



**2024 PERIODIC REVIEW REPORT  
for**

**FORMER GROSSINGERS RESORT  
LIBERTY, SULLIVAN COUNTY, NEW YORK  
NYSDEC Site # C353015**

**April 30, 2023 – July 30, 2024  
Reporting Period**

**prepared for:**

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## LIST OF ACRONYMS

<b>Acronym</b>	<b>Definition</b>
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	Below ground surface
CFCs	Chlorofluorocarbons
DER	Division of Environmental Remediation
DER-10	NYSDEC Technical Guidance for Site Investigation & Remediation
ECs	Engineering Controls
EE	Environmental Easement
HAL	USEPA Health Advisory Level
ICs	Institutional Controls
LNAPL	Light Non-Aqueous Phase Liquid
MCL	Maximum Contaminant Level
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PAH	Polycyclic Aromatic Hydrocarbon
PFAS	Per and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
ppt	parts per trillion
PRR	Periodic Review Report
RI	Remedial Investigation
RI/IRM	Remedial Investigation/Interim Remedial Measure
RIWP	Remedial Investigation Work Plan
SCO	Soil Cleanup Objectives
SESI	SESI Consulting Engineers, PC
SMP	Site Management Plan
SV	Soil Vapor
SVI	Soil Vapor Investigation

<b>Acronym</b>	<b>Definition</b>
SVOCs	Semi-Volatile Organic Compounds
TAL	Target Analyte List
TCL	Target Compound List
TOGS	Technical and Operations Guidance Series
USCO	Unrestricted Use Soil Cleanup Objectives
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

## **1.0 INTRODUCTION**

### **1.1 SUMMARY**

SESI Consulting Engineers (SESI) prepared this Periodic Review Report (PRR) for the period April 30, 2023 to July 30, 2024 for the Former Grossingers Resort, New York State Brownfield Cleanup Program (BCP) Site No. C353015, located in Liberty, New York (hereinafter referred to as the "Site"). SESI prepared this PRR on behalf of Sullivan Resorts LLC, who entered into a Brownfield Cleanup Agreement (BCA) as Volunteers in April 2018 with the New York State Department of Environmental Conservation (NYSDEC) to remediate the Site.

Historically, Site development included a 272-room resort hotel, boiler room, laundry room, convention center, swimming pool, ice skating rink and its ancillary building, service building known as the Joy Cottage, service building known as the Harry G, and outdoor tennis courts constructed over time since 1950s. A downhill ski slope was located to the west of the main hotel buildings.

A remedial investigation (RI) was conducted in 2019 and the results of the soil sampling showed exceedances to the unrestricted use Soil Cleanup Objectives (USCOs) for benzene, ethylbenzene, 2-methylnaphthalene, Polycyclic aromatic hydrocarbon (PAHs), mercury and lead. The results of surface soil samples showed one (1) or more of the pesticides 4,4'-DDT, 4,4'-DDE and 4,4'-DDD, lead and PAHs above the USCOs. The Site investigation for soil vapor identified elevated concentrations of Trichlorofluoromethane (Freon-11), Dichlorodifluoromethane (Freon-12), benzene, and 1,3 butadiene. The Site investigation for groundwater showed exceedances to the Class GA Groundwater Standards for benzene, ethylbenzene, isopropyl benzene, lead, barium, nickel and beryllium, Freon-11, Freon-12. The per-and polyfluoroalkyl substances (PFAS) perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) were detected at concentrations exceeding the U.S. Environmental Protection Agency Health Advisory Level (HAL) of 70 parts per trillion (ppt). The impacts at the Site are the result of a leaking underground storage tank (UST), historically applied pesticides, and other historical Site facilities.

The Site has been remediated to conditional Track 1. The remaining Engineering Control (EC) is groundwater monitoring. There are no engineering controls for soil vapors because the Site does not have any buildings; however, vapor intrusion monitoring is ongoing. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to the remaining contamination to ensure protection of public health and the environment. An Environmental Easement (EE) was granted to the NYSDEC and recorded by the Site owners with the Sullivan County Clerk, and it requires compliance with a Site Management Plan (SMP) and the ICs and ECs placed on the Site. These ICs currently allow for residential, restricted residential use, commercial, and industrial uses, but prohibit the use of groundwater without necessary water quality treatment. The ECs require quarterly groundwater monitoring for natural attenuation. A Site Location Map is provided in Figure 1.1. All formerly approved SMP figures are included in **Appendix A** of this report.

This PRR reports the required inspection and monitoring activities that were conducted during the current reporting period. The inspection and monitoring were conducted to ensure compliance with the ICs required by the EE and as stated in the SMP as approved by NYSDEC.

## **1.2 EFFECTIVENESS OF REMEDIAL PROGRAM**

In order to monitor the effectiveness of the contaminant removal and the Site natural attenuation, an on-site monitoring well network including MW-203, MW-204, MW-206, MW-208 (MW208R), MW-207, MW-209, MW-213, MW-214, MW-216, and MW-217 was sampled for volatile organic compounds (VOCs) and PFAS. As presented in Section 3, Freon 11 and Freon 12 levels detected in monitoring wells MW-213, MW-214, MW-216, and MW-217 have been decreasing since February 2019. Freon 11 levels in MW-21 and MW-216 and Freon 12 levels in MW-214, MW-216, and MW-217 are below the Ambient Water Quality Standards (AWQS).

The PFOS and PFOA levels detected in exceedances in monitoring wells MW-203, MW-204, MW-206, MW-207, MW208 (MW208R), MW-213, MW-214, MW-216, and MW-217 have been steadily decreasing since February 2019. PFOS levels in MW-203, MW-204, MW-206, MW-207 and MW-216 are all below the 10 ppt MCL established in January 2020

and referenced in the NYSDEC's letter, dated March 17, 2023. Decreasing concentrations were observed in MW-213, MW-214, MW-216 and MW-217 since the July 2022 sampling event through the May 2024 event. This represents groundwater monitoring events over the course of three years in which PFOA levels in MW-203, MW-204, MW-206, MW-207, MW-216 and MW-217 were found to be at or below the 10-ppt MCL as well.

Soil vapor samples have typically been collected from vapor points SMPV-1, SMPV-2, SMPV-10, SMPV-11, SMPV-12, SMPV-13, and SMPV-14 during this monitoring period. As presented in Section 3, the highest detected levels of Freon 11 and Freon 12 across the Site have decreased in the post-Certificate of Completion (COC) sampling rounds.

### 1.3 COMPLIANCE

In accordance with the SMP for the Site, SESI sampled the groundwater well network in March 2020, September 2020, April 2021, September 2021, November 2021, July 2022, June 2023, January 2024 and May 2024. Soil vapor samples were collected in March 2020, April 2021, September 2021, July 2022, June 2023, January 2024 and July 1, 2024. Snow cover and water in soil vapor point lines made it impossible to collect an accurate soil-vapor sample during the January 2024 monitoring event. During the January and May 2024 groundwater monitoring events, monitoring wells MW-203, MW-206, MW-207, MW-213, MW-214, MW-216 and MW-217 were sampled. In July 2024, MW208R was installed as a replacement of MW-208, which was destroyed to determine the PFAS levels on Site.

### 1.4 CONCLUSIONS AND RECOMMENDATIONS

SESI has conducted monitoring and sampling in compliance with the Site SMP and has verified that the ECs and ICs are in compliance.

SEIS recommends the following for the next reporting period:

- It is proposed to modify and reduce the environmental easement to reflect current conditions, which show significant reductions of contaminant concentrations in groundwater and soil vapor since the issuance of the Certificate of Completion (COC) in 2019. The proposed environmental easement is shown in **Figure 3.1** and **Figure 3.2**.
- The area of the reduced Easement, which is located on the western portion of the Site, will continue to be a conditional Track 1 treatment area until the end of 2024.

