEIFOSE       41.7       10-130       11/27/24 14:40	13C6-PFDA		67.4	40-130					11/27/24 14:40	
13C2-PFTeDA       48.2       10-130       11/27/24 14:40         13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFHXS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-8:2FTS       82.4       40-200       11/27/24 14:40         13C8-PFOSA       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D5-NEtFOSA       37.3       10-130       11/27/24 14:40         D5-NEtFOSA       47.2       40-170       11/27/24 14:40         D5-NEtFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEtFOSE       41.7       10-130       11/27/24 14:40	13C7-PFUnA		61.4	30-130					11/27/24 14:40	
13C3-PFBS       72.3       40-135       11/27/24 14:40         13C3-PFHxS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEIFOSA       37.2       10-130       11/27/24 14:40         D5-NEIFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEIFOSE       41.7       10-130       11/27/24 14:40	13C2-PFDoA		54.3	10-130					11/27/24 14:40	
13C3-PFHxS       71.5       40-130       11/27/24 14:40         13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEIFOSA       37.2       10-130       11/27/24 14:40         D5-NEIFOSAA       47.2       40-170       11/27/24 14:40         D5-NEIFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEIFOSE       41.7       10-130       11/27/24 14:40	13C2-PFTeDA		48.2	10-130					11/27/24 14:40	
13C8-PFOS       68.0       40-130       11/27/24 14:40         13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEtFOSA       37.2       10-130       11/27/24 14:40         D5-NEtFOSAA       47.2       40-170       11/27/24 14:40         D5-NEtFOSE       44.8       10-130       11/27/24 14:40         D9-NEtFOSE       41.7       10-130       11/27/24 14:40	13C3-PFBS		72.3	40-135					11/27/24 14:40	
13C2-4:2FTS       139       40-200       11/27/24 14:40         13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEIFOSA       37.2       10-130       11/27/24 14:40         D5-NEIFOSAA       47.2       40-170       11/27/24 14:40         D5-NEIFOSE       44.8       10-130       11/27/24 14:40         D9-NEIFOSE       41.7       10-130       11/27/24 14:40	13C3-PFHxS		71.5	40-130					11/27/24 14:40	
13C2-6:2FTS       82.4       40-200       11/27/24 14:40         13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEtFOSA       37.2       10-130       11/27/24 14:40         D3-NMeFOSAA       47.2       40-170       11/27/24 14:40         D5-NEtFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEtFOSE       41.7       10-130       11/27/24 14:40	13C8-PFOS		68.0	40-130					11/27/24 14:40	
13C2-8:2FTS       64.2       40-300       11/27/24 14:40         13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEtFOSA       37.2       10-130       11/27/24 14:40         D3-NMeFOSAA       47.2       40-170       11/27/24 14:40         D5-NEtFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEtFOSE       41.7       10-130       11/27/24 14:40	13C2-4:2FTS		139	40-200					11/27/24 14:40	
13C8-PFOSA       52.3       40-130       11/27/24 14:40         D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEtFOSA       37.2       10-130       11/27/24 14:40         D3-NMeFOSAA       47.2       40-170       11/27/24 14:40         D5-NEtFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEtFOSE       41.7       10-130       11/27/24 14:40	13C2-6:2FTS		82.4	40-200					11/27/24 14:40	
D3-NMeFOSA       37.3       10-130       11/27/24 14:40         D5-NEtFOSA       37.2       10-130       11/27/24 14:40         D3-NMeFOSAA       47.2       40-170       11/27/24 14:40         D5-NEtFOSAA       45.2       25-135       11/27/24 14:40         D7-NMeFOSE       44.8       10-130       11/27/24 14:40         D9-NEtFOSE       41.7       10-130       11/27/24 14:40	13C2-8:2FTS		64.2	40-300					11/27/24 14:40	
D5-NEtFOSA     37.2     10-130     11/27/24 14:40       D3-NMeFOSAA     47.2     40-170     11/27/24 14:40       D5-NEtFOSAA     45.2     25-135     11/27/24 14:40       D7-NMeFOSE     44.8     10-130     11/27/24 14:40       D9-NEtFOSE     41.7     10-130     11/27/24 14:40	13C8-PFOSA		52.3	40-130					11/27/24 14:40	
D3-NMeFOSAA     47.2     40-170     11/27/24 14:40       D5-NEtFOSAA     45.2     25-135     11/27/24 14:40       D7-NMeFOSE     44.8     10-130     11/27/24 14:40       D9-NEtFOSE     41.7     10-130     11/27/24 14:40	D3-NMeFOSA		37.3	10-130					11/27/24 14:40	
D5-NEtFOSAA     45.2     25-135     11/27/24 14:40       D7-NMeFOSE     44.8     10-130     11/27/24 14:40       D9-NEtFOSE     41.7     10-130     11/27/24 14:40	D5-NEtFOSA		37.2	10-130					11/27/24 14:40	
D7-NMeFOSE     44.8     10-130     11/27/24 14:40       D9-NEtFOSE     41.7     10-130     11/27/24 14:40	D3-NMeFOSAA		47.2	40-170					11/27/24 14:40	
D9-NEtFOSE 41.7 10-130 11/27/24 14:40	D5-NEtFOSAA		45.2	25-135					11/27/24 14:40	
	D7-NMeFOSE		44.8	10-130					11/27/24 14:40	
13C3-HFPO-DA 70.3 40-130 11/27/24 14:40	D9-NEtFOSE		41.7	10-130					11/27/24 14:40	
	13C3-HFPO-DA		70.3	40-130					11/27/24 14:40	

Work Order: 24K0480



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

Project Location: Old Bethpage, NY Sample Description:

Date Received: 11/6/2024

Field Sample #: ASF-CP-01-110524

Sampled: 11/5/2024 09:00

Sample ID: 24K0480-04
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	14	0.19	μg/L	1	B, B-07	SW-846 8270E	11/11/24	11/14/24 7:32	GJB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
1,4-Dioxane-d8	_	23.8	15-110			_		11/14/24 7:32	



Project Location: Old Bethpage, NY Sample Description: Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: ASF-CP-01-110524 Sampled: 11/5/2024 09:00

Sample ID: 24K0480-04
Sample Matrix: Ground Water

## Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Volathe Organic Col Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	34	6.0	ng/L	1	1 mg/ Qum	Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoropentanoic acid (PFPeA)	20	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorohexanoic acid (PFHxA)	23	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoroheptanoic acid (PFHpA)	12	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorooctanoic acid (PFOA)	47	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorononanoic acid (PFNA)	42	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorodecanoic acid (PFDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorobutanesulfonic acid (PFBS)	2.7	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoropentanesulfonic acid (PFPeS)	1.8	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorohexanesulfonic acid (PFHxS)	7.5	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorooctanesulfonic acid (PFOS)	16	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA) N-ethyl perfluorooctanesulfonamide	ND ND	1.5	ng/L	1		Draft Method 1633  Draft Method 1633	11/26/24 11/26/24	11/27/24 14:49 11/27/24 14:49	AMS AMS
(NEtFOSA) N-MeFOSAA (NMeFOSAA)			_	1	g 20	Draft Method 1633			
	ND	1.5	ng/L		S-29	Draft Method 1633	11/26/24	11/27/24 14:49	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
N-methylperfluorooctanesulfonamidoethan ol(NMeFOSE) N-ethylperfluorooctanesulfonamidoethanol	ND ND	15 15	ng/L	1		Draft Method 1633	11/26/24 11/26/24	11/27/24 14:49 11/27/24 14:49	AMS AMS
(NEtFOSE) Hexafluoropropylene oxide dimer acid	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
(HFPO-DA) 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
9Cl-PF3ONS (F53B Minor)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
11Cl-PF3OUdS (F53B Major)	ND	6.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.5	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	38	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	38	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS



Project Location: Old Bethpage, NY Sam

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024

Field Sample #: ASF-CP-01-110524

Sampled: 11/5/2024 09:00

Sample ID: 24K0480-04
Sample Matrix: Ground Water

Comizzolatila	Organia	Compounds by -	I C/MC MC

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
(PFMBA)			Ü						
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	3.0	ng/L	1		Draft Method 1633	11/26/24	11/27/24 14:49	AMS
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
13C4-PFBA		71.1	5-130					11/27/24 14:49	
13C5-PFPeA		71.4	40-130					11/27/24 14:49	
13C5-PFHxA		71.6	40-130					11/27/24 14:49	
13C4-PFHpA		67.0	40-130					11/27/24 14:49	
13C8-PFOA		74.8	40-130					11/27/24 14:49	
13C9-PFNA		69.0	40-130					11/27/24 14:49	
13C6-PFDA		62.1	40-130					11/27/24 14:49	
13C7-PFUnA		50.3	30-130					11/27/24 14:49	
13C2-PFDoA		41.5	10-130					11/27/24 14:49	
13C2-PFTeDA		28.1	10-130					11/27/24 14:49	
13C3-PFBS		76.0	40-135					11/27/24 14:49	
13C3-PFHxS		74.3	40-130					11/27/24 14:49	
13C8-PFOS		64.8	40-130					11/27/24 14:49	
13C2-4:2FTS		138	40-200					11/27/24 14:49	
13C2-6:2FTS		71.9	40-200					11/27/24 14:49	
13C2-8:2FTS		59.4	40-300					11/27/24 14:49	
13C8-PFOSA		49.0	40-130					11/27/24 14:49	
D3-NMeFOSA		36.8	10-130					11/27/24 14:49	
D5-NEtFOSA		32.2	10-130					11/27/24 14:49	
D3-NMeFOSAA		37.5 *	40-170		S-29			11/27/24 14:49	
D5-NEtFOSAA		36.5	25-135					11/27/24 14:49	
D7-NMeFOSE		29.0	10-130					11/27/24 14:49	
D9-NEtFOSE		24.1	10-130					11/27/24 14:49	
13C3-HFPO-DA		69.3	40-130					11/27/24 14:49	



Project Location: Old Bethpage, NY Sa

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024
Field Sample #: TB-110524

Sampled: 11/5/2024 00:00

Sample ID: 24K0480-05

Sample Matrix: Trip Blank Water

Volatile Organic	Compounds	by GC/MS
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			Volatile Organic Co	mpounds by G	SC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Benzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Bromochloromethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Bromodichloromethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Bromoform	ND	1.0	μg/L	1	V-05	SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Bromomethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
2-Butanone (MEK)	ND	20	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
n-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
sec-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
tert-Butylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Carbon Disulfide	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Carbon Tetrachloride	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Chlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Chlorodibromomethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Chloroethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Chloroform	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Chloromethane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Cyclohexane	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2-Dibromoethane (EDB)	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,3-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,4-Dichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,1-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2-Dichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,1-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
cis-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
trans-1,2-Dichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2-Dichloropropane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
cis-1,3-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
trans-1,3-Dichloropropene	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Ethylbenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
2-Hexanone (MBK)	ND	10	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Isopropylbenzene (Cumene)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Methyl Acetate	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Methyl Cyclohexane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Methylene Chloride	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Naphthalene	ND	2.0	μg/L	1	V-05	SW-846 8260D	11/7/24	11/8/24 11:58	MFF
n-Propylbenzene	ND	1.0	μg/L	1	. 55	SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Styrene	ND	1.0	μg/L μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
·	HD	1.0	µg/ L	1		5 11-040 02000	11///24	Page 28	

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Project Location: Old Bethpage, NY

Sample Description:

Work Order: 24K0480

Date Received: 11/6/2024 Field Sample #: TB-110524

Sampled: 11/5/2024 00:00

Sample ID: 24K0480-05

Sample Matrix: Trip Blank Water

Volatile	Organic	Compounds	by	GC/MS
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Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Tetrachloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Toluene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2,3-Trichlorobenzene	ND	5.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,1,1-Trichloroethane	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,1,2-Trichloroethane	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Trichloroethylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2,3-Trichloropropane	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,2,4-Trimethylbenzene	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
1,3,5-Trimethylbenzene	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Vinyl Chloride	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
m+p Xylene	ND	2.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
o-Xylene	ND	1.0	μg/L	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Xylenes (total)	ND	1.0	$\mu g/L$	1		SW-846 8260D	11/7/24	11/8/24 11:58	MFF
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual				
1,2-Dichloroethane-d4		101	70-130					11/8/24 11:58	

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		11/8/24 11:58
Toluene-d8	96.8	70-130		11/8/24 11:58
4-Bromofluorobenzene	84.8	70-130		11/8/24 11:58