The EE will be terminated on the remainder of the Site, which will have achieved a Track 1 remedy and will no longer require monitoring.

- Continued monitoring and sampling for monitoring wells located within the proposed reduced easement area. These include MW-213, MW-214, MW-216 and MW-217
- No further sampling for FREON-11 and FREON-12 in the remaining monitoring wells outside of the proposed modified easement: MW-203, MW-204, MW-206, MW-207 and MW-208R due to non-detectable concentrations of those compounds.
- No further sampling of PFOS and PFOA in the remaining monitoring wells outside of the proposed modified easement: MW-203, MW-204, MW-206 and MW-207 due to decreased concentrations which are all at or below the AWQS MCL of 10 ng/l as is noted in a March 17, 2023 NYSDEC correspondence regarding this Site.
- PFOS and PFOA concentrations in well 208R are well below the USEPA Health Advisory Limit of 70 ppt as referenced in the 2019 DECISION DOCUMENT for this Site.
- No further monitoring or sampling of the soil vapor points on-site due to decreasing concentrations and/or vapor concentrations reaching asymptotic levels.
- Prepare a Final Report with the formal recommendation to terminate institutional and engineering controls at the Site; report to be submitted by December 2024.

## **2.0 SITE OVERVIEW**

### **2.1 SITE LOCATION AND DESCRIPTION**

The Site is located in New Liberty, Sullivan County, New York, and is identified as a portion of tax parcel ID number 30-1-1.1 on the Sullivan County Tax Map. A United States Geological Survey (USGS) topographical quadrangle map, SMP Figure 1.1 in **Appendix A**, shows the Site location. The Site is an approximately is a 17.30-acre area bounded by residential dwellings and undeveloped woodlands along Route 52 to the north, Route 52 and multiple commercial dwellings to the south, residential dwellings and commercial properties along Sunset Lake to the east, and the Middle Mongauop River and commercial properties along Route 17 to the west. A boundary map is attached to the amended BCA as required by Environmental Conservation Law Title 14 Section 27-1419 and is shown on SMP **Figure 1.2 in Appendix A**.

### **2.2 SITE HISTORY**

The Site is part of the former Grossingers Resort, developed in 1916. The resort hotel was composed of more than three dozen buildings with a total floor area of approximately 700,000 square feet. The resort featured indoor and outdoor tennis facilities, indoor and outdoor pools, a championship golf course, a skating rink, skiing facilities, horse trails and more. Since its closure in 1986 and prior to the implementation of the Remedial Investigation/Interim Remedial Measure (RI/IRM), the hotel complex had been shuttered and many of the old resort hotel structures remained. The structures were well beyond repair and required demolition. This Site is currently vacant; all operations on the Site ceased around 1986. However, the golf course is still active and is not part of the Site.

#### **2.2.1 REMEDIAL INVESTIGATION (RI) CONDUCTED AT THE SITE**

The Remedial Investigation Report/Interim Remedial Measure Construction Completion Report prepared by SESI in December 2019 details the results of prior investigations and the RI performed on the Site. The RI was conducted in accordance with the Remedial Investigation\Interim Remedial Measures Work Plan (RI/IRMWP) for the Site, which was submitted to NYSDEC on October 3, 2018 and subsequently approved by the NYSDEC on October 16, 2018.

The results of the remedial investigation soil sampling showed exceedances to the USCOs for benzene, ethylbenzene, 2-methylnaphthalene, PAHs, mercury and lead.

After the demolition and removal of the building foundations, a soil boring investigation was conducted in every building footprint to determine the environmental conditions of the uncovered areas. The soil boring investigation included performing 24 additional soil borings (SB-51 to SB-74) at the Site. Two (2) soil samples were collected from each boring. Soil borings were also conducted around the boiler room, which contained two (2) 15,000-gallon No. 4 heating oil USTs. Light non-aqueous phase liquid (LNAPL) was observed in borings in the boiler room area. (This LNAPL was subsequently removed as part of the remedial action.) The soil boring locations are shown on SMP Figure 2.2 in **Appendix A**. The exceedances shown on SMP Figure 2.2 in **Appendix A** are the exceedances left post remediation as described below in Section 2.2.5.

All soil borings were advanced to a minimum of 15 ft-bgs or to bedrock, whichever was encountered first. Two (2) soil samples were collected from each boring. Sample collection depths from each boring location were biased based on the field screening which included photo ionization detector, visual, and olfactory observations. If the field screening did not result in any impacts, the soil samples were collected at the six-inch interval above the water table and at the deepest six-inch interval, which is just above bedrock. All samples were analyzed for Target Compound List/Target Analyte List (TCL/TAL) +30 tentatively identified compounds.

The results of the soil boring samples showed PAHs were detected above the unrestricted use SCOs in a soil sample collected from boring SB-62 at concentrations ranging from 3.23 mg/kg to 8.15 mg/kg. The pesticide 4,4'-DDE was detected in soil boring SB-66 (3.5 to 4.0 feet) above the unrestricted use SCO at a concentration of 0.005 mg/kg. In soil boring SB-73 (11.5 to 12.0), the pesticides 4,4'-DDT (0.014 mg/kg), 4,4'-DDE (0.027 mg/kg) and 4,4'-DDD (0.008 mg/kg) were detected above the unrestricted use SCOs. All these exceedances were excavated as part of the remedial action as described below; the remaining exceedances shown on SMP Figure 2.2 in **Appendix A** are described in Section 2.2.5 below.

### Surface Soil Sampling

Surface soil samples were initially collected at ten (10) locations during October and November 2018 after most of the buildings were demolished. The surface soil sample locations were determined after the vegetation was removed based on field screening, visual observations of stained soils and historic data. Surface soil samples were collected from the 0.0 to 2-inch interval below ground surface.

The results of the ten (10) surface soil samples showed one (1) or more of the pesticides 4,4'-DDT, 4,4'-DDE and 4,4'-DDD were detected above the unrestricted use SCOs in seven (7) of the ten (10) surface soil samples at concentrations ranging from 0.005 mg/kg to 0.061 mg/kg. Lead was detected in surface soil sample SS-3 above the unrestricted use SCOs at 67.1 mg/kg. PAHs were detected above the unrestricted use SCOs in sample SS-5 at concentrations ranging from 3.96 mg/kg to 9.92 mg/kg.

To determine the horizontal and vertical extent of the pesticides, additional surface soil samples were collected at 15 locations within the BCP Area during November and December 2018. Two (2) samples were collected from each location at the 0 to 2-inch below grade interval and the 6 to 8-inch below grade interval after the vegetation was removed. The soil samples were collected using a stainless-steel trowel or shovel and delivered to Test America Laboratories for pesticide analysis on a 24-hour turnaround time. Care was taken when collecting the soil samples not to cross-contaminate between sample intervals and sample locations. The stainless-steel trowel or shovel was decontaminated prior to each use with a detergent wash and distilled water rinse. Any fall in from the surrounding soil was removed prior to collecting the sample. All surface soil exceedances were excavated except for the exceedances shown on SMP Figure 2.3 in **Appendix A**. The remaining soil exceedances are described in Section 2.2.5 below.

After demolition of the buildings, eight (8) additional surface soil samples were collected beneath the former buildings during June 2019. Pesticide exceedances to the unrestricted use SCOs were detected in three (3) of the eight (8) samples.

### Soil Vapor Sampling

A soil vapor investigation was determined to be necessary in preparation for the planned development on the Site, which may include buildings. To evaluate the potential for future exposures in the future building, SESI designed a soil vapor investigation (SVI) in accordance with the NYS Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion (Guidance) (October 2006). The SVI plan was included in the RI/IRMWP submitted to the NYSDEC on October 3, 2018 and subsequently approved on October 16, 2018.

During the period from November 30, 2018 to December 14, 2018, ten (10) soil vapor (SV) samples (V-1, V-2, V-3, V-10, V-11, V-12, V-13, V-14, V-15, and V-16) were collected across the Site. The sample locations and results are presented on SMP Figure 2.4 in **Appendix A**. The soil vapor samples were collected from vapor points installed in the vadose zone to a depth of 2 or 3 ft-bg. Planned SV sample locations V-4 through V-9 were not installed because they are all in the former LNAPL area, which was subsequently remediated by excavation to bedrock.

A second round of soil vapor samples was collected from February 8 to 11, 2019. SV samples were collected from locations V-1, V-2, V-11, V-12, V-13 and V-14. SESI attempted to collect samples from the remaining locations; however, melting ice and snow caused the vapor points to fill up with water. The soil vapor results were compared to the NYSDOH October 2006 air guideline values, which does not include values for soil vapors.

The soil vapor results showed that benzene was detected in samples V-1 (24 ug/m<sup>3</sup>), V-10 (40 ug/m<sup>3</sup>) and V-14 (18 ug/m<sup>3</sup>). Soil vapor point V-1 is located in the former tennis court area. Soil vapor point V-10 is located south of the former indoor pool and V-14 is located near the western boundary of the BCP area. The compound 1,3-butadiene was also detected in samples V-1 (66 ug/m<sup>3</sup>), V-3 (28 ug/m<sup>3</sup>), V-11 (53 ug/m<sup>3</sup>), V-15 (60 ug/m<sup>3</sup>) and V-16 (57 ug/m<sup>3</sup>). Soil vapor point V-3 is located beneath the former convention center, V-11 is located at the southeast portion of the BCP and V-15 and V-16 are located in the former ski maintenance area. The results of the soil vapor samples collected from February 8 to February 11, 2019 showed trichlorofluoromethane in all six (6) samples at concentrations ranging from 2,300 ug/m<sup>3</sup> at V-2 to 660,000 ug/m<sup>3</sup> at V-11.

Dichlorodifluoromethane was detected at concentrations ranging from 110 ug/m<sup>3</sup> at V-2 to 680,000 ug/m<sup>3</sup> at V-13. Benzene was detected in soil vapor point V-14 at 16 ug/m<sup>3</sup>. The compound 1,3-butadiene was not detected in any of the vapor points sampled in February 2019.

### Groundwater Sampling

The Site investigation for groundwater included the installation of five (5) monitoring wells. The results of the groundwater sample showed exceedances to the Class GA AWQS for benzene, ethylbenzene, isopropyl benzene, lead, barium, nickel and beryllium. These wells were abandoned prior to the implementation of the IRM.

Initially, twelve (12) groundwater monitoring wells (MW-201 through MW-212) were installed. The wells were installed to replace the abandoned wells, investigate potential impacts to groundwater from the soil contamination and delineate groundwater contamination upgradient and downgradient from the former, since remediated, boiler room/LNAPL area.

The twelve (12) groundwater monitoring wells (MW-201 through MW-212) were gauged for depth to LNAPL/depth to groundwater after they were installed and developed. A sheen was detected in five (5) monitoring wells (MW-202, MW-203, MW-204, MW-205 and MW-206) located within the boiler room/LNAPL area. Therefore, these five (5) wells located in the former UST/LNAPL area were not sampled. In later sampling events, wells MW-203, MW-204, MW-205 and MW-206 were sampled because there was no LNAPL detected; and MW-202 was destroyed and never sampled. The remaining wells were sampled for TCL/TAL+30, 1,4 dioxane and PFAS in accordance with the RI/IRMWP. During the December 2018 sampling event, one (1) well (MW-207) resulted in exceedances of the AWQS for Freon-12 and Freon-11. There were no other exceedances for any of the other TCL/TAL compounds or 1,4 dioxane in any of the wells. The groundwater sampling results are presented in on SMP Figure 2.8 in **Appendix A**.

Based on the NYSDEC January 10, 2019 comments, three (3) monitoring wells (MW-213, MW-214, and MW-215) were installed at the Site on January 17, 2019. MW-215 was installed in the ski maintenance area to replace MW-1. Two (2) monitoring wells (MW-

216 and MW-217) were installed in July 2019 along the western boundary of the BCP site area for downgradient delineation of the Freon.

An additional round of groundwater samples was collected from the previous and new monitoring wells on January 29, 2019 and from February 6 to February 8, 2019. The samples were analyzed for TCL/TAL+30, and select wells, where PFAS were previously detected, were analyzed also for PFAS. The results of the groundwater samples collected on January 29 and February 6 through 8, 2019 showed Freon-12 and Freon-11 exceedances in well MW-213. No other exceedances of the Groundwater Class GA Effluent Standards were detected in any of the wells sampled. This includes MW-207, which previously had exceedances for Freon-12 and Freon-11.

As a result of the Freon exceedances in well MW-213, on July 10, 2019 two (2) additional monitoring wells (MW-216 and MW-217) were installed to the north of well MW-213 to delineate the northern extent of the Freon plume. The results of the groundwater sampling for wells MW-216 and MW-217 showed Freon 12 and Freon 11 above 5 ug/l in monitoring well MW-216 at concentrations of 48 ug/l and 120 ug/l, respectively. Freon 11 was detected in monitoring well MW-217 at a concentration of 12 ug/L. Freon 12 was not detected in monitoring well MW-217.

The PFAS compounds PFOS and PFOA were detected in well MW-207 at concentrations of 91 and 100 ppt, respectively. PFOS and PFOA are present at a maximum combined concentration of 159 ppt in MW-206 and 191 ppt in MW-217, compared to the current U.S. Environmental Protection Agency HAL of 70 ppt.

### **2.2.2 DESCRIPTION OF INTERIM REMEDIAL MEASURES**

The following IRM were conducted in accordance with the NYSDEC approved RI/IRMWP.

1. Removal of two (2) USTs that were present under the boiler room slab and the clean-up of the resulting LNAPL discharge area.
2. Basin Sediment: Removal of sediments that contained metals exceedances, and excavation around the outlet area until confirmed clean post-excavation samples (which did not exceed the USCOs) were obtained.

3. Stockpile D: Disposal of the stockpiled material and sampling in the stockpile area to confirm removal of all contaminants that exceeded the unrestricted SCOs.
4. Ice Skating Rink: Excavation of the area around SB-14, which contained PAH and VOC exceedances, on a 25-foot radius to a depth of 1-foot. Collection of bottom and side wall samples to document the remedial action.
5. Joy Cottage: Excavation of the area around SB-38, which contained pesticide exceedances, on a 25-foot radius to a depth of 1.5-foot. Collection of bottom and side wall samples to document the remedial action.
6. Ski Maintenance Area: Excavation of the area around SB-16, which had metal exceedances, on a 25-foot radius to depth of 1.5-foot and around SB-41, which had pesticide exceedances, on a 25-foot radius to a depth of 1.5 foot. Collection of bottom and side wall samples to document remedial action.
7. From August 2018 through December 2018, SESI observed Capital Wrecking remove structures on the Site, remove two (2) USTs, and excavate contaminated soil. Air monitoring was conducted in accordance with the Community Air Monitoring Plan.