## Sample Extraction Data

Prep Method:EPA 1633 Analytical Method:Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K0480-01RE1 [PD-CP-00-110524]	B393054	566	4.00	11/26/24
24K0480-02RE1 [PD-CP-01-110524]	B393054	530	4.00	11/26/24
24K0480-03RE1 [ASF-CP-00-110524]	B393054	534	4.00	11/26/24
24K0480-04RE1 [ASF-CP-01-110524]	B393054	533	4.00	11/26/24

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K0480-01 [PD-CP-00-110524]	B391682	5	5.00	11/07/24
24K0480-02 [PD-CP-01-110524]	B391682	5	5.00	11/07/24
24K0480-05 [TB-110524]	B391682	5	5.00	11/07/24

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K0480-01 [PD-CP-00-110524]	B391693	112	1.00	11/07/24
24K0480-02 [PD-CP-01-110524]	B391693	112	1.00	11/07/24

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K0480-01 [PD-CP-00-110524]	B391943	1040	1.00	11/11/24
24K0480-02 [PD-CP-01-110524]	B391943	1040	1.00	11/11/24
24K0480-03 [ASF-CP-00-110524]	B391943	1040	1.00	11/11/24
24K0480-04 [ASF-CP-01-110524]	B391943	1040	1.00	11/11/24

RPD

%REC



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

## QUALITY CONTROL

Spike

Source

## Volatile Organic Compounds by GC/MS - Quality Control

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B391682 - SW-846 5030B										
Blank (B391682-BLK1)				Prepared: 11	/07/24 Anal	yzed: 11/08/2	4			
Acetone	ND	50	$\mu g/L$							
Benzene	ND	1.0	$\mu g/L$							
Bromochloromethane	ND	1.0	$\mu g/L$							
Bromodichloromethane	ND	0.50	$\mu g/L$							
Bromoform	ND	1.0	$\mu g/L$							V-05
Bromomethane	ND	2.0	$\mu g/L$							
2-Butanone (MEK)	ND	20	$\mu g/L$							
n-Butylbenzene	ND	1.0	$\mu g/L$							
sec-Butylbenzene	ND	1.0	$\mu g/L$							
tert-Butylbenzene	ND	1.0	$\mu g/L$							
Carbon Disulfide	ND	5.0	$\mu g/L$							
Carbon Tetrachloride	ND	5.0	$\mu g/L$							
Chlorobenzene	ND	1.0	$\mu g/L$							
Chlorodibromomethane	ND	0.50	$\mu g/L$							
Chloroethane	ND	2.0	$\mu g/L$							
Chloroform	ND	2.0	$\mu g/L$							
Chloromethane	ND	2.0	$\mu g/L$							
Cyclohexane	ND	5.0	$\mu g/L$							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	$\mu g/L$							
1,2-Dibromoethane (EDB)	ND	0.50	$\mu g/L$							
1,2-Dichlorobenzene	ND	1.0	$\mu g/L$							
1,3-Dichlorobenzene	ND	1.0	$\mu g/L$							
1,4-Dichlorobenzene	ND	1.0	$\mu g/L$							
Dichlorodifluoromethane (Freon 12)	ND	2.0	$\mu g/L$							
1,1-Dichloroethane	ND	1.0	$\mu g/L$							
1,2-Dichloroethane	ND	1.0	$\mu g/L$							
1,1-Dichloroethylene	ND	1.0	$\mu g/L$							
cis-1,2-Dichloroethylene	ND	1.0	$\mu g/L$							
trans-1,2-Dichloroethylene	ND	1.0	$\mu g/L$							
1,2-Dichloropropane	ND	1.0	$\mu g/L$							
cis-1,3-Dichloropropene	ND	0.50	$\mu g/L$							
trans-1,3-Dichloropropene	ND	0.50	$\mu g/L$							
Ethylbenzene	ND	1.0	$\mu g/L$							
2-Hexanone (MBK)	ND	10	$\mu g/L$							
Isopropylbenzene (Cumene)	ND	1.0	$\mu g \! / \! L$							
p-Isopropyltoluene (p-Cymene)	ND	1.0	$\mu g \! / \! L$							
Methyl Acetate	ND	1.0	$\mu g \! / \! L$							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	$\mu g \! / \! L$							
Methyl Cyclohexane	ND	1.0	$\mu g \! / \! L$							
Methylene Chloride	ND	5.0	$\mu g/L$							
4-Methyl-2-pentanone (MIBK)	ND	10	$\mu g/L$							
Naphthalene	ND	2.0	$\mu g \! / \! L$							V-05
n-Propylbenzene	ND	1.0	$\mu g/L$							
Styrene	ND	1.0	$\mu g \! / \! L$							
1,1,2,2-Tetrachloroethane	ND	0.50	$\mu g \! / \! L$							
Tetrachloroethylene	ND	1.0	$\mu g/L$							
Toluene	ND	1.0	$\mu g/L$							
1,2,3-Trichlorobenzene	ND	5.0	$\mu g/L$							
1,2,4-Trichlorobenzene	ND	1.0	$\mu g/L$							
1,1,1-Trichloroethane	ND	1.0	$\mu g/L$							
1,1,2-Trichloroethane	ND	1.0	$\mu g/L$							
Trichloroethylene	ND	1.0	$\mu g/L$							



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

## QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391682 - SW-846 5030B										
lank (B391682-BLK1)				Prepared: 11	/07/24 Analy	yzed: 11/08/2	4			
Crichlorofluoromethane (Freon 11)	ND	2.0	μg/L	•		<u> </u>				
,2,3-Trichloropropane	ND	2.0	μg/L							
,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	1.0	μg/L							
13)										
2,4-Trimethylbenzene	ND	1.0	μg/L							
3,5-Trimethylbenzene	ND	1.0	$\mu g/L$							
inyl Chloride	ND	2.0	μg/L							
+p Xylene	ND	2.0	μg/L							
Xylene	ND	1.0	$\mu g/L$							
ylenes (total)	ND	1.0	μg/L							
urrogate: 1,2-Dichloroethane-d4	24.7		μg/L	25.00		98.7	70-130			
urrogate: Toluene-d8	23.6		$\mu g/L$	25.00		94.5	70-130			
nrrogate: 4-Bromofluorobenzene	21.4		$\mu g/L$	25.00		85.4	70-130			
CS (B391682-BS1)				Prepared: 11	/07/24 Analy	yzed: 11/08/2	4			
cetone	95.9	50	μg/L	100.0		95.9	70-160			
enzene	11.0	1.0	μg/L	10.00		110	70-130			
romochloromethane	12.0	1.0	μg/L	10.00		120	70-130			
romodichloromethane	10.4	0.50	μg/L	10.00		104	70-130			
romoform	8.66	1.0	μg/L	10.00		86.6	70-130			V-05
romomethane	13.6	2.0	μg/L	10.00		136	40-160			V-20
Butanone (MEK)	103	20	μg/L	100.0		103	40-160			
Butylbenzene	9.62	1.0	μg/L	10.00		96.2	70-130			
cc-Butylbenzene	9.59	1.0	μg/L	10.00		95.9	70-130			
rt-Butylbenzene	9.41	1.0	μg/L	10.00		94.1	70-130			
arbon Disulfide	93.6	5.0	μg/L	100.0		93.6	70-130			
arbon Tetrachloride	9.99	5.0	μg/L	10.00		99.9	70-130			
hlorobenzene	11.2	1.0	μg/L	10.00		112	70-130			
hlorodibromomethane	9.73	0.50	μg/L	10.00		97.3	70-130			
hloroethane	9.95	2.0	μg/L	10.00		99.5	70-130			
hloroform	10.3	2.0	μg/L	10.00		103	70-130			
hloromethane	10.2	2.0	μg/L	10.00		102	40-160			
yclohexane	10.4	5.0	μg/L	10.00		104	70-130			
2-Dibromo-3-chloropropane (DBCP)	8.19	5.0	μg/L	10.00		81.9	70-130			
2-Dibromoethane (EDB)	9.78	0.50	μg/L	10.00		97.8	70-130			
2-Dichlorobenzene	10.8	1.0	μg/L	10.00		108	70-130			
3-Dichlorobenzene	10.5	1.0	μg/L	10.00		105	70-130			
4-Dichlorobenzene	9.33	1.0	μg/L	10.00		93.3	70-130			
ichlorodifluoromethane (Freon 12)	9.50	2.0	μg/L	10.00		95.0	40-160			
1-Dichloroethane	10.3	1.0	μg/L	10.00		103	70-130			
2-Dichloroethane	11.4	1.0	μg/L	10.00		114	70-130			
1-Dichloroethylene	10.2	1.0	μg/L	10.00		102	70-130			
s-1,2-Dichloroethylene	10.5	1.0	μg/L	10.00		105	70-130			
ans-1,2-Dichloroethylene	10.1	1.0	μg/L	10.00		101	70-130			
2-Dichloropropane	10.4	1.0	μg/L	10.00		104	70-130			
s-1,3-Dichloropropene	9.97	0.50	μg/L	10.00		99.7	70-130			
ans-1,3-Dichloropropene	9.30	0.50	μg/L	10.00		93.0	70-130			
hylbenzene	10.8	1.0	μg/L	10.00		108	70-130			
Hexanone (MBK)	86.0	10	μg/L	100.0		86.0	70-160			
opropylbenzene (Cumene)	10.2	1.0	μg/L	10.00		102	70-130			
Isopropyltoluene (p-Cymene)	9.67	1.0	μg/L	10.00		96.7	70-130			
lethyl Acetate	13.6	1.0	μg/L μg/L	10.00		136 *	70-130			L-02, V-20
lethyl tert-Butyl Ether (MTBE)	9.49	1.0	μg/L	10.00		94.9	70-130			2 02, 1.20