### **2.2.3 DESCRIPTION OF REMEDIAL ACTIONS**

The site was remediated in accordance with the remedy selected by the NYSDEC in the RI/IRMWP dated October 2018.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy implemented at the Site:

1. Excavation and off-Site disposal of on-Site soils which exceed USCOs, as defined by 6 NYCRR Part 375-6.8.
2. Closure of the two (2) USTs by removal of all observable LNAPL in soil and weathered shale;
3. Collection and analysis of end-point samples at the bottom and sidewalls of all the excavations to evaluate the remedy by comparing results to the Track 1 USCOs.

4. Execution and recording of an Environmental Easement to restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH.
5. Development and implementation of an SMP for long-term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance, and (4) reporting.
6. Periodic certification of the institutional and Engineering Controls listed above.

#### **2.2.4 ON-SITE AND OFF-SITE TREATMENT SYSTEMS**

No long-term treatment systems were required to be installed as part of the site remedy.

#### **2.2.5 MANAGEMENT OF RESIDUAL CONTAMINATION THROUGH INSTITUTIONAL AND ENGINEERING CONTROLS IN THE ENVIRONMENTAL EASEMENT**

The Site has conditionally achieved a Track 1 remedy. Until that is changed to an unconditional remedy, the Department requires that an Environmental Easement (EE) be placed on the Site to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling the use of groundwater; and (3) limit the use and development of the site to residential, restricted residential, commercial and industrial uses. An SMP (December 2019) was prepared by SESI and approved by the NYSDEC for the long-term management and monitoring of the EE requirements.

The SMP lists the institutional controls (ICs) and engineering controls (ECs) required by the NYSDEC to manage the residual contamination present at this Site (discussed in Section 3.0) to protect public health and the environment in the future and keep the Site safe for reuse. The remedy for the Site did not require the construction of any other Engineering Control systems, however, groundwater monitoring is included as an engineering control.

### **3.0 REMEDY PERFORMANCE, EFFECTIVENESS, PROTECTIVENESS**

The goal of the SMP is to manage the residual contamination at the Site through implementation of ICs until the Department determines that the conditional Track 1 designation can be changed to an unconditional Track 1. At present, SESI is conducting monitoring/inspection of the ICs and ECs on the Site in accordance with the SMP dated December 2019. Site inspection checklist performed during 2024 is provided in **Appendix B**, while field reports completed during each monitoring event at the Site are presented in **Appendix C**.

#### **Groundwater Monitoring**

In order to monitor the effectiveness of the contaminant removal and the Site natural attenuation, an onsite monitoring well network including MW-201, MW-203, MW-204, MW-205, MW-206, MW-207, MW-209, MW-210, MW-211, MW-213, MW-214, MW-216, and MW-217 was sampled periodically for VOCs and PFAS since the issuance of the COC. Monitoring well MW-208 was damaged and is no longer sampled. However, in July 2024, MW208R was installed as a replacement of MW208. Monitoring wells MW-212 and MW-209 have not been sampled due to insufficient water levels. Monitoring wells MW-201, MW-205, MW-210, or MW-211 were not sampled in the June 2023 sampling event, per the recommendation made in the 2022 PRR based upon concentrations lower than the AWQS.

The available groundwater sampling and purging logs are presented for the January 2024, May 2024 and July 2024 sampling events are presented in **Appendix D. Table 3.1** presents the groundwater analytical result summary compared to the AWQS. The laboratory data of the sampling events for this monitoring period are presented in **Appendix E**.

**Table 3.2** below and **Figure 3.1** present a summary of VOC exceedances in groundwater and **Chart 1** and **Chart 2** illustrate the historic data in each well for Freon 11 and Freon 12. Freon-11 and Freon-12 have been decreasing in all wells have achieved levels below the AWQS in all but 2 wells (MW213, and MW217), which are in the proposed easement.

Due to the well damage historically sustained in MW-208, critical information regarding the levels of PFAS in that area of the Site was unknown due to the inability to monitor the well since March 2020. Sullivan Resorts, LLC volunteered to determine the levels of Freon and PFAS in that area of the Site by installing MW-208R. The new well, MW-208R, was installed approximately 10 ft to the southeast of the original MW-208. The construction log of MW-208R is included in **Appendix D**. The location of MW-208R is additionally depicted on Figure 3.1 with results presented in Table 3.3 below.

**Table 3.2 Summary of Historical FREON Exceedances in Groundwater**

LOCATION		MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
SAMPLING DATE		1/29/2019	3/4/2020	9/2/2020	4/27/2021	9/8/2021	11/19/2021	7/12/2022	6/29/2023	1/4/2024	5/16/2024	
SAMPLE TYPE		Water	Q WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	NY-AWQS	Results	Results Q	Results Q	Results Q	Results Q	Results Q	Results Q				
Trichlorofluoromethane (Freon 11)	5	48	71	56	52	48	61	37	24	14	11	
Dichlorodifluoromethane (Freon 12)	5	29	74	40	54	41	45	31	23	14	11	

LOCATION		MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214
SAMPLING DATE		1/29/2019	3/4/2020	9/3/2020	4/27/2021	9/8/2021	11/22/2021	7/12/2022	6/29/2023	1/4/2024	5/16/2024	
SAMPLE TYPE		Water	Q WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	NY-AWQS	Results	Results Q	Results Q	Results Q	Results Q	Results Q	Results Q				
Trichlorofluoromethane (Freon 11)	5	0.14	U 10	5.1	5.4	1	J 3	2.5	1.5	J 1.7	J ND	J
Dichlorodifluoromethane (Freon 12)	5	0.88	J 27	16	21	5	U 10	9.9	6.9	3.7	J ND	J

LOCATION		MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
SAMPLING DATE		7/10/2019	3/6/2020	9/3/2020	4/28/2021	9/8/2021	11/19/2021	7/11/2022	6/29/2023	1/5/2024	5/16/2024	
SAMPLE TYPE		Water	Q WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	NY-AWQS	Results	Results Q	Results Q	Results Q	Results Q	Results Q	Results Q				
Trichlorofluoromethane (Freon 11)	5	120	48	6.9	29	5.3	4.7	5.5	4	8.5	ND	
Dichlorodifluoromethane (Freon 12)	5	48	15	3.9	11	3.6	J 3.5	J 3.6	J 2.4	J 2.5	J 1.7	J

LOCATION		MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
SAMPLING DATE		7/10/2019	3/6/2020	9/3/2020	4/28/2021	9/8/2021	11/19/2021	7/11/2022	6/29/2023	1/5/2024	5/16/2024	
SAMPLE TYPE		Water	Q WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	NY-AWQS	Results	Results Q	Results Q	Results Q	Results Q	Results Q	Results Q				
Trichlorofluoromethane (Freon 11)	5	12	22	5.6	47	55	62	52	18	3.7	ND	
Dichlorodifluoromethane (Freon 12)	5	5	U 5	U 0.31	U 5	U 5	U 5	U 5	U 5	U 5	U 7.2	

Notes:

1. Results are shown in micrograms per liter (ug/L)
2. Yellow shading denotes exceedances of NYSDEC AWQS
3. Bold = Compound Detected
4. Q = Qualifier
5. U = Compound Not Detected
6. J = Estimated Concentration

**Table 3.3** below and **Figure 3.1** present a summary of PFOS and PFOA exceedances in groundwater and **Chart 3** and **Chart 4** illustrate the historic data in each well for PFOS and PFOA.

PFOA has been decreasing in all wells to concentrations below the PFAS MCL levels as referenced in the DEC letter of March 17, 2023 except in 4 wells (MW-217, MW-216, MW-214, and MW-213), which are located in the proposed reduced easement area. The PFOA was reduced in MW208R compared to MW208 to below the MCL, the PFOS levels in MW208R were significantly reduced compared to the levels in MW208.