%REC

RPD



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

## QUALITY CONTROL

Spike

Source

## Volatile Organic Compounds by GC/MS - Quality Control

Reporting

Analyte	Result	Reporting Limit	Units	Level	Source Result	%REC	%REC Limits	RPD	Limit	Notes
Haryte	Result		Cints	Level	Result	70KEC	Limits	МЪ		Trotes
Satch B391682 - SW-846 5030B										
CS (B391682-BS1)				Prepared: 11	/07/24 Analy	yzed: 11/08/2	.4			
Methyl Cyclohexane	10.3	1.0	μg/L	10.00		103	70-130			
Methylene Chloride	9.89	5.0	μg/L	10.00		98.9	70-130			
-Methyl-2-pentanone (MIBK)	96.8	10	$\mu g/L$	100.0		96.8	70-160			
aphthalene	6.81	2.0	$\mu g/L$	10.00		68.1	40-130			V-05
-Propylbenzene	10.2	1.0	$\mu g/L$	10.00		102	70-130			
tyrene	9.94	1.0	$\mu g/L$	10.00		99.4	70-130			
,1,2,2-Tetrachloroethane	10.4	0.50	$\mu g/L$	10.00		104	70-130			
etrachloroethylene	11.4	1.0	$\mu g/L$	10.00		114	70-130			
oluene	10.9	1.0	$\mu g/L$	10.00		109	70-130			
2,3-Trichlorobenzene	10.1	5.0	$\mu g/L$	10.00		101	70-130			
,2,4-Trichlorobenzene	9.49	1.0	$\mu g/L$	10.00		94.9	70-130			
,1,1-Trichloroethane	10.0	1.0	$\mu g/L$	10.00		100	70-130			
,1,2-Trichloroethane	10.6	1.0	$\mu g/L$	10.00		106	70-130			
richloroethylene	10.8	1.0	$\mu g/L$	10.00		108	70-130			
richlorofluoromethane (Freon 11)	10.4	2.0	$\mu g/L$	10.00		104	70-130			
,2,3-Trichloropropane	10.9	2.0	$\mu g/L$	10.00		109	70-130			
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 13)	9.65	1.0	μg/L	10.00		96.5	70-130			
,2,4-Trimethylbenzene	9.87	1.0	μg/L	10.00		98.7	70-130			
,3,5-Trimethylbenzene	10.6	1.0	μg/L μg/L	10.00		106	70-130			
Vinyl Chloride	10.0	2.0	μg/L	10.00		102	40-160			
n+p Xylene		2.0	μg/L μg/L	20.00		102	70-130			
-Xylene	21.3	1.0	μg/L μg/L	10.00		107	70-130			
Zylenes (total)	10.1 31.4	1.0	μg/L μg/L	30.00		101	0-200			
urrogate: 1,2-Dichloroethane-d4	25.0		μg/L μg/L	25.00		100	70-130			
urrogate: Toluene-d8	24.9		μg/L μg/L	25.00		99.8	70-130			
urrogate: 4-Bromofluorobenzene	24.2		μg/L μg/L	25.00		96.6	70-130			
-	21.2		µд, Д		/07/24 A 1					
CS Dup (B391682-BSD1)	104	50	μg/L	100.0	/07/24 Analy	104	70-160	7.85	25	
Benzene		1.0	μg/L μg/L	10.00		105	70-130	3.82	25	
Bromochloromethane	10.5	1.0								
romodichloromethane	11.8	0.50	μg/L μg/I	10.00		118	70-130	1.85	25 25	
romodicniorometnane Bromoform	10.6	0.50	μg/L	10.00		106	70-130	2.00	23	
TOTHOTOTIII	0.40	1.0	ILC:/T	10.00		940		2.05		17.05
tramamathana	8.40	1.0	μg/L	10.00		84.0	70-130	3.05	25	V-05
	15.2	2.0	μg/L	10.00		152	70-130 40-160	11.4	25 25	V-05 V-20
Bromomethane -Butanone (MEK)	15.2 111	2.0 20	μg/L μg/L	10.00 100.0		152 111	70-130 40-160 40-160	11.4 7.89	25 25 25	
-Butanone (MEK) -Butylbenzene	15.2 111 9.32	2.0 20 1.0	μg/L μg/L μg/L	10.00 100.0 10.00		152 111 93.2	70-130 40-160 40-160 70-130	11.4 7.89 3.17	25 25 25 25	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene	15.2 111 9.32 10.1	2.0 20 1.0 1.0	μg/L μg/L μg/L μg/L	10.00 100.0 10.00 10.00		152 111 93.2 101	70-130 40-160 40-160 70-130 70-130	11.4 7.89 3.17 5.48	25 25 25 25 25 25	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene	15.2 111 9.32 10.1 9.68	2.0 20 1.0 1.0	μg/L μg/L μg/L μg/L μg/L	10.00 100.0 10.00 10.00 10.00		152 111 93.2 101 96.8	70-130 40-160 40-160 70-130 70-130	11.4 7.89 3.17 5.48 2.83	25 25 25 25 25 25 25	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene Carbon Disulfide	15.2 111 9.32 10.1 9.68 104	2.0 20 1.0 1.0 1.0 5.0	μg/L μg/L μg/L μg/L μg/L μg/L	10.00 100.0 10.00 10.00 10.00 100.0		152 111 93.2 101 96.8 104	70-130 40-160 40-160 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5	25 25 25 25 25 25 25 25 25	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene Carbon Disulfide Carbon Tetrachloride	15.2 111 9.32 10.1 9.68 104 9.99	2.0 20 1.0 1.0 1.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 100.0 10.00		152 111 93.2 101 96.8 104 99.9	70-130 40-160 40-160 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00	25 25 25 25 25 25 25 25 25 25 25	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene Carbon Disulfide Carbon Tetrachloride Chlorobenzene	15.2 111 9.32 10.1 9.68 104 9.99 11.2	2.0 20 1.0 1.0 1.0 5.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 100.0 10.00		152 111 93.2 101 96.8 104 99.9	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895	25 25 25 25 25 25 25 25 25 25 25 25	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene earbon Disulfide earbon Tetrachloride chlorobenzene chlorodibromomethane	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3	2.0 20 1.0 1.0 5.0 5.0 1.0 0.50	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene earbon Disulfide earbon Tetrachloride chlorobenzene chlorodibromomethane chloroethane	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3	2.0 20 1.0 1.0 1.0 5.0 5.0 1.0 0.50 2.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene erton Disulfide erton Tetrachloride chlorodibromomethane chloroethane	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0	2.0 20 1.0 1.0 5.0 5.0 1.0 0.50 2.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene cc-Butylbenzene ert-Butylbenzene arbon Disulfide arbon Tetrachloride hlorobenzene hlorodibromomethane hloroform hloromethane	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0 10.3	2.0 20 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130 40-160	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389 11.9	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene ertbon Disulfide erbon Tetrachloride ehlorodibromomethane ehloroform ehloromethane eyclohexane	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0	2.0 20 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103 115 98.5	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene ert-Butylbe	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0 10.3	2.0 20 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0 5.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130 40-160	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389 11.9	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene ert-Butylbe	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0 10.3 11.5 9.85	2.0 20 1.0 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0 5.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103 115 98.5	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130 40-160 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389 11.9 5.53 0.366 2.12	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene Carbon Disulfide Carbon Tetrachloride	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0 10.3 11.5 9.85 8.22	2.0 20 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0 5.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103 115 98.5 82.2	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 40-160 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389 11.9 5.53 0.366	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene earbon Disulfide Carbon Tetrachloride Chlorobenzene Chlorodibromomethane Chloroform Chloroform Chloromethane Cyclohexane (2-Dibromo-3-chloropropane (DBCP) (2-Dibromoethane (EDB)	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0 10.3 11.5 9.85 8.22 9.99	2.0 20 1.0 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0 5.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103 115 98.5 82.2 99.9	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 40-160 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389 11.9 5.53 0.366 2.12	25 25 25 25 25 25 25 25 25 25 25 25 25 2	
-Butanone (MEK) -Butylbenzene ec-Butylbenzene ert-Butylbenzene earbon Disulfide Carbon Tetrachloride Chlorobenzene Chlorodibromomethane Chloroform Chloromethane Cyclohexane ,2-Dibromo-3-chloropropane (DBCP) ,2-Dibromoethane (EDB)	15.2 111 9.32 10.1 9.68 104 9.99 11.2 10.3 11.0 10.3 11.5 9.85 8.22 9.99 10.6	2.0 20 1.0 1.0 1.0 5.0 5.0 1.0 0.50 2.0 2.0 2.0 5.0 5.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	10.00 100.0 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00		152 111 93.2 101 96.8 104 99.9 112 103 110 103 115 98.5 82.2 99.9 106	70-130 40-160 40-160 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130	11.4 7.89 3.17 5.48 2.83 10.5 0.00 0.0895 5.50 10.3 0.389 11.9 5.53 0.366 2.12 1.49	25 25 25 25 25 25 25 25 25 25 25 25 25 2	



## QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391682 - SW-846 5030B										
LCS Dup (B391682-BSD1)				Prepared: 11	/07/24 Analy	zed: 11/08/2	4			
1,1-Dichloroethane	11.5	1.0	$\mu g/L$	10.00		115	70-130	11.5	25	
1,2-Dichloroethane	11.2	1.0	$\mu g/L$	10.00		112	70-130	2.48	25	
,1-Dichloroethylene	11.2	1.0	$\mu g/L$	10.00		112	70-130	9.10	25	
eis-1,2-Dichloroethylene	12.0	1.0	$\mu g/L$	10.00		120	70-130	13.2	25	
rans-1,2-Dichloroethylene	11.1	1.0	μg/L	10.00		111	70-130	9.34	25	
,2-Dichloropropane	11.0	1.0	μg/L	10.00		110	70-130	5.33	25	
eis-1,3-Dichloropropene	10.2	0.50	μg/L	10.00		102	70-130	1.89	25	
rans-1,3-Dichloropropene	9.85	0.50	μg/L	10.00		98.5	70-130	5.74	25	
Ethylbenzene	10.7	1.0	μg/L	10.00		107	70-130	0.745	25	
2-Hexanone (MBK)	91.8	10	$\mu g/L$	100.0		91.8	70-160	6.48	25	
sopropylbenzene (Cumene)	10.1	1.0	$\mu g/L$	10.00		101	70-130	0.592	25	
p-Isopropyltoluene (p-Cymene)	10.1	1.0	$\mu g/L$	10.00		101	70-130	4.75	25	
Methyl Acetate	14.6	1.0	$\mu g/L$	10.00		146 *	70-130	7.52	25	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	$\mu g/L$	10.00		105	70-130	10.2	25	
Methyl Cyclohexane	10.9	1.0	$\mu g/L$	10.00		109	70-130	5.38	25	
Methylene Chloride	11.4	5.0	$\mu g \! / \! L$	10.00		114	70-130	14.3	25	
-Methyl-2-pentanone (MIBK)	96.3	10	$\mu g \! / \! L$	100.0		96.3	70-160	0.487	25	
Naphthalene	6.27	2.0	$\mu g/L$	10.00		62.7	40-130	8.26	25	V-05
-Propylbenzene	10.2	1.0	μg/L	10.00		102	70-130	0.195	25	
Styrene	9.96	1.0	μg/L	10.00		99.6	70-130	0.201	25	
,1,2,2-Tetrachloroethane	9.87	0.50	μg/L	10.00		98.7	70-130	5.71	25	
etrachloroethylene	11.2	1.0	μg/L	10.00		112	70-130	1.24	25	
Coluene	11.0	1.0	μg/L	10.00		110	70-130	0.640	25	
,2,3-Trichlorobenzene	9.41	5.0	μg/L	10.00		94.1	70-130	7.37	25	
,2,4-Trichlorobenzene	8.86	1.0	μg/L	10.00		88.6	70-130	6.87	25	
,1,1-Trichloroethane	10.3	1.0	$\mu g/L$	10.00		103	70-130	2.17	25	
,1,2-Trichloroethane	11.0	1.0	μg/L	10.00		110	70-130	3.60	25	
richloroethylene	10.7	1.0	μg/L	10.00		107	70-130	1.21	25	
Frichlorofluoromethane (Freon 11)	11.4	2.0	μg/L	10.00		114	70-130	8.99	25	
,2,3-Trichloropropane	11.0	2.0	μg/L	10.00		110	70-130	0.0914	25	
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 13)	10.7	1.0	μg/L	10.00		107	70-130	10.4	25	
,2,4-Trimethylbenzene	9.86	1.0	$\mu g/L$	10.00		98.6	70-130	0.101	25	
1,3,5-Trimethylbenzene	10.4	1.0	$\mu g \! / \! L$	10.00		104	70-130	1.62	25	
Vinyl Chloride	10.7	2.0	$\mu g/L$	10.00		107	40-160	4.68	25	
n+p Xylene	20.6	2.0	$\mu g/L$	20.00		103	70-130	3.43	25	
o-Xylene	10.1	1.0	$\mu g/L$	10.00		101	70-130	0.0990	25	
Xylenes (total)	30.7	1.0	μg/L	30.00		102	0-200	2.35		
Surrogate: 1,2-Dichloroethane-d4	25.2		μg/L	25.00		101	70-130			
Surrogate: Toluene-d8	25.9		μg/L μg/L	25.00		104	70-130			
Surrogate: 4-Bromofluorobenzene	23.4		μg/L μg/L	25.00		93.6	70-130			
Matrix Spike (B391682-MS1)	Sou	rce: 24K0480-		Prepared: 11	/07/24 Analy	zed: 11/08/2	4			
Acetone	83.6	50	μg/L	100.0	2.35		70-130			
Benzene	9.76	1.0	μg/L	10.00	2.33 ND		70-130			
Bromochloromethane	10.2	1.0	μg/L	10.00	ND ND		70-130			
Bromodichloromethane	8.89	0.50	μg/L μg/L	10.00	ND ND		70-130			
Bromoform		1.0	μg/L μg/L	10.00	ND ND		70-130			V-05
romomethane	7.19	2.0	μg/L μg/L	10.00			70-130			V-03 V-20
-Butanone (MEK)	12.9	2.0			ND					v-20
	89.7	1.0	μg/L μg/I	100.0	ND		70-130			
n-Butylbenzene nec-Butylbenzene	7.41	1.0	μg/L μg/I	10.00	ND		70-130			
ес-витупоепzene ert-Butylbenzene	8.17		μg/L	10.00	ND		70-130			
ar-Butyroenzene	7.98	1.0	μg/L	10.00	ND	79.8	70-130			Page 34 o



## QUALITY CONTROL

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	ı

Matrix Spike (B391682-MS1)	Sourc	e: 24K0480-	01	Prepared: 11/07	7/24 Analyz	ed: 11/08/	24	
Carbon Disulfide	82.6	5.0	μg/L	100.0	ND	82.6	70-130	
Carbon Tetrachloride	9.01	5.0	$\mu g/L$	10.00	ND	90.1	70-130	
Chlorobenzene	9.56	1.0	$\mu g/L$	10.00	ND	95.6	70-130	
Chlorodibromomethane	8.24	0.50	$\mu g/L$	10.00	ND	82.4	70-130	
Chloroethane	8.93	2.0	$\mu g/L$	10.00	ND	89.3	70-130	
Chloroform	9.22	2.0	$\mu g/L$	10.00	ND	92.2	70-130	
Chloromethane	9.66	2.0	$\mu g/L$	10.00	ND	96.6	70-130	
Cyclohexane	9.30	5.0	μg/L	10.00	ND	93.0	70-130	
,2-Dibromo-3-chloropropane (DBCP)	7.15	5.0	μg/L	10.00	ND	71.5	70-130	
,2-Dibromoethane (EDB)	8.34	0.50	μg/L	10.00	ND	83.4	70-130	
,2-Dichlorobenzene	8.90	1.0	μg/L	10.00	ND	89.0	70-130	
,3-Dichlorobenzene	8.98	1.0	μg/L	10.00	ND	89.8	70-130	
,4-Dichlorobenzene	8.78	1.0	μg/L	10.00	ND	87.8	70-130	
Dichlorodifluoromethane (Freon 12)	8.33	2.0	μg/L	10.00	ND	83.3	70-130	
,1-Dichloroethane	9.06	1.0	μg/L	10.00	ND	90.6	70-130	
,2-Dichloroethane	10.1	1.0	μg/L	10.00	ND	101	70-130	
,1-Dichloroethylene	8.94	1.0	μg/L	10.00	ND	89.4	70-130	
is-1,2-Dichloroethylene	9.25	1.0	μg/L	10.00	ND	92.5	70-130	
rans-1,2-Dichloroethylene	8.94	1.0	μg/L	10.00	ND	89.4	70-130	
,2-Dichloropropane	8.63	1.0	μg/L	10.00	ND	86.3	70-130	
is-1,3-Dichloropropene	7.61	0.50	μg/L	10.00	ND	76.1	70-130	
rans-1,3-Dichloropropene	7.39	0.50	μg/L	10.00	ND	73.9	70-130	
thylbenzene	9.08	1.0	μg/L	10.00	ND	90.8	70-130	
-Hexanone (MBK)		10	μg/L	100.0	ND	76.2	70-130	
sopropylbenzene (Cumene)	76.2	1.0	μg/L	10.00	ND	83.2	70-130	
-Isopropyltoluene (p-Cymene)	8.32	1.0	μg/L μg/L	10.00	ND ND	81.1	70-130	
Methyl Acetate	8.11	1.0	μg/L μg/L	10.00		86.5	70-130	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	8.65	1.0	μg/L	10.00	ND	80.7	70-130	L-02, V-20
Methyl Cyclohexane	8.07	1.0	μg/L μg/L	10.00	ND	90.6	70-130	
Methylene Chloride	9.06	5.0	μg/L μg/L	10.00	ND	90.0	70-130	
l-Methyl-2-pentanone (MIBK)	9.02	10			ND			
Naphthalene	80.7	2.0	μg/L ug/I	100.0	ND	80.7	70-130	MC 00 1/0
•	3.89		μg/L	10.00	ND	38.9 *		MS-09, V-0
ı-Propylbenzene	8.52	1.0 1.0	μg/L	10.00	ND	85.2	70-130	
Styrene	8.11		μg/L	10.00	ND	81.1	70-130	
,1,2,2-Tetrachloroethane	8.89	0.50	μg/L	10.00	ND	88.9	70-130	
Tetrachloroethylene	9.61	1.0	μg/L	10.00	ND	96.1	70-130	
Coluene	9.12	1.0	μg/L	10.00	ND	91.2	70-130	
,2,3-Trichlorobenzene	7.17	5.0	μg/L	10.00	ND	71.7	70-130	1.60.00
,2,4-Trichlorobenzene	6.45	1.0	μg/L	10.00	ND	64.5		MS-09
,1,1-Trichloroethane	9.30	1.0	μg/L	10.00	ND	93.0	70-130	
,1,2-Trichloroethane	8.70	1.0	μg/L	10.00	ND	87.0	70-130	
richloroethylene	9.64	1.0	μg/L	10.00	ND	96.4	70-130	
richlorofluoromethane (Freon 11)	9.79	2.0	μg/L	10.00	ND	97.9	70-130	
,2,3-Trichloropropane	9.45	2.0	μg/L	10.00	ND	94.5	70-130	
,1,2-Trichloro-1,2,2-trifluoroethane (Freon	9.01	1.0	μg/L	10.00	ND	90.1	70-130	
,2,4-Trimethylbenzene	8.08	1.0	μg/L	10.00	ND	80.8	70-130	
3,5-Trimethylbenzene	8.57	1.0	$\mu g/L$	10.00	ND	85.7	70-130	
Tinyl Chloride	8.89	2.0	$\mu g/L$	10.00	ND	88.9	70-130	
n+p Xylene	18.0	2.0	$\mu g/L$	20.00	ND	89.8	70-130	
-Xylene	8.49	1.0	$\mu g/L$	10.00	ND	84.9	70-130	
Xylenes (total)	26.5	1.0	μg/L	30.00	ND	88.2	0-200	



## QUALITY CONTROL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391682 - SW-846 5030B										
Matrix Spike (B391682-MS1)	Sour	rce: 24K0480-01	1	Prepared: 11/	/07/24 Analyz	ed: 11/08/2	24			
Surrogate: 1,2-Dichloroethane-d4	25.7		μg/L	25.00		103	70-130			
Surrogate: Toluene-d8	24.5		μg/L	25.00		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	23.2		$\mu g/L$	25.00		93.0	70-130			
Matrix Spike Dup (B391682-MSD1)	Sour	rce: 24K0480-01	1	Prepared: 11/	/07/24 Analyz	ed: 11/08/2	24			
Acetone	90.6	50	μg/L	100.0	2.35		70-130	8.03	30	
Benzene	9.15	1.0	$\mu g/L$	10.00	ND	91.5	70-130	6.45	30	
Bromochloromethane	10.3	1.0	μg/L	10.00	ND	103	70-130	1.07	30	
Bromodichloromethane	9.12	0.50	$\mu g/L$	10.00	ND	91.2	70-130	2.55	30	
Bromoform	7.08	1.0	$\mu g/L$	10.00	ND	70.8	70-130	1.54	30	V-05
Bromomethane	12.6	2.0	μg/L	10.00	ND	126	70-130	2.59	30	V-20
2-Butanone (MEK)	98.3	20	μg/L	100.0	ND	98.3	70-130	9.21	30	
n-Butylbenzene	7.96	1.0	μg/L	10.00	ND	79.6	70-130	7.16	30	
sec-Butylbenzene	8.32	1.0	μg/L	10.00	ND	83.2	70-130	1.82	30	
tert-Butylbenzene	8.22	1.0	$\mu g/L$	10.00	ND	82.2	70-130	2.96	30	
Carbon Disulfide	91.8	5.0	μg/L	100.0	ND	91.8	70-130	10.5	30	
Carbon Tetrachloride	9.26	5.0	$\mu g/L$	10.00	ND	92.6	70-130	2.74	30	
Chlorobenzene	9.24	1.0	$\mu g/L$	10.00	ND	92.4	70-130	3.40	30	
Chlorodibromomethane	8.29	0.50	$\mu g/L$	10.00	ND	82.9	70-130	0.605	30	
Chloroethane	10.2	2.0	$\mu g/L$	10.00	ND	102	70-130	13.1	30	
Chloroform	9.23	2.0	$\mu g/L$	10.00	ND	92.3	70-130	0.108	30	
Chloromethane	10.1	2.0	μg/L	10.00	ND	101	70-130	4.16	30	
Cyclohexane	8.79	5.0	μg/L	10.00	ND	87.9	70-130	5.64	30	
1,2-Dibromo-3-chloropropane (DBCP)	7.46	5.0	μg/L	10.00	ND	74.6	70-130	4.24	30	
1,2-Dibromoethane (EDB)	8.16	0.50	μg/L	10.00	ND	81.6	70-130	2.18	30	
1,2-Dichlorobenzene	8.91	1.0	μg/L	10.00	ND	89.1	70-130	0.112	30	
1,3-Dichlorobenzene	9.17	1.0	μg/L	10.00	ND	91.7	70-130	2.09	30	
1,4-Dichlorobenzene	8.16	1.0	μg/L	10.00	ND	81.6	70-130	7.32	30	
Dichlorodifluoromethane (Freon 12)	9.02	2.0	μg/L	10.00	ND	90.2	70-130	7.95	30	
1,1-Dichloroethane	9.84	1.0	μg/L	10.00	ND	98.4	70-130	8.25	30	
1,2-Dichloroethane	9.42	1.0	μg/L	10.00	ND	94.2	70-130	6.67	30	
1,1-Dichloroethylene	9.92	1.0	μg/L	10.00	ND	99.2	70-130	10.4	30	
cis-1,2-Dichloroethylene	10.2	1.0	μg/L	10.00	ND	102	70-130	9.38	30	
trans-1,2-Dichloroethylene	9.69	1.0	μg/L	10.00	ND	96.9	70-130	8.05	30	
1,2-Dichloropropane	8.90	1.0	μg/L	10.00	ND	89.0	70-130	3.08	30	
cis-1,3-Dichloropropene	7.56	0.50	μg/L	10.00	ND	75.6	70-130	0.659	30	
trans-1,3-Dichloropropene	7.22	0.50	μg/L	10.00	ND	72.2	70-130	2.33	30	
Ethylbenzene	8.78	1.0	μg/L	10.00	ND	87.8	70-130	3.36	30	
2-Hexanone (MBK)	74.6	10	μg/L	100.0	ND	74.6	70-130	2.07	30	
Isopropylbenzene (Cumene)	8.21	1.0	μg/L	10.00	ND	82.1	70-130	1.33	30	
p-Isopropyltoluene (p-Cymene)	8.28	1.0	μg/L	10.00	ND ND	82.8	70-130	2.07	30	
Methyl Acetate	9.74	1.0	μg/L	10.00	ND ND	97.4	70-130	11.9	30	L-02, V-20
Methyl tert-Butyl Ether (MTBE)	8.86	1.0	μg/L	10.00	ND	88.6	70-130	9.33	30	, , 20
Methyl Cyclohexane	9.40	1.0	μg/L μg/L	10.00	ND ND	94.0	70-130	3.68	30	
Methylene Chloride	9.40 9.87	5.0	μg/L μg/L	10.00	ND ND	98.7	70-130	9.00	30	
4-Methyl-2-pentanone (MIBK)	9.87 80.6	10	μg/L μg/L	100.0	ND ND	80.6	70-130	0.124	30	
Naphthalene	80.6 3.94	2.0	μg/L μg/L	10.00	ND ND	39.4 *		1.28	30	MS-09, V-05
n-Propylbenzene	3.94 8.44	1.0	μg/L μg/L	10.00	ND ND	39.4 * 84.4	70-130	0.943	30	v, v-U3
Styrene	8.44 7.97	1.0	μg/L μg/L	10.00	ND ND	84.4 79.7	70-130	1.74	30	
1,1,2,2-Tetrachloroethane	7.97 8.37	0.50	μg/L μg/L	10.00	ND ND	83.7	70-130	6.03	30	
Tetrachloroethylene	8.37 9.98	1.0	μg/L μg/L	10.00		83.7 99.8	70-130 70-130	6.03 3.78	30	
•					ND ND					
Toluene	9.31	1.0	μg/L	10.00	ND	93.1	70-130	2.06	30	



## QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B391682 - SW-846 5030B										

Matrix Spike Dup (B391682-MSD1)	Source	e: 24K0480-	01	Prepared: 11/07	7/24 Analyz	ed: 11/0	08/24	ŀ			
1,2,3-Trichlorobenzene	6.96	5.0	μg/L	10.00	ND	69.6	*	70-130	2.97	30	MS-24
1,2,4-Trichlorobenzene	5.98	1.0	$\mu g/L$	10.00	ND	59.8	*	70-130	7.56	30	MS-09
1,1,1-Trichloroethane	8.95	1.0	$\mu g/L$	10.00	ND	89.5		70-130	3.84	30	
1,1,2-Trichloroethane	9.16	1.0	$\mu g/L$	10.00	ND	91.6		70-130	5.15	30	
Trichloroethylene	9.50	1.0	$\mu g/L$	10.00	ND	95.0		70-130	1.46	30	
Trichlorofluoromethane (Freon 11)	10.7	2.0	$\mu g/L$	10.00	ND	107		70-130	8.70	30	
1,2,3-Trichloropropane	9.01	2.0	$\mu g/L$	10.00	ND	90.1		70-130	4.77	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1	1.0	μg/L	10.00	ND	101		70-130	11.3	30	
1,2,4-Trimethylbenzene	8.43	1.0	$\mu g/L$	10.00	ND	84.3		70-130	4.24	30	
1,3,5-Trimethylbenzene	8.43	1.0	$\mu g/L$	10.00	ND	84.3		70-130	1.65	30	
Vinyl Chloride	9.57	2.0	$\mu g/L$	10.00	ND	95.7		70-130	7.37	30	
n+p Xylene	17.5	2.0	$\mu g/L$	20.00	ND	87.5		70-130	2.65	20	
o-Xylene	8.37	1.0	$\mu g/L$	10.00	ND	83.7		70-130	1.42	30	
Xylenes (total)	25.9	1.0	$\mu g/L$	30.00	ND	86.2		0-200	2.25		
Surrogate: 1,2-Dichloroethane-d4	26.1		μg/L	25.00		104		70-130			
Surrogate: Toluene-d8	25.7		$\mu g/L$	25.00		103		70-130			
Surrogate: 4-Bromofluorobenzene	23.2		μg/L	25.00		92.9		70-130			