**Table 3.3 Summary of Historical PFAS Exceedances in Groundwater**

LOCATION		MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203										
SAMPLING DATE		2/7/2019	3/5/2020	9/2/2020	4/28/2021	9/8/2021	11/22/2021	7/11/2022	6/29/2023	1/5/2024	5/16/2024											
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER										
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q									
Perfluorooctanesulfonic Acid (PFOS)	10	37		27.9		25		14.5		18		12.8		0.982	J	11.9		1.08		3.83		
Perfluorooctanoic Acid (PFOA)	10	22.3		6		5.15		3.26		3.28		1.82		J	1.82	U	2.89		1.06	J	2.08	J

LOCATION		MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204						
SAMPLING DATE		3/5/2020	3/5/2020	9/2/2020	4/27/2021	9/9/2021	11/22/2021	7/11/2022							
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER							
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q						
Perfluorooctanesulfonic Acid (PFOS)	10	5.05		5.05		12.1		4.41		7.56		4.68		1.8	U
Perfluorooctanoic Acid (PFOA)	10	2.22		2.22		3.94		1.53	J	1.95		1.28	JF	1.8	U

LOCATION		MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206									
SAMPLING DATE		2/6/2019	3/5/2020	9/2/2020	4/27/2021	9/9/2021	11/22/2021	7/11/2022	6/29/2023	1/4/2024	5/16/2024										
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER									
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q								
Perfluorooctanesulfonic Acid (PFOS)	10	51.9		47.9		38.7		30.9		32.5		34.1		4.43		9.57		2.95	F	2.89	
Perfluorooctanoic Acid (PFOA)	10	107		25.5		12.1		26		14.6		13.1		1.79	U	5.6		1.53	U	0.651	J

LOCATION		MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207									
SAMPLING DATE		2/6/2019	3/5/2020	9/3/2020	4/27/2021	9/9/2021	11/22/2021	7/11/2022	6/29/2023	1/5/2024	5/16/2024										
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER									
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q								
Perfluorooctanesulfonic Acid (PFOS)	10	34		11.3		22.1		8.36		29.9		17.4		1.5	J	8.97	J	5.44		9.96	
Perfluorooctanoic Acid (PFOA)	10	23.4		6.59		5.46		2.2		9.68		3.64		1.8	U	1.8	U	1.32	J	ND	J

LOCATION		MW-208	MW-208		
SAMPLING DATE		2/7/2019	3/5/2020		
SAMPLE TYPE		WATER	WATER		
	PFAS MCL	Results	Q		
Perfluorooctanesulfonic Acid (PFOS)	10	17.6		68.2	
Perfluorooctanoic Acid (PFOA)	10	10.8		38.2	

LOCATION		MW-208R
SAMPLING DATE		7/16/2024
SAMPLE TYPE		WATER
	PFAS MCL	Results
Perfluorooctanesulfonic Acid (PFOS)	10	13.9
Perfluorooctanoic Acid (PFOA)	10	4.29

LOCATION		MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	
SAMPLING DATE		1/29/2019	3/4/2020	9/2/2020	4/27/2021	9/8/2021	11/19/2021	7/12/2022	6/29/2023	1/4/2024	5/16/2024		
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Perfluorooctanesulfonic Acid (PFOS)	10	91.2		73.4		60.7		70		64.1		67.4	
Perfluorooctanoic Acid (PFOA)	10	40.4		32.8		26.5		27.7		24		25.4	
								1.03	J	14.4		23.6	

LOCATION		MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	
SAMPLING DATE		1/29/2019	3/4/2020	9/3/2020	4/27/2021	9/9/2021	11/22/2021	7/12/2022	6/29/2023	1/4/2024	5/16/2024		
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Perfluorooctanesulfonic Acid (PFOS)	10	48.5		47.3		46.6		40.3		30.5		56.2	
Perfluorooctanoic Acid (PFOA)	10	68.6		29.9		25.8		29.5		15.9		24.7	
								0.826	J	21.1	J	17.1	11.1

LOCATION		MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	
SAMPLING DATE		7/10/2019	3/6/2020	9/3/2020	4/28/2021	9/8/2021	11/19/2021	7/11/2022	6/29/2023	1/5/2024	5/16/2024		
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Perfluorooctanesulfonic Acid (PFOS)	10	29.4		6.51		24.8		24.9		20.8		15.7	
Perfluorooctanoic Acid (PFOA)	10	17.9		8.18		9.39		10.8		11.7		9.79	
								1.78	U	6.12		10.4	4.9

LOCATION		MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	
SAMPLING DATE		7/10/2019	3/6/2020	9/3/2020	4/28/2021	9/8/2021	11/19/2021	7/11/2022	6/29/2023	1/5/2024	5/16/2024		
SAMPLE TYPE		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
	PFAS MCL	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Perfluorooctanesulfonic Acid (PFOS)	10	17		30		42.1		19.5		38.6		27	
Perfluorooctanoic Acid (PFOA)	10	16.5		15.7		13.8		14.6		21.4		12.8	
								1.74	U	4.67		6.1	6.36

Notes:

1. Results are shown in micrograms per liter (ng/L)
2. Yellow shading denotes exceedances of NYSDEC PFAS MCL established Jan 2020
3. Bold = Compound Detected
4. Q = Qualifier
5. U = Compound Not Detected
6. J = Estimated Concentration

**Soil Vapor**

Soil vapor samples were collected from vapor points SMPV-1, SMPV-2, SMPV-10, SMPV-11, SMPV-12, SMPV-13, and SMPV-14 during this monitoring period in June 2023. SMPV-2, SMPV-10, SMPV-11, SMPV-12, SMPV-13 and SMPV-14 were sampled again on July 1, 2024. **Table 3.4** presents the vapor analytical results. The analytical laboratory data reports are presented in **Appendix E**. The soil vapor locations are depicted in **Figure 3.2**. No comparison has been made to standards as New York State does not have guidance values or standards for VOCs in soil vapor.

Freon 11 and Freon 12 soil vapor concentrations have consistently decreased to very low levels. Benzene and butanone levels have been consistently found to be negligible.

The NYSDEC and NYSDOH have no action levels for any of the Freon's and they are not included in any of the NYSDOH published matrices. The US EPA does not have levels for Freon-11 for Vapor Intrusion Screening Levels (VISL) on its published calculator ([https://epa-visl.ornl.gov/cgi-bin/visl\\_search](https://epa-visl.ornl.gov/cgi-bin/visl_search)). The EPA calculator has levels for Freon-12 with a targeted indoor air screening level of 10.4 ug/m3, and a sub-slab soil vapor concentration of 348 ug/m3. Freon-12 is listed as non-cancerous on the EPA calculator website.