## QUALITY CONTROL

Spike

Source

%REC

RPD

# Semivolatile Organic Compounds by GC/MS - Quality Control

A 1	D 1	Reporting	T.T., 12	Spike	Source	0/BEC	%REC	מממ	RPD	NT /
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B391693 - SW-846 3510C										
Blank (B391693-BLK1)				Prepared: 11	/07/24 Analy	yzed: 11/08/2	4			
,3,4,6-Tetrachlorophenol	ND	20	$\mu g/L$							
trazine	ND	20	$\mu g/L$							
Benzaldehyde	ND	10	$\mu g/L$							
Siphenyl	ND	20	$\mu g/L$							
Caprolactam	ND	10	$\mu g/L$							L-04
cenaphthene	ND	5.0	$\mu g/L$							
cenaphthylene	ND	5.0	$\mu g/L$							
cetophenone	ND	10	$\mu g/L$							
niline	ND	20	$\mu g/L$							V-05
anthracene	ND	5.0	$\mu g/L$							
Benzo(a)anthracene	ND	5.0	$\mu g/L$							
Benzo(a)pyrene	ND	5.0	$\mu g/L$							
Benzo(b)fluoranthene	ND	5.0	$\mu g/L$							
Benzo(g,h,i)perylene	ND	5.0	$\mu g/L$							
Benzo(k)fluoranthene	ND	5.0	$\mu g/L$							
sis(2-chloroethoxy)methane	ND	10	μg/L							
sis(2-chloroethyl)ether	ND	10	μg/L							
,2'-oxybis(1-Chloropropane)	ND	10	μg/L							
sis(2-Ethylhexyl)phthalate	ND	10	μg/L							
-Bromophenylphenylether	ND	10	μg/L							
Butylbenzylphthalate	ND	10	μg/L							
Carbazole	ND	10	μg/L							
-Chloroaniline	ND	10	μg/L							
-Chloro-3-methylphenol	ND	10	μg/L							
-Chloronaphthalene	ND	10	μg/L							
-Chlorophenol	ND ND	10	μg/L							
-Chlorophenylphenylether	ND ND	10	μg/L							
Chrysene	ND ND	5.0	μg/L							
Dibenz(a,h)anthracene	ND ND	5.0	μg/L							V-04
Dibenzofuran	ND ND	5.0	μg/L μg/L							¥-0- <del>1</del>
Di-n-butylphthalate	ND ND	10	μg/L μg/L							
,3-Dichlorobenzidine		10	μg/L μg/L							
,4-Dichlorophenol	ND ND	10	μg/L μg/L							
iethylphthalate	ND ND	10	μg/L μg/L							
,4-Dimethylphenol	ND	10	μg/L μg/L							
imethylphthalate	ND	10								
,6-Dinitro-2-methylphenol	ND	20	μg/L μg/L							
,4-Dinitrophenol	ND	10	μg/L μg/L							V 04 V 0
,4-Dinitrophenoi ,4-Dinitrotoluene	ND	10	μg/L μg/L							V-04, V-0
,6-Dinitrotoluene	ND									
	ND	10	μg/L							37.04
Pi-n-octylphthalate Tuoranthene	ND	10 5.0	μg/L μg/I							V-04
luorantnene	ND	5.0	μg/L μg/I							
	ND	5.0	μg/L							
Jexachlorobenzene	ND	10	μg/L							
Iexachlorobutadiene	ND	10	μg/L							
Iexachlorocyclopentadiene	ND	10	μg/L							
Iexachloroethane	ND	10	μg/L							
ndeno(1,2,3-cd)pyrene	ND	5.0	μg/L							V-04
sophorone	ND	10	μg/L							
-Methylnaphthalene	ND	5.0	μg/L							
-Methylnaphthalene -Methylphenol	ND	5.0	μg/L							



## QUALITY CONTROL

Spike

Source

%REC

RPD

# Semivolatile Organic Compounds by GC/MS - Quality Control

	n 1.	Reporting	TT '	Spike	Source	0/BEC	%REC	DDD	RPD T.::4	<b>X</b> T -
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
atch B391693 - SW-846 3510C										
lank (B391693-BLK1)				Prepared: 11	/07/24 Analy	zed: 11/08/2	4			
/4-Methylphenol	ND	10	μg/L							
aphthalene	ND	5.0	μg/L							
-Nitroaniline	ND	10	μg/L							
-Nitroaniline	ND	10	μg/L							
-Nitroaniline	ND	10	μg/L							
itrobenzene	ND	10	μg/L							
Nitrophenol	ND	10	μg/L							
Nitrophenol	ND	10	μg/L							
-Nitrosodiphenylamine/Diphenylamine	ND	10	μg/L							
-Nitrosodi-n-propylamine	ND	10	μg/L							
entachlorophenol	ND	10	μg/L							
nenanthrene	ND	5.0	μg/L							
nenol	ND	10	μg/L							
vrene	ND	5.0	μg/L							
yridine	ND	20	μg/L							V-34
2,4,5-Tetrachlorobenzene	ND	10	μg/L							
4,5-Trichlorophenol	ND	10	μg/L							
4,6-Trichlorophenol	ND	10	μg/L	400.0		(0.2	15 110			
irrogate: 2-Fluorophenol	273		μg/L	400.0		68.3	15-110			
irrogate: Phenol-d6	180		μg/L	400.0		45.0	15-110			
nrogate: Nitrobenzene-d5 nrogate: 2-Fluorobiphenyl	212 162		μg/L μg/L	200.0 200.0		106 81.0	30-130 30-130			
irrogate: 2-r iuorooipnenyi irrogate: 2,4,6-Tribromophenol	162 464		μg/L μg/L	400.0		81.0 116 *	15-110			S-07
rrogate: 2,4,0-171010mophenoi	214		μg/L μg/L	200.0		107	30-130			5-07
CS (B391693-BS1)			. 0		/07/24 Analy					
3,4,6-Tetrachlorophenol	101	20	μg/L	100.0		101	40-140			
trazine	107	20	μg/L	100.0		107	40-140			
enzaldehyde	89.0	10	μg/L	100.0		89.0	40-140			
iphenyl	86.9	20	μg/L	100.0		86.9	40-140			
aprolactam	27.6	10	μg/L	100.0		27.6 *	40-140			L-04
cenaphthene	87.4	5.0	μg/L	100.0		87.4	40-140			
cenaphthylene	93.7	5.0	μg/L	100.0		93.7	40-140			
cetophenone	88.0	10	μg/L	100.0		88.0	40-140			
niline	74.6	20	μg/L	100.0		74.6	40-140			V-05
nthracene	92.3	5.0	μg/L	100.0		92.3	40-140			
enzo(a)anthracene				100.0		91.0	40-140			
enzo(a)pyrene	91.0	5.0	μg/L	100.0			40-140			
	91.0 91.8	5.0 5.0	μg/L μg/L	100.0		91.8	40-140			
enzo(b)fluoranthene						91.8 94.5	40-140			
enzo(b)fluoranthene enzo(g,h,i)perylene	91.8	5.0	$\mu g/L$	100.0						
	91.8 94.5	5.0 5.0	μg/L μg/L	100.0 100.0		94.5	40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene	91.8 94.5 93.5	5.0 5.0 5.0	μg/L μg/L μg/L	100.0 100.0 100.0		94.5 93.5	40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene s(2-chloroethoxy)methane	91.8 94.5 93.5 94.2	5.0 5.0 5.0 5.0	μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0		94.5 93.5 94.2	40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene s(2-chloroethoxy)methane s(2-chloroethyl)ether	91.8 94.5 93.5 94.2 90.7	5.0 5.0 5.0 5.0	μg/L μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7	40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene s(2-chloroethoxy)methane s(2-chloroethyl)ether 2'-oxybis(1-Chloropropane)	91.8 94.5 93.5 94.2 90.7 86.3	5.0 5.0 5.0 5.0 10	μg/L μg/L μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3	40-140 40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene s(2-chloroethoxy)methane s(2-chloroethyl)ether 2'-oxybis(1-Chloropropane) s(2-Ethylhexyl)phthalate	91.8 94.5 93.5 94.2 90.7 86.3 88.7	5.0 5.0 5.0 5.0 10 10	μg/L μg/L μg/L μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3 88.7	40-140 40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene s(2-chloroethoxy)methane s(2-chloroethyl)ether 2'-oxybis(1-Chloropropane) s(2-Ethylhexyl)phthalate Bromophenylphenylether	91.8 94.5 93.5 94.2 90.7 86.3 88.7 87.1	5.0 5.0 5.0 5.0 10 10	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3 88.7 87.1	40-140 40-140 40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene	91.8 94.5 93.5 94.2 90.7 86.3 88.7 87.1	5.0 5.0 5.0 5.0 10 10 10	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8	40-140 40-140 40-140 40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene is(2-chloroethoxy)methane is(2-chloroethyl)ether 2'-oxybis(1-Chloropropane) is(2-Ethylhexyl)phthalate Bromophenylphenylether utylbenzylphthalate arbazole	91.8 94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8 91.0	5.0 5.0 5.0 5.0 10 10 10 10	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8 91.0	40-140 40-140 40-140 40-140 40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene is(2-chloroethoxy)methane is(2-chloroethyl)ether 2'-oxybis(1-Chloropropane) is(2-Ethylhexyl)phthalate Bromophenylphenylether utylbenzylphthalate arbazole Chloroaniline	91.8 94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8 91.0	5.0 5.0 5.0 5.0 10 10 10 10 10	µg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8 91.0 93.4	40-140 40-140 40-140 40-140 40-140 40-140 40-140 40-140 40-140			
enzo(g,h,i)perylene enzo(k)fluoranthene is(2-chloroethoxy)methane is(2-chloroethyl)ether 2'-oxybis(1-Chloropropane) is(2-Ethylhexyl)phthalate Bromophenylphenylether utylbenzylphthalate	91.8 94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8 91.0 93.4	5.0 5.0 5.0 5.0 10 10 10 10 10 10	Hg/L Hg/L Hg/L Hg/L Hg/L Hg/L Hg/L Hg/L	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0		94.5 93.5 94.2 90.7 86.3 88.7 87.1 89.8 91.0 93.4 94.9	40-140 40-140 40-140 40-140 40-140 40-140 40-140 40-140 40-140 40-140			



## QUALITY CONTROL

Spike

Source

%REC

RPD

## Semivolatile Organic Compounds by GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B391693 - SW-846 3510C										
.CS (B391693-BS1)				Prepared: 11	/07/24 Analy	zed: 11/08/2	4			
1-Chlorophenylphenylether	93.9	10	$\mu g/L$	100.0		93.9	40-140			
Chrysene	89.1	5.0	$\mu g/L$	100.0		89.1	40-140			
Dibenz(a,h)anthracene	87.8	5.0	$\mu g/L$	100.0		87.8	40-140			V-04
Dibenzofuran	94.5	5.0	$\mu g/L$	100.0		94.5	40-140			
Di-n-butylphthalate	85.8	10	$\mu g/L$	100.0		85.8	40-140			
3,3-Dichlorobenzidine	94.0	10	$\mu g/L$	100.0		94.0	40-140			
2,4-Dichlorophenol	94.1	10	$\mu g/L$	100.0		94.1	30-130			
Diethylphthalate	90.3	10	$\mu g/L$	100.0		90.3	40-140			
2,4-Dimethylphenol	81.6	10	$\mu g/L$	100.0		81.6	30-130			
Dimethylphthalate	95.0	10	$\mu g/L$	100.0		95.0	40-140			
4,6-Dinitro-2-methylphenol	80.8	20	$\mu g/L$	100.0		80.8	30-130			
2,4-Dinitrophenol	56.1	10	$\mu g/L$	100.0		56.1	30-130			V-04, V-05
2,4-Dinitrotoluene	98.3	10	$\mu g/L$	100.0		98.3	40-140			
2,6-Dinitrotoluene	97.7	10	$\mu g/L$	100.0		97.7	40-140			
Di-n-octylphthalate	85.2	10	$\mu g/L$	100.0		85.2	40-140			V-04
Fluoranthene	95.2	5.0	μg/L	100.0		95.2	40-140			
Fluorene	95.1	5.0	μg/L	100.0		95.1	40-140			
Hexachlorobenzene	95.8	10	μg/L	100.0		95.8	40-140			
Iexachlorobutadiene	66.3	10	μg/L	100.0		66.3	40-140			
Hexachlorocyclopentadiene	75.9	10	μg/L	100.0		75.9	30-140			
Hexachloroethane	45.3	10	μg/L	100.0		45.3	40-140			
ndeno(1,2,3-cd)pyrene	91.6	5.0	μg/L	100.0		91.6	40-140			V-04
sophorone	94.2	10	μg/L	100.0		94.2	40-140			
-Methylnaphthalene	83.6	5.0	μg/L	100.0		83.6	40-140			
-Methylnaphthalene	81.2	5.0	μg/L	100.0		81.2	40-140			
-Methylphenol	79.5	10	μg/L	100.0		79.5	30-130			
/4-Methylphenol	82.5	10	μg/L	100.0		82.5	30-130			
Naphthalene	74.0	5.0	μg/L	100.0		74.0	40-140			
2-Nitroaniline	106	10	μg/L	100.0		106	40-140			
3-Nitroaniline	94.8	10	μg/L	100.0		94.8	40-140			
-Nitroaniline	91.6	10	μg/L	100.0		91.6	40-140			
Vitrobenzene		10	μg/L μg/L	100.0		87.4	40-140			
-Nitrophenol	87.4	10	μg/L μg/L	100.0		84.4	30-130			
l-Nitrophenol	84.4	10	μg/L μg/L	100.0		50.3	10-130			
N-Nitrosodiphenylamine/Diphenylamine	50.3	10	μg/L μg/L	100.0		88.4	40-140			
J-Nitrosodi-n-propylamine	88.4	10	μg/L μg/L	100.0		86.5	40-140			
Pentachlorophenol	86.5	10	μg/L μg/L	100.0		83.5	30-130			
Phenanthrene	83.5	5.0	μg/L μg/L							
Phenol	90.7	10	μg/L μg/L	100.0		90.7	40-140			
	46.4	5.0		100.0		46.4	20-130			
Pyrene Pyridine	91.8		μg/L	100.0		91.8	40-140			37.24
•	15.8	20	μg/L	100.0		15.8	10-140			V-34
,2,4,5-Tetrachlorobenzene	87.4	10	μg/L	100.0		87.4	40-140			
2,4,5-Trichlorophenol	93.8	10	μg/L	100.0		93.8	30-130			
2,4,6-Trichlorophenol	92.6	10	μg/L	100.0		92.6	30-130			
Surrogate: 2-Fluorophenol	260		$\mu g/L$	400.0		65.1	15-110			
Surrogate: Phenol-d6	199		$\mu g/L$	400.0		49.8	15-110			
Surrogate: Nitrobenzene-d5	192		μg/L	200.0		96.2	30-130			
Surrogate: 2-Fluorobiphenyl	164		$\mu g/L$	200.0		82.2	30-130			
Surrogate: 2,4,6-Tribromophenol	465		$\mu g/L$	400.0		116 *	15-110			S-07
Surrogate: p-Terphenyl-d14	197		μg/L	200.0		98.5	30-130			



## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

nalyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch B391693 - SW-846 3510C										
CS Dup (B391693-BSD1)				Prepared: 11	/07/24 Anal	yzed: 11/08/2	4			
3,4,6-Tetrachlorophenol	82.7	20	$\mu g/L$	100.0		82.7	40-140	19.5	20	
trazine	99.6	20	μg/L	100.0		99.6	40-140	6.71	20	
enzaldehyde	82.8	10	μg/L	100.0		82.8	40-140	7.22	20	
iphenyl	80.5	20	μg/L	100.0		80.5	40-140	7.64	20	
aprolactam	25.7	10	μg/L	100.0		25.7 *	40-140	7.12	20	L-04
cenaphthene	81.8	5.0	μg/L	100.0		81.8	40-140	6.67	20	
cenaphthylene	87.4	5.0	μg/L	100.0		87.4	40-140	6.95	20	
cetophenone	82.5	10	μg/L	100.0		82.5	40-140	6.38	20	
niline	76.6	20	$\mu g/L$	100.0		76.6	40-140	2.70	50	V-05
nthracene	89.5	5.0	$\mu g/L$	100.0		89.5	40-140	3.08	20	
enzo(a)anthracene	88.7	5.0	$\mu g/L$	100.0		88.7	40-140	2.62	20	
enzo(a)pyrene	88.9	5.0	$\mu g/L$	100.0		88.9	40-140	3.18	20	
enzo(b)fluoranthene	90.3	5.0	$\mu g/L$	100.0		90.3	40-140	4.56	20	
enzo(g,h,i)perylene	90.0	5.0	$\mu g \! / \! L$	100.0		90.0	40-140	3.86	20	
enzo(k)fluoranthene	89.0	5.0	$\mu g/L$	100.0		89.0	40-140	5.66	20	
s(2-chloroethoxy)methane	87.3	10	$\mu g/L$	100.0		87.3	40-140	3.81	20	
s(2-chloroethyl)ether	82.6	10	$\mu g/L$	100.0		82.6	40-140	4.33	20	
2'-oxybis(1-Chloropropane)	79.8	10	$\mu g/L$	100.0		79.8	40-140	10.5	20	
s(2-Ethylhexyl)phthalate	84.8	10	$\mu g/L$	100.0		84.8	40-140	2.63	20	
Bromophenylphenylether	90.5	10	$\mu g/L$	100.0		90.5	40-140	0.798	20	
utylbenzylphthalate	88.3	10	$\mu g/L$	100.0		88.3	40-140	2.93	20	
arbazole	88.7	10	$\mu g/L$	100.0		88.7	40-140	5.17	20	
Chloroaniline	87.6	10	$\mu g/L$	100.0		87.6	40-140	7.98	20	
Chloro-3-methylphenol	89.5	10	$\mu g/L$	100.0		89.5	30-130	5.72	20	
Chloronaphthalene	72.5	10	μg/L	100.0		72.5	40-140	12.3	20	
Chlorophenol	73.0	10	μg/L	100.0		73.0	30-130	14.0	20	
Chlorophenylphenylether	88.6	10	μg/L	100.0		88.6	40-140	5.75	20	
nrysene	85.4	5.0	μg/L	100.0		85.4	40-140	4.23	20	
ibenz(a,h)anthracene	84.7	5.0	μg/L	100.0		84.7	40-140	3.60	20	V-04
benzofuran	89.4	5.0	μg/L	100.0		89.4	40-140	5.50	20	
-n-butylphthalate	83.0	10	μg/L	100.0		83.0	40-140	3.28	20	
3-Dichlorobenzidine	92.4	10	μg/L	100.0		92.4	40-140	1.80	20	
4-Dichlorophenol	84.1	10	μg/L	100.0		84.1	30-130	11.1	20	
iethylphthalate	84.0	10	μg/L	100.0		84.0	40-140	7.31	20	
4-Dimethylphenol	77.1	10	μg/L	100.0		77.1	30-130	5.70	20	
imethylphthalate	89.3	10	μg/L	100.0		89.3	40-140	6.14	50	
6-Dinitro-2-methylphenol	69.2	20	μg/L	100.0		69.2	30-130	15.4	50	
4-Dinitrophenol	39.7	10	μg/L	100.0		39.7	30-130	34.1	50	V-04, V-05
4-Dinitrotoluene	91.0	10	μg/L	100.0		91.0	40-140	7.80	20	, . 05
6-Dinitrotoluene	91.3	10	μg/L	100.0		91.3	40-140	6.76	20	
-n-octylphthalate	91.3 84.0	10	μg/L μg/L	100.0		84.0	40-140	1.47	20	V-04
uoranthene	92.0	5.0	μg/L μg/L	100.0		92.0	40-140	3.47	20	. 01
uorene	89.4	5.0	μg/L	100.0		89.4	40-140	6.14	20	
exachlorobenzene	93.5	10	μg/L μg/L	100.0		93.5	40-140	2.42	20	
exachlorobutadiene	56.6	10	μg/L μg/L	100.0		56.6	40-140	15.9	20	
exachlorocyclopentadiene	72.1	10	μg/L μg/L	100.0		72.1	30-140	5.24	50	
exachloroethane		10	μg/L μg/L	100.0		38.1 *	40-140	17.4	50	L-07
deno(1,2,3-cd)pyrene	38.1	5.0	μg/L μg/L	100.0		91.2	40-140	0.405	50	L-07 V-04
ophorone	91.2 89.2	10	μg/L μg/L	100.0		89.2	40-140	5.42	20	v-U+
Methylnaphthalene		5.0	μg/L μg/L	100.0		78.3		6.51	20	
Methylnaphthalene	78.3	5.0	μg/L μg/L				40-140			
Methylphenol	78.7 76.2	10	μg/L μg/L	100.0 100.0		78.7 76.2	40-140 30-130	3.18 4.34	20 20	



## 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 B391693 - SW-846 3510C											
LCS Dup (B391693-BSD1)				Prepared: 11	/07/24 Anal	yzed: 11/08/2	24				
3/4-Methylphenol	74.4	10	μg/L	100.0		74.4	30-130	10.3	20		
Naphthalene	69.4	5.0	$\mu g/L$	100.0		69.4	40-140	6.32	20		
2-Nitroaniline	99.4	10	$\mu g/L$	100.0		99.4	40-140	6.50	20		
3-Nitroaniline	87.1	10	μg/L	100.0		87.1	40-140	8.42	20		
4-Nitroaniline	85.0	10	μg/L	100.0		85.0	40-140	7.53	20		
Nitrobenzene	80.5	10	μg/L	100.0		80.5	40-140	8.16	20		
2-Nitrophenol	74.5	10	$\mu g/L$	100.0		74.5	30-130	12.4	20		
4-Nitrophenol	35.9	10	$\mu g/L$	100.0		35.9	10-130	33.5	50		† ‡
N-Nitrosodiphenylamine/Diphenylamine	85.9	10	$\mu g/L$	100.0		85.9	40-140	2.85	20		
N-Nitrosodi-n-propylamine	79.1	10	$\mu g/L$	100.0		79.1	40-140	8.91	20		
Pentachlorophenol	62.9	10	$\mu g/L$	100.0		62.9	30-130	28.1	50		‡
Phenanthrene	88.8	5.0	μg/L	100.0		88.8	40-140	2.13	20		
Phenol	41.2	10	μg/L	100.0		41.2	20-130	11.9	20		†
Pyrene	86.9	5.0	$\mu g/L$	100.0		86.9	40-140	5.48	20		
Pyridine	20.5	20	$\mu g/L$	100.0		20.5	10-140	25.5	50	V-34	† ‡
1,2,4,5-Tetrachlorobenzene	81.6	10	$\mu g/L$	100.0		81.6	40-140	6.89	20		
2,4,5-Trichlorophenol	80.4	10	$\mu g/L$	100.0		80.4	30-130	15.4	20		
2,4,6-Trichlorophenol	74.0	10	$\mu g/L$	100.0		74.0	30-130	22.4	50		‡
Surrogate: 2-Fluorophenol	213		μg/L	400.0		53.2	15-110				
Surrogate: Phenol-d6	164		$\mu g/L$	400.0		40.9	15-110				
Surrogate: Nitrobenzene-d5	172		$\mu g/L$	200.0		86.0	30-130				
Surrogate: 2-Fluorobiphenyl	148		$\mu g/L$	200.0		73.8	30-130				
Surrogate: 2,4,6-Tribromophenol	372		$\mu g/L$	400.0		93.0	15-110				
Surrogate: p-Terphenyl-d14	178		$\mu g/L$	200.0		88.8	30-130				



## 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 B391943 - SW-846 3510C										
Blank (B391943-BLK1)				Prepared: 11	/11/24 Anal	yzed: 11/13/2	24			
1,4-Dioxane	0.92	0.20	μg/L							В
Surrogate: 1,4-Dioxane-d8	2.42		μg/L	10.00		24.2	15-110			
LCS (B391943-BS1)				Prepared: 11	/11/24 Anal	yzed: 11/13/2	24			
1,4-Dioxane	11.1	0.20	μg/L	10.00		111	40-140			В
Surrogate: 1,4-Dioxane-d8	2.50		μg/L	10.00		25.0	15-110			
LCS Dup (B391943-BSD1)				Prepared: 11	/11/24 Anal	yzed: 11/13/2	24			
1,4-Dioxane	12.0	0.20	μg/L	10.00		120	40-140	7.74	30	В
Surrogate: 1,4-Dioxane-d8	2.50		μg/L	10.00		25.0	15-110			