**Table 3.5: Summary of Historical Soil Vapor Results**

LOCATION	V-1		V-1		SMPV-1		SMPV-1		SMPV-1		SMPV-1		SMPV-1	
SAMPLING DATE	12/14/2018		2/11/2019		3/6/2020		4/29/2021		9/20/2021		7/12/2022		6/29/2023	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	24		590	U	0.811		2.37		1.65		5.24		9.01	
Trichlorofluoromethane (FREON 11)	3.5	U	380000	B	4.24		2.56		6.57		5.9		2.39	
Dichlorodifluoromethane (FREON 12)	9.9	U	2600	U	3.21		2.36		2.09		3.63		2.43	

LOCATION	V-2		V-2		SMPV-2		SMPV-2		SMPV-2		SMPV-2		SMPV-2		SMPV-2	
SAMPLING DATE	11/30/2018		2/11/2019		3/6/2020		4/29/2021		9/20/2021		7/12/2022		6/29/2023		7/1/2024	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	2.3	U	5.6	U	0.639	U	1.52		1.53		7.16		12.3		5.75	
Trichlorofluoromethane (FREON 11)	3.5	U	2300	B	1.12	U	21.5		58.4		27.2		22.7		2.47	
Dichlorodifluoromethane (FREON 12)	9.9	U	110		2.16		2.52		2.62		3.26		2.5		3.88	

LOCATION	V-3		SMPV-3		SMPV-3		SMPV-3	
SAMPLING DATE	12/14/2018		3/6/2020		4/29/2021		7/12/2022	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	5.1	J	0.639	U	2.87		0.639	U
Trichlorofluoromethane (FREON 11)	26		3.2		1.21		2.11	
Dichlorodifluoromethane (FREON 12)	140		4.84		2.34		3.89	

LOCATION	V-10		SMPV-10		SMPV-10		SMPV-10		SMPV-10		SMPV-10		SMPV-10	
SAMPLING DATE	11/30/2018		3/6/2020		4/28/2021		9/20/2021		7/12/2022		6/29/2023		7/1/2024	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	40		1.09		1.9		0.639	U	8.79		3.19		0.965	
Trichlorofluoromethane (FREON 11)	3.5	U	111		21.5		7.81		43.9		30.4		3.25	
Dichlorodifluoromethane (FREON 12)	9.9	U	73.2		8.41		2.67		10.3		5.59		12.4	

LOCATION	V-11		V-11		SMPV-11		SMPV-11		SMPV-11		SMPV-11		SMPV-11	
SAMPLING DATE	12/13/2018		2/11/2019		3/6/2020		4/28/2021		9/20/2021		7/12/2022		6/29/2023	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	11		810	U	0.652		2.87		0.639	U	21.2		6.26	ND
Trichlorofluoromethane (FREON 11)	62		66000	B	9.72		238		1210		1700		725	2.58
Dichlorodifluoromethane (FREON 12)	9.9	U	3500	U	2.52		2.24		2.38		4.94	U	7.32	1.32

LOCATION	V-12		V-12		SMPV-12		SMPV-12		SMPV-12		SMPV-12	
SAMPLING DATE	11/30/2018		2/11/2019		3/6/2020		7/12/2022		6/29/2023		7/1/2024	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	2.3	U	5.7	U	0.639	U	6.9		4.31		3.26	
Trichlorofluoromethane (FREON 11)	3.5	U	5300	B	1.82		3.53		22.1		2.46	
Dichlorodifluoromethane (FREON 12)	9.9	U	25	U	2.73		2.8		3.58		1.61	

LOCATION	V-13		SMPV-13		SMPV-13		SMPV-13		SMPV-13		SMPV-13		SMPV-13	
SAMPLING DATE	11/30/2018		3/6/2020		4/28/2021		9/20/2021		7/12/2022		6/29/2023		7/1/2024	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	0.23	U	0.639	U	1.38		0.984		10.4		8.95		ND	
Trichlorofluoromethane (FREON 11)	13		48.7		105		91		691		289		4.04	
Dichlorodifluoromethane (FREON 12)	69		285		376		96.9		2950		1230		2.07	

LOCATION	V-14		V-14		SMPV-14		SMPV-14		SMPV-14		SMPV-14		SMPV-14	
SAMPLING DATE	11/30/2018		2/11/2019		3/6/2020		4/28/2021		9/20/2021		7/12/2022		6/29/2023	
Units ug/m3	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q	Results	Q
Benzene	18		16	J	1.51		0.834		0.958		6.23		10.4	6.68
Trichlorofluoromethane (FREON 11)	4.5	J	4600	B	826		447		72.5		181		61.3	2.67
Dichlorodifluoromethane (FREON 12)	21	J	1400		82.1		10.6		3.16		40.5		2.89	15.3

Notes:

1. Results are shown in micrograms per cubic meter (ug/m3)
2. Bold = Compound Detected
3. Q = Qualifier
4. U = Compound Not Detected
5. J = concentration estimated

#### **4.0 IC/EC PLAN COMPLIANCE**

#### **4.1 IC/EC REQUIREMENTS AND COMPLIANCE**

##### **Institutional and Engineering Controls**

The Site remedy requires that an EE be placed on the property to (1) implement, maintain and monitor the Institutional and Engineering Controls; (2) prevent future exposure to remaining contamination by controlling the use of groundwater; and (3) limit the use and development of the site to residential, restricted residential, commercial and industrial uses. An SMP (December 2019) was prepared by SESI and approved by the NYSDEC for the long-term management and monitoring of the EE requirements.

A series of ICs and ECs is required to prevent future exposure to remaining contamination. Adherence to these ICs and ECs on the Site is required and will be implemented under the EE and SMP. The boundaries are shown on SMP Figure 3.1, and the requirements include:

- The property may be used for residential, restricted residential, commercial, and industrial use;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Sullivan County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP; all ECs must be inspected at a frequency and in a manner defined in the SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on SMP Figure 3.1, and any potential impacts that are identified must be monitored or mitigated.

### **Criteria for Completion of Remediation/Termination of Remedial Systems**

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC Division of Environmental Remediation (DER-10) Technical Guidance for Site Investigation and Remediation (May 3, 2010).

### **Monitoring Wells Associated with Monitored Natural Attenuation**

Groundwater monitoring activities to assess natural attenuation will continue as determined by the NYSDEC, with consultation with NYSDOH, until residual concentrations of the dissolved phase Freon in groundwater are found to be consistently below ambient water quality standards, the Site Standards, Criteria and Guidelines, or have become asymptotic at an acceptable level over an extended period. In the event that monitoring data indicates that monitoring for natural attenuation may no longer be required, a proposal to discontinue the system will be submitted by the remedial party. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC.

### **Soil Vapor Intrusion Evaluation**

A soil vapor intrusion evaluation must be performed upon a change in use of the property that will result in occupancy of a previously unoccupied building or initial occupancy of a new building. Upon completion of the evaluation, if an action is required, any actions taken or to be taken must be reflected in an updated SMP. Based on the results of the soil vapor, no additional evaluation is recommended on the Site.

## **4.2 IC/EC CERTIFICATION**

The NYSDEC Institutional and Engineering Controls Certification Form has been completed and is included in **Appendix F**.

## 5.0 MONITORING PLAN COMPLIANCE

### 5.1 MONITORING COMPLETED DURING CURRENT REPORTING PERIOD

**Table 5.1: SMP Monitoring Frequency Requirements**

<b>Task/Report</b>	<b>Reporting Frequency</b>
Inspection Report	Not Required; however completed with sampling event(s)
Groundwater monitoring and sampling	Performed Quarterly until downward trend is confirmed
Soil Vapor Sampling	Annually prior to any building constructions
Periodic Review Report	Annually, or as otherwise determined by the Department

#### **Groundwater Monitoring**

Groundwater samples were collected from monitoring wells MW-203, MW-206, MW-207, MW-213, MW-214, MW-216, and MW-217 in accordance with the approved 2023 PRR recommendations. Sampling for 2024 has been performed in January and May as part of the 2024 PRR.

#### **Soil Vapor Monitoring**

Soil vapor samples were collected in 2023 from vapor points SMPV-1, SMPV-2, SMPV-3, SMPV-10, SMPV-12, SMPV-11, SMPV-13, and SMPV-14 in June 2023 in accordance with the SMP. No soil vapor samples were collected in January 2024 due to snow cover and water vapor in the sampling lines. Due to this SESI returned to the Site and collected soil vapor samples on July 1, 2024.