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

## QUALITY CONTROL

Spike

Source

%REC

RPD

# Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

		Reporting	T7 **	Spike	Source	0/5==	%REC	p. n.=	RPD	• •
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B393054 - EPA 1633										
Blank (B393054-BLK1)				Prepared: 11	1/26/24 Analy	yzed: 11/27/2	4			
Perfluorobutanoic acid (PFBA)	ND	6.3	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	3.1	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.6	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.6	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.6	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.6	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.6	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.6	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.6	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	1.6	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	1.6	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.6	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	1.6	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.6	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.6	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.6	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	1.6	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	1.6	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	1.6	ng/L							
IH,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS) IH,1H,2H,2H-Perfluorooctane sulfonic acid	ND ND	6.3	ng/L							
6:2FTS)  IH,1H,2H,2H-Perfluorodecane sulfonic	ND ND	6.3	ng/L							
acid (8:2FTS)										
Perfluorooctanesulfonamide (PFOSA)	ND	1.6	ng/L							
N-methyl perfluoroocatnesulfonamide NMeFOSA)	ND	1.6	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA) N-MeFOSAA (NMeFOSAA)	ND	1.6 1.6	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	1.6	ng/L							
N-methylperfluorooctanesulfonamidoethano ((NMeFOSE)	ND ND	16	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	16	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	6.3	ng/L							
(ADONA)	ND	6.3	ng/L							
PCI-PF3ONS (F53B Minor)	ND	6.3	ng/L							
11Cl-PF3OUdS (F53B Major)  3-Perfluoropropyl propanoic acid (FPrPA)	ND ND	6.3 7.9	ng/L ng/L							
3:3FTCA) 2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	39	ng/L							
acid(FFePA)(5:5FTCA)  3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	39	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	3.1	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	3.1	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	3.1	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	3.1	ng/L							
Surrogate: 13C4-PFBA	68.7		ng/L	78.53		87.4	5-130			



## QUALITY CONTROL

Spike

Source

%REC

RPD

## Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

. 1.	D 1.	Reporting	TT *-	Spike	Source	0/DEC	%REC	DDD	RPD	37 -
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
atch B393054 - EPA 1633										
ank (B393054-BLK1)				Prepared: 11	/26/24 Analy	zed: 11/27/2	24			
ırrogate: 13C5-PFPeA	33.9		ng/L	39.27		86.4	40-130			
urrogate: 13C5-PFHxA	16.6		ng/L	19.63		84.3	40-130			
urrogate: 13C4-PFHpA	15.5		ng/L	19.63		79.0	40-130			
urrogate: 13C8-PFOA	17.3		ng/L	19.63		87.9	40-130			
arrogate: 13C9-PFNA	7.84		ng/L	9.817		79.9	40-130			
arrogate: 13C6-PFDA	7.73		ng/L	9.817		78.8	40-130			
rrogate: 13C7-PFUnA	7.59		ng/L	9.817		77.4	30-130			
rrogate: 13C2-PFDoA	7.19		ng/L	9.817		73.3	10-130			
rrogate: 13C2-PFTeDA	6.71		ng/L	9.817		68.3	10-130			
arrogate: 13C3-PFBS	16.2		ng/L	19.63		82.4	40-135			
arrogate: 13C3-PFHxS	16.0		ng/L	19.63		81.6	40-130			
rrogate: 13C8-PFOS	16.5		ng/L	19.63		83.9	40-130			
arrogate: 13C2-4:2FTS	36.9		ng/L	39.27		94.1	40-200			
arrogate: 13C2-6:2FTS	31.3		ng/L	39.27		79.7	40-200			
arrogate: 13C2-8:2FTS	32.2		ng/L	39.27		82.0	40-300			
urrogate: 13C8-PFOSA	13.2		ng/L	19.63		67.5	40-130			
rrogate: D3-NMeFOSA	10.2		ng/L	19.63		52.1	10-130			
rrogate: D5-NEtFOSA	9.64		ng/L	19.63		49.1	10-130			
rrogate: D3-NMeFOSAA	25.0		ng/L	39.27		63.6	40-170			
rrogate: D5-NEtFOSAA	26.2		ng/L	39.27		66.8	25-135			
rrogate: D7-NMeFOSE	126		ng/L	196.3		64.1	10-130			
rrogate: D9-NEtFOSE	118		ng/L	196.3		60.3	10-130			
irrogate: 13C3-HFPO-DA	68.9		ng/L	78.53		87.7	40-130			
CS (B393054-BS1)				Prepared: 11	/26/24 Analy	zed: 11/27/2	24			
rfluorobutanoic acid (PFBA)	73.2	6.3	ng/L	78.27		93.5	70-140			
rfluoropentanoic acid (PFPeA)	38.7	3.1	ng/L	39.13		98.9	65-135			
rfluorohexanoic acid (PFHxA)	19.2	1.6	ng/L	19.57		98.1	70-145			
erfluoroheptanoic acid (PFHpA)	18.4	1.6	ng/L	19.57		94.1	70-150			
erfluorooctanoic acid (PFOA)	18.6	1.6	ng/L	19.57		95.2	70-150			
erfluorononanoic acid (PFNA)	19.7	1.6	ng/L	19.57		101	70-150			
erfluorodecanoic acid (PFDA)	19.4	1.6	ng/L	19.57		98.9	70-140			
erfluoroundecanoic acid (PFUnA)	20.0	1.6	ng/L	19.57		102	70-145			
erfluorododecanoic acid (PFDoA)	20.9	1.6	ng/L	19.57		107	70-140			
erfluorotridecanoic acid (PFTrDA)	18.6	1.6	ng/L	19.57		95.2	65-140			
erfluorotetradecanoic acid (PFTeDA)	20.4	1.6	ng/L	19.57		104	60-140			
rrfluorobutanesulfonic acid (PFBS)	16.5	1.6	ng/L	17.38		94.8	60-145			
erfluoropentanesulfonic acid (PFPeS)	17.9	1.6	ng/L	18.39		97.1	65-140			
rfluorohexanesulfonic acid (PFHxS)	16.6	1.6	ng/L	17.85		92.8	65-145			
erfluoroheptanesulfonic acid (PFHpS)	18.3	1.6	ng/L	18.63		98.2	70-150			
erfluorooctanesulfonic acid (PFOS)	18.2	1.6	ng/L	18.16		100	55-150			
erfluorononanesulfonic acid (PFNS)	18.2	1.6	ng/L	18.78		96.9	65-145			
rfluorodecanesulfonic acid (PFDS)	17.3	1.6	ng/L	18.86		91.6	60-145			
rfluorododecanesulfonic acid (PFDoS)	15.8	1.6	ng/L	18.94		83.5	50-145			
I,1H,2H,2H-Perfluorohexane sulfonic	77.3	6.3	ng/L	73.34		105	70-145			
id (4:2FTS)  I,1H,2H,2H-Perfluorooctane sulfonic acid	76.9	6.3	ng/L	74.43		103	65-155			
:2FTS) H,1H,2H,2H-Perfluorodecane sulfonic	80.5	6.3	ng/L	75.14		107	60-150			
id (8:2FTS) rfluorooctanesulfonamide (PFOSA)	10.2	1.6	ng/I	10.57		08.2	70 145			
-methyl perfluoroocatnesulfonamide	19.2 22.3	1.6 1.6	ng/L ng/L	19.57 19.57		98.3 114	70-145 60-150			
MeFOSA)	22.3		_							



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## QUALITY CONTROL

## Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B393054 - EPA 1633				-						
CS (B393054-BS1)				Prepared: 11	/26/24 Analy	zed: 11/27/2	4			
N-ethyl perfluorooctanesulfonamide	22.3	1.6	ng/L	19.57		114	65-145			
NEtFOSA)			_							
N-MeFOSAA (NMeFOSAA)	18.4	1.6	ng/L	19.57		93.9	50-140			
N-EtFOSAA (NEtFOSAA)	19.0	1.6	ng/L	19.57		97.0	70-145			
N-methylperfluorooctanesulfonamidoethano	192	16	ng/L	195.7		97.9	70-145			
NMeFOSE) I-ethylperfluorooctanesulfonamidoethanol NEtFOSE)	190	16	ng/L	195.7		97.2	70-135			
Jexafluoropropylene oxide dimer acid HFPO-DA)	78.5	6.3	ng/L	78.27		100	70-140			
,8-Dioxa-3H-perfluorononanoic acid ADONA)	76.9	6.3	ng/L	73.96		104	65-145			
Cl-PF3ONS (F53B Minor)	69.0	6.3	ng/L	73.02		94.5	70-155			
1Cl-PF3OUdS (F53B Major)	69.0	6.3	ng/L	73.81		93.4	55-160			
B-Perfluoropropyl propanoic acid (FPrPA)	86.7	7.8	ng/L	97.84		88.6	65-130			
3:3FTCA) PH,2H,3H,3H-Perfluorooctanoic	440	39	ng/L	489.2		89.9	70-135			
cid(FPePA)(5:3FTCA) s-Perfluoroheptyl propanoic acid (FHpPA)	441	39	ng/L	489.2		90.1	50-145			
7:3FTCA) Perfluoro(2-ethoxyethane)sulfonic acid	34.8	3.1	ng/L	34.91		99.6	70-140			
PFEESA) Perfluoro-3-methoxypropanoic acid PFMPA)	35.6	3.1	ng/L	39.13		91.1	55-140			
erfluoro-4-methoxybutanoic acid PFMBA)	37.8	3.1	ng/L	39.13		96.5	60-150			
Jonafluoro-3,6-dioxaheptanoic acid NFDHA)	38.3	3.1	ng/L	39.13		97.8	50-150			
Surrogate: 13C4-PFBA	60.0		ng/L	78.27		76.7	5-130			
urrogate: 13C5-PFPeA	30.0		ng/L	39.13		76.7	40-130			
urrogate: 13C5-PFHxA	14.7		ng/L	19.57		75.2	40-130			
urrogate: 13C4-PFHpA	13.4		ng/L	19.57		68.5	40-130			
Surrogate: 13C8-PFOA	14.9		ng/L	19.57		76.1	40-130			
urrogate: 13C9-PFNA	6.92		ng/L	9.784		70.8	40-130			
urrogate: 13C6-PFDA	7.12		ng/L	9.784		72.7	40-130			
urrogate: 13C7-PFUnA	7.14		ng/L	9.784		73.0	30-130			
urrogate: 13C2-PFDoA	6.60		ng/L	9.784		67.5	10-130			
Surrogate: 13C2-PFTeDA	6.21		ng/L	9.784		63.5	10-130			
Surrogate: 13C3-PFBS	14.1		ng/L	19.57		72.2	40-135			
Surrogate: 13C3-PFHxS	14.2		ng/L	19.57		72.3	40-130			
Surrogate: 13C8-PFOS	13.9		ng/L	19.57		70.9	40-130			
urrogate: 13C2-4:2FTS	29.7		ng/L	39.13		75.9	40-200			
Surrogate: 13C2-6:2FTS	25.4		ng/L	39.13		65.0	40-200			
Surrogate: 13C2-8:2FTS	26.2		ng/L ng/L	39.13		67.0	40-300			
Surrogate: 13C8-PFOSA	12.2		ng/L ng/L	19.57		62.3	40-130			
urrogate: D3-NMeFOSA	9.15		ng/L ng/L	19.57		46.7	10-130			
urrogate: D5-NEtFOSA	9.09		ng/L	19.57		46.5	10-130			
urrogate: D3-NMeFOSAA	23.2		ng/L ng/L	39.13		59.2	40-170			
urrogate: D5-NEtFOSAA	22.5		ng/L ng/L	39.13		57.4	25-135			
urrogate: D7-NMeFOSE	121		ng/L ng/L	195.7		62.0	10-130			
urrogate: D9-NEtFOSE	119		ng/L ng/L	195.7		60.8	10-130			
urrogate: 13C3-HFPO-DA	59.9		ng/L	78.27		76.5	40-130			
ARL Check (B393054-MRL1)				Prepared: 11	/26/24 Analy	zed: 12/03/2	24			
erfluorobutanoic acid (PFBA)	6.22	6.3	ng/L	6.320		98.4	70-140			
Perfluoropentanoic acid (PFPeA)	2.97	3.2	ng/L	3.160		94.0	65-135			