## 5.2 COMPARISON WITH REMEDIAL OBJECTIVES

#### **Groundwater**

As discussed in Section 3 of this report, Freon 11 and Freon 12 exceedances that were detected in groundwater samples collected from monitoring wells MW-213, MW-214, MW-216 and MW-217 post-COC in March 2020 are decreasing and achieving asymptotic levels as shown in Chart 1.

The PFOS and PFOA exceedances that were detected in monitoring wells MW-203, MW-206, MW-207, MW-208 (MW-208R), MW-213, MW-214, MW-216, and MW-217 are decreasing reaching asymptotic concentrations as shown in the attached **Chart 3** and **Chart 4**.

### **Soil Vapor**

Soil vapor samples were collected in 2023 from vapor points SMPV-1, SMPV-2, SMPV-3, SMPV-10, SMPV-12, SMPV-11, SMPV-13, and SMPV-14 in June 2023 in accordance with the SMP. No soil vapor samples were collected in 2024 due to snow cover in January and water vapor in the sampling lines. . Due to this SESI returned to the Site and collected soil vapor samples on July 1, 2024.

### **Monitoring Deficiencies**

All aspects of the monitoring plan were in accordance with the SMP, however, not all events were completed due to sampling conditions; i.e., snow covered ground and water vapor in the vapor sampling lines.

Laboratory reports are presented as **Appendix E**.

## **6.0 OPERATION AND MAINTENANCE PLAN COMPLIANCE**

The Site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems, to protect public health and the environment. Therefore, the operation and maintenance of such components is not applicable.

## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

### **Compliance with the SMP**

All aspects of the SMP, including IC/EC and monitoring, have met the requirements. The O&M is not required at this time for the Site. There are no new exposure pathways resulting in an unacceptable risk. Not all sampling events were conducted due to excessive snow and limited access to sampling points.

### **Performance and Effectiveness of the Remedy**

The sampling of the monitoring well network is determining the effectiveness of the Site's ability to naturally degrade the contaminants of concern in groundwater.

### **Future PRR Submittals**

A PRR may be submitted in 2025 for the reduced easement area. A Final Report with the formal recommendation to terminate institutional and engineering controls at the Site; report to be submitted by December 2024.

### **Recommendations**

SESI has conducted monitoring and sampling in compliance with the Site SMP and all aspects of the remedial program appear to be meeting the site remedy design goal. Based on the results and the attached charts the level of contamination in groundwater is decreasing and is achieving asymptotic levels. Accordingly, SESI recommends the following for the next reporting period.

SEIS recommends the following for the next reporting period:

- It is proposed to modify and reduce the environmental easement to reflect current conditions, which show significant reductions of contaminant concentrations in groundwater and soil vapor since the issuance of the Certificate of Completion (COC) in 2019. The proposed environmental easement is shown in **Figure 3.1** and **Figure 3.2**.
- The area of the reduced Easement, which is located on the western portion of the Site, will continue to be a conditional Track 1 treatment area until the end of 2024. The EE will be terminated on the remainder of the Site, which will have achieved a Track 1 remedy and will no longer require monitoring.

- Continued monitoring and sampling for monitoring wells located within the proposed reduced easement area. These include MW-213, MW-214, MW-216 and MW-217
  - No further sampling for FREON-11 and FREON-12 in the remaining monitoring wells outside of the proposed modified easement: MW-203, MW-204, MW-206, MW-207 and MW-208R due to non-detectable concentrations of those compounds.
  - No further sampling of PFOS and PFOA in the remaining monitoring wells outside of the proposed modified easement: MW-203, MW-204, MW-206 and MW-207 due to decreased concentrations which are all at or below the AWQS MCL of 10 ng/l as is noted in a March 17, 2023 NYSDEC correspondence regarding this Site.
  - PFOS and PFOA concentrations in well 208R are well below the USEPA Health Advisory Limit of 70 ppt as referenced in the 2019 DECISION DOCUMENT for this Site.
  - No further monitoring or sampling of the soil vapor points on-site due to decreasing concentrations and/or vapor concentrations reaching asymptotic levels.
- Prepare a Final Report with the formal recommendation to terminate institutional and engineering controls at the Site; report to be submitted by December 2024.

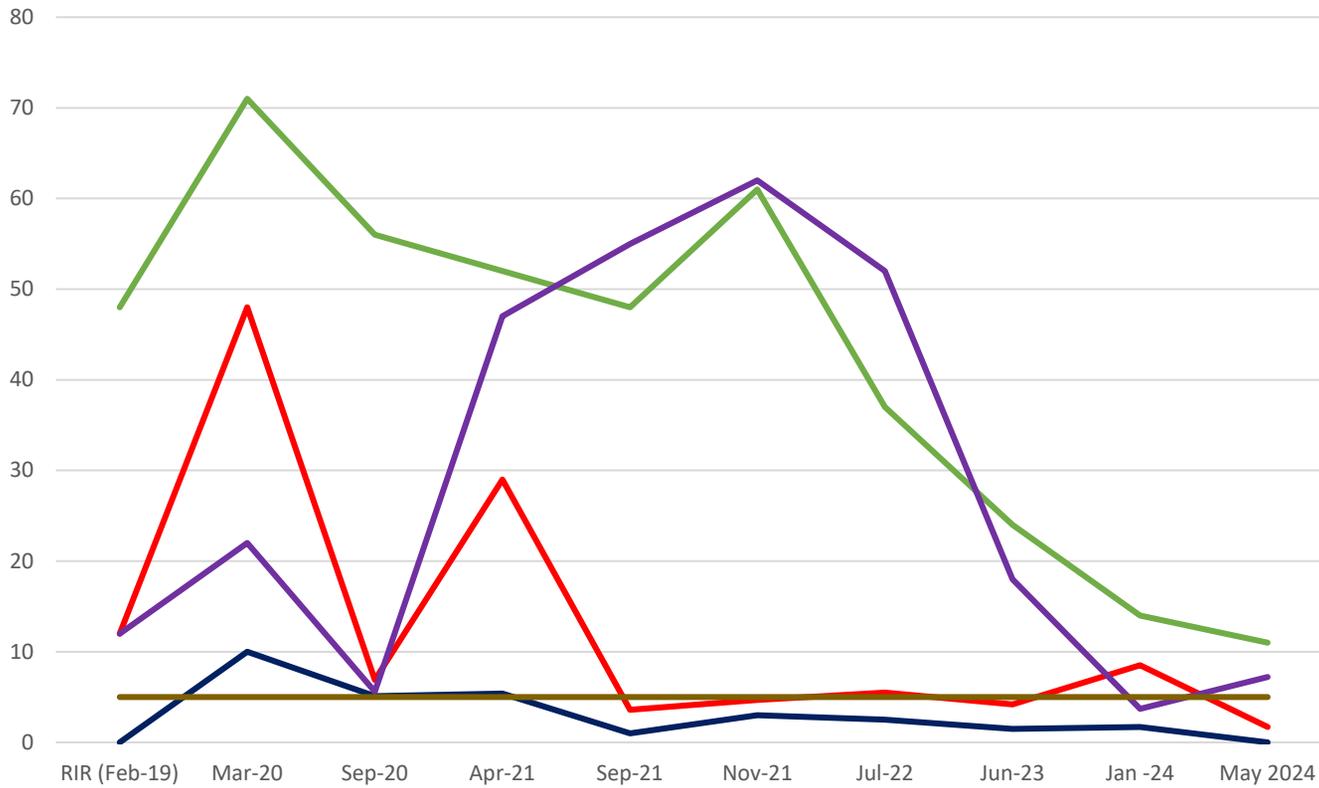
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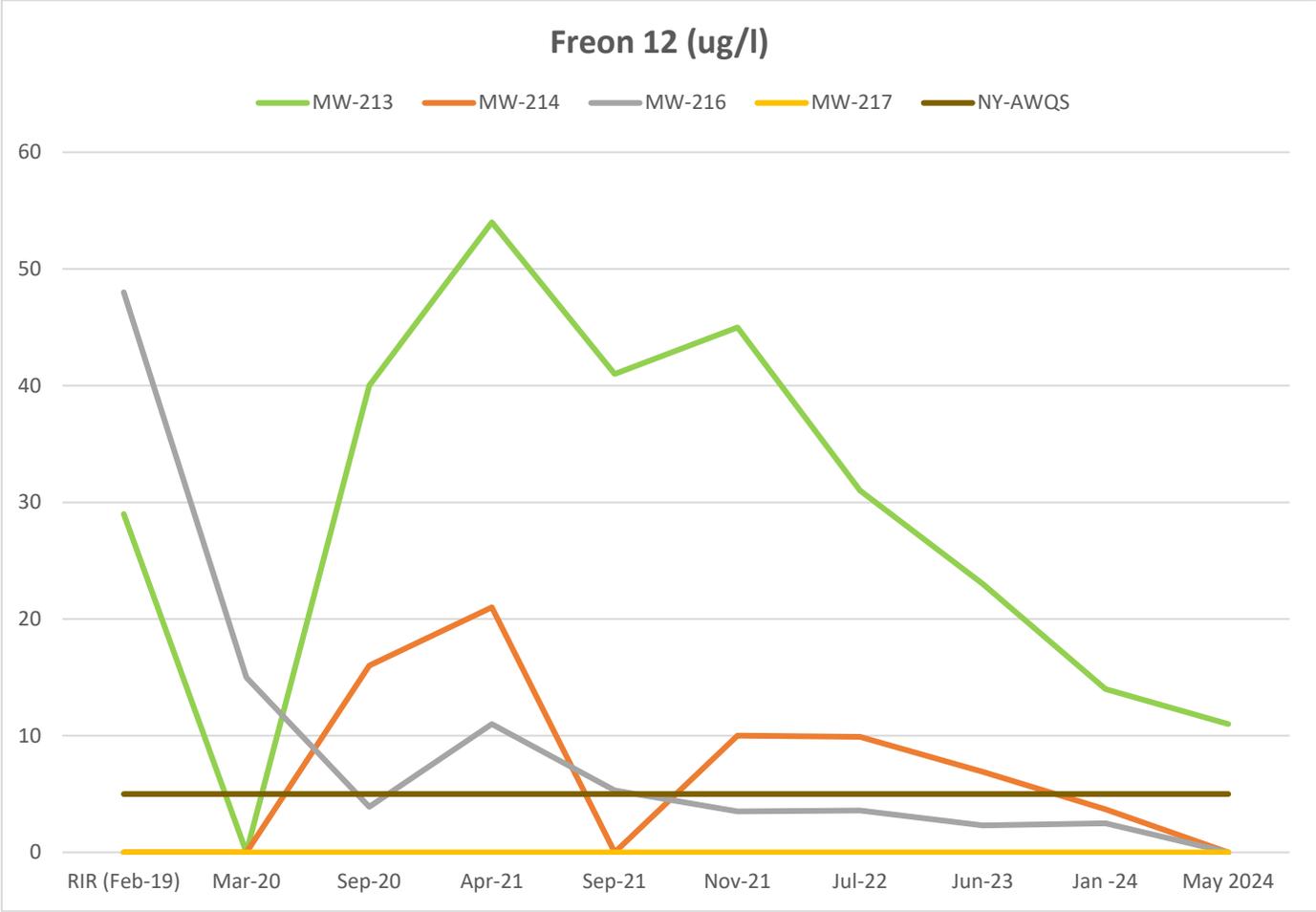
# Tables