RPD

%REC



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## QUALITY CONTROL

Spike

Source

## Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

nalyte	Result	Limit	Units	Level	Source Result	%REC	%REC Limits	RPD	Limit	Notes
	Testati	Ziiiik	20	20701						1.5005
atch B393054 - EPA 1633  IRL Check (B393054-MRL1)				Prenared: 11	/26/24 Analyz	zed: 12/03/2	4			
erfluorohexanoic acid (PFHxA)	1.51	1.6	ng/L	1.580	./20/24 Allary2	95.9	70-145			
erfluoroheptanoic acid (PFHpA)	1.62	1.6	ng/L	1.580		102	70-143			
erfluorooctanoic acid (PFOA)	1.02	1.6	ng/L	1.580		80.9	70-150			
erfluorononanoic acid (PFNA)	1.28	1.6	ng/L	1.580		85.3	70-150			
erfluorodecanoic acid (PFDA)	1.70	1.6	ng/L	1.580		108	70-130			
erfluoroundecanoic acid (PFUnA)	1.46	1.6	ng/L	1.580		92.4	70-145			
erfluorododecanoic acid (PFDoA)		1.6	ng/L	1.580		92.0	70-143			
erfluorotridecanoic acid (PFTrDA)	1.45	1.6	ng/L	1.580		100	65-140			
erfluorotetradecanoic acid (PFTeDA)	1.58	1.6	ng/L	1.580		107	60-140			
erfluorobutanesulfonic acid (PFBS)	1.70	1.6	ng/L							
erfluoropentanesulfonic acid (PFPeS)	1.38		-	1.403		98.6 93.1	60-145			
erfluorohexanesulfonic acid (PFHxS)	1.38	1.6	ng/L	1.485			65-140			
` '	1.51	1.6	ng/L	1.441		104	65-145			
erfluoroheptanesulfonic acid (PFHpS)	1.59	1.6	ng/L	1.504		106	70-150			
erfluorooctanesulfonic acid (PFOS)	1.40	1.6	ng/L	1.466		95.5	55-150			
erfluorononanesulfonic acid (PFNS)	1.44	1.6	ng/L	1.517		95.2	65-145			
erfluorodecanesulfonic acid (PFDS)	1.41	1.6	ng/L	1.523		92.9	60-145			
erfluorododecanesulfonic acid (PFDoS)	1.28	1.6	ng/L	1.529		83.5	50-145			
H,1H,2H,2H-Perfluorohexane sulfonic cid (4:2FTS)	5.48	6.3	ng/L	5.922		92.6	70-145			
H,1H,2H,2H-Perfluorooctane sulfonic acid :2FTS)	6.09	6.3	ng/L	6.010		101	65-155			
H,1H,2H,2H-Perfluorodecane sulfonic id (8:2FTS)	5.47	6.3	ng/L	6.067		90.2	60-150			
erfluorooctanesulfonamide (PFOSA)	1.55	1.6	ng/L	1.580		98.1	70-145			
-methyl perfluoroocatnesulfonamide NMeFOSA)	1.59	1.6	ng/L	1.580		100	60-150			
-ethyl perfluorooctanesulfonamide  VETFOSAA (NIM-FOSAA)	1.86	1.6	ng/L	1.580		118	65-145			
-MeFOSAA (NMeFOSAA)	1.22	1.6	ng/L	1.580		77.5	50-140			
-EtFOSAA (NEtFOSAA)	1.59	1.6	ng/L	1.580		100	70-145			
-methylperfluorooctanesulfonamidoethano NMeFOSE)	14.9	16	ng/L	15.80		94.2	70-145			
-ethylperfluorooctanesulfonamidoethanol NEtFOSE)	15.0	16	ng/L	15.80		94.7	70-135			
exafluoropropylene oxide dimer acid IFPO-DA)	5.97	6.3	ng/L	6.320		94.5	70-140			
8-Dioxa-3H-perfluorononanoic acid ADONA)	5.60	6.3	ng/L	5.973		93.8	65-145			
Cl-PF3ONS (F53B Minor)	5.90	6.3	ng/L	5.897		100	70-155			
Cl-PF3OUdS (F53B Major)	5.31	6.3	ng/L	5.960		89.1	55-160			
Perfluoropropyl propanoic acid (FPrPA) :3FTCA)	6.78	7.9	ng/L	7.900		85.8	65-130			
H,2H,3H,3H-Perfluorooctanoic cid(FPePA)(5:3FTCA)	34.7	40	ng/L	39.50		87.9	70-135			
Perfluoroheptyl propanoic acid (FHpPA) :3FTCA)	31.3	40	ng/L	39.50		79.2	50-145			
erfluoro(2-ethoxyethane)sulfonic acid PEESA) erfluoro-3-methoxypropanoic acid	2.91	3.2	ng/L	2.819		103	70-140			
erfluoro-3-methoxypropanoic acid FMPA) erfluoro-4-methoxybutanoic acid	3.63 2.98	3.2	ng/L	3.160 3.160		115 94.2	55-140 60-150			
PMBA) onafluoro-3,6-dioxaheptanoic acid	3.27	3.2	ng/L	3.160		103	50-150			
NFDHA)										
urrogate: 13C4-PFBA	69.7		ng/L	79.00		88.2	5-130			
urrogate: 13C5-PFPeA	34.9		ng/L	39.50		88.4	40-130 40-130			



## QUALITY CONTROL

## Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte Result Limit Units Level Result %REC Limits RPD Limit Notes			Reporting		Spike	Source		%REC		RPD	
	Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

MRL Check (B393054-MRL1)			Prepared: 11/26/24	Analyzed: 12/03	/24
Surrogate: 13C4-PFHpA	16.5	ng/L	19.75	83.4	40-130
Surrogate: 13C8-PFOA	16.2	ng/L	19.75	82.3	40-130
Surrogate: 13C9-PFNA	8.63	ng/L	9.875	87.4	40-130
Surrogate: 13C6-PFDA	7.45	ng/L	9.875	75.5	40-130
Surrogate: 13C7-PFUnA	7.75	ng/L	9.875	78.5	30-130
Surrogate: 13C2-PFDoA	6.88	ng/L	9.875	69.7	10-130
Surrogate: 13C2-PFTeDA	5.94	ng/L	9.875	60.1	10-130
Surrogate: 13C3-PFBS	16.4	ng/L	19.75	83.0	40-135
Surrogate: 13C3-PFHxS	16.5	ng/L	19.75	83.6	40-130
Surrogate: 13C8-PFOS	15.6	ng/L	19.75	79.0	40-130
Surrogate: 13C2-4:2FTS	39.7	ng/L	39.50	101	40-200
Surrogate: 13C2-6:2FTS	35.3	ng/L	39.50	89.5	40-200
Surrogate: 13C2-8:2FTS	34.5	ng/L	39.50	87.4	40-300
Surrogate: 13C8-PFOSA	14.4	ng/L	19.75	72.8	40-130
Surrogate: D3-NMeFOSA	10.1	ng/L	19.75	50.9	10-130
Surrogate: D5-NEtFOSA	9.86	ng/L	19.75	49.9	10-130
Surrogate: D3-NMeFOSAA	28.7	ng/L	39.50	72.6	40-170
Surrogate: D5-NEtFOSAA	26.8	ng/L	39.50	67.7	25-135
Surrogate: D7-NMeFOSE	133	ng/L	197.5	67.2	10-130
Surrogate: D9-NEtFOSE	124	ng/L	197.5	63.0	10-130
Surrogate: 13C3-HFPO-DA	69.2	ng/L	79.00	87.7	40-130



## 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.
В	Analyte is found in the associated laboratory blank as well as in the sample.
B-07	Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits.  Reported value for this compound is likely to be biased on the low side.
L-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.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
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.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
S-29	Extracted Internal Standard is outside of control limits.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
Z-01	Extracted internal standard is outside of control limits, matrix interference suspected. Reanalysis yielded similar extracted internal standard non-conformance.



# CERTIFICATIONS

Analyte	Certifications
Draft Method 1633 in Water	
	NIL DAIVE WILCT
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methyl perfluoro octane sulfon a mid oethanol (NMeFOSE)	NH-P,PA,WV,CT
$N-ethyl perfluoro octane sulfon a mid oethanol \ (NEtFOSE)$	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY



# CERTIFICATIONS

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



# CERTIFICATIONS

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



# CERTIFICATIONS

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



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

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

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Ş	Special Instructions:		OU-5 November 2024 Monthly System Samples	Samples																		
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œ	elinquishe	Service L	Jan 1		10/01	Courier Nam	vame:	NFedEx NX( N	Dog	Pate:	~										2 8	notes regarding condition of samples
÷G	٠.	GES, Inc	JC.	Time:	1500	Tracking #:	-	7	Time:	فدا	9.30										as	as received:
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100	e Type:	l "	N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank SE = Sediment, SO = Soil, WG = Groundwater, WQ = Water Quality WS = Surface Water, WW = Waste Water, WP = Potable Water, AA = Ambient Air,	= Equipment Blan Q = Water Qualith	k, TB = Trip Bla	lk, MS = La Water, WV	b Matrix Spike; / = Waste Wate	trix Spike, Other (Specify); FRB = Field Reagent Blank aste Water, WP = Potable Water, AA = Ambient Air, Other (Specify);	: FRB = Fie Water, A	ld Reage A = Amb	ent Blank ient Air,	Other (Speci	; <u>;</u>									
<u> </u>	of 57	O= none,	1=HCL, 2=HNO <sub>3</sub> , 3=H <sub>2</sub> SO <sub>4</sub> , 4=NaOH, 5=Zn Acetay  1=HCL, 2=HNO <sub>3</sub> , 3=H <sub>2</sub> SO <sub>4</sub> , 4=NaOH, 5=Zn Acetay	H, S=Zn Acetar	, 6 = MeOH,			11 6 24 00 SB	ooss	200		M		13	11/2/12/	0	430	0				
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Pace AMALYTICAL SERVICES

DC#\_Title: ENV-FRM-ELON-0001 v08\_Sample Receiving Checklist

Effective Date: 06/11/2024

	Login Sample Receipt Checklist – (Rejecti	on Criteria Listing
Log In Back-Sheet	<ul> <li>Using Acceptance Policy) Any False stat</li> </ul>	ement will be
MYSDEC ROUMENI	brought to the attention of the Client – $T$	rue or False
Client 1010 C Close Man 1 Par Chemical	Site QY SYS Samples	True False
Project 1996 Care 10014 For y are mical	Received on Ice	
IVICP/RCP Required N/H		/a = =
Deliverable Parkage Requirement	Received in Cooler	
Location Ol Beth Page NY	Custody Seal: DATE TIME	
PWSID# (When Applicable)	COC Relinguished	
Arrival Method:	COC/Samples Labels Agree	
Courier Fed Ex Walk In Other	All Samples in Good Condition	
Received By / Date / Time KLIII6124 0720	Samples Received within Holding Time	<u> </u>
Back-Sheet By / Date / Time STM /6/24 1734	Is there enough Volume	
Temperature Method GW #6	Proper Media/Container Used	<u>≯</u> □
WV samples: Yes (see note*) No follow normal procedure)	Splitting Samples Required	
Temp < 6° C Actual Temperature 0-4,0,8,7-0	MS/MSD	
Rush Samples: Yes Notify		THE TO
Short Hold: Yes No Notify	Trip Blanks	
	Lab to Filters	
Notes regarding Samples/COC outside of SOP:	COC Legible	
	COC Included: (Check all included)	-4
	Client Analysis S	ampler Name
	Project IDs C	ollection Date/Time
	500 <b>F</b>	1105
	All Samples Proper pH: N/A	XY
	Additional Contai	ner Notes
	*Note: West Virginia requires all s	samples to have their
	temperature taken. Note any out	
	temperature taken. Note any bad	1613.

Qualtrax ID: 120836

Qualtrax ID: 120836

DC#\_Title: ENV-FRM-ELON-0001 v08\_Sample Receiving Checklist

Other / Fill in		7]\\$\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		-	-	_																
		BiSulfate																				_
VOA Via s	2	D.I. Water																				
\ \d	Ž L	MeOH																				$\Box$
>	}	нсі	J	W			9															_
		Unpreserved																				
		oniZ\HO <sub>6</sub> N																				
		atstack muinommA																				
1 1	[	HOBN																				
1 1	250mL	Nitric																				
8	7	Sulfuric																				
Plastics		Emzi1T																				
교		Unpreserved																				
	뒽	Sulfuric																				
	500ml	Unpreserved	2	2	2	17																
	1 Liter	Sulfuric																				
	=[	Unpreserved																				
	100mL	Unpreserved	2	17																		
	اےا	HCI																				
ers	250mL	Phosphoric																				$\Box$
Ambers	17	Sulfuric				_																
	_	Sulfuric																				
	1 Liter	нсг																				
	-	Unpreserved	N	7	11	1																
	ear)	2oz Amb/Clear																				
Jars	D/dr	4oz Amb/Clear																				
Soils Jars	(Circle Amb/Clear)	302 Amb/Clear																				
S	(Circ	16oz Amb/Clear																				
		əldme2		7	m	4	2	9	7	000	6	8	11	12	13	14	15	16	17	8	19	70