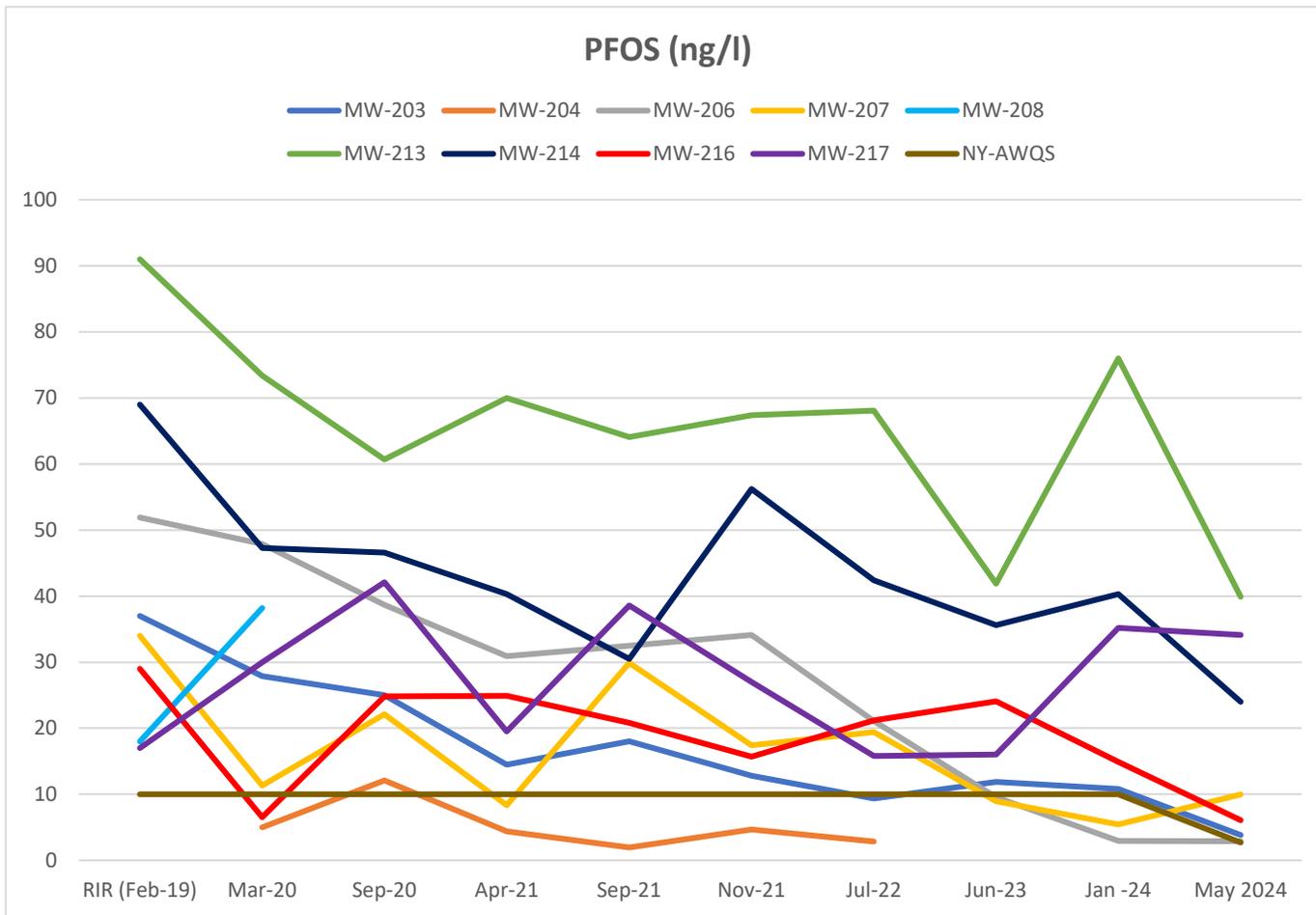
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### Freon 11 (ug/l)

MW-213 MW-214 MW-216 MW-217 NY-AWQS









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## Figures

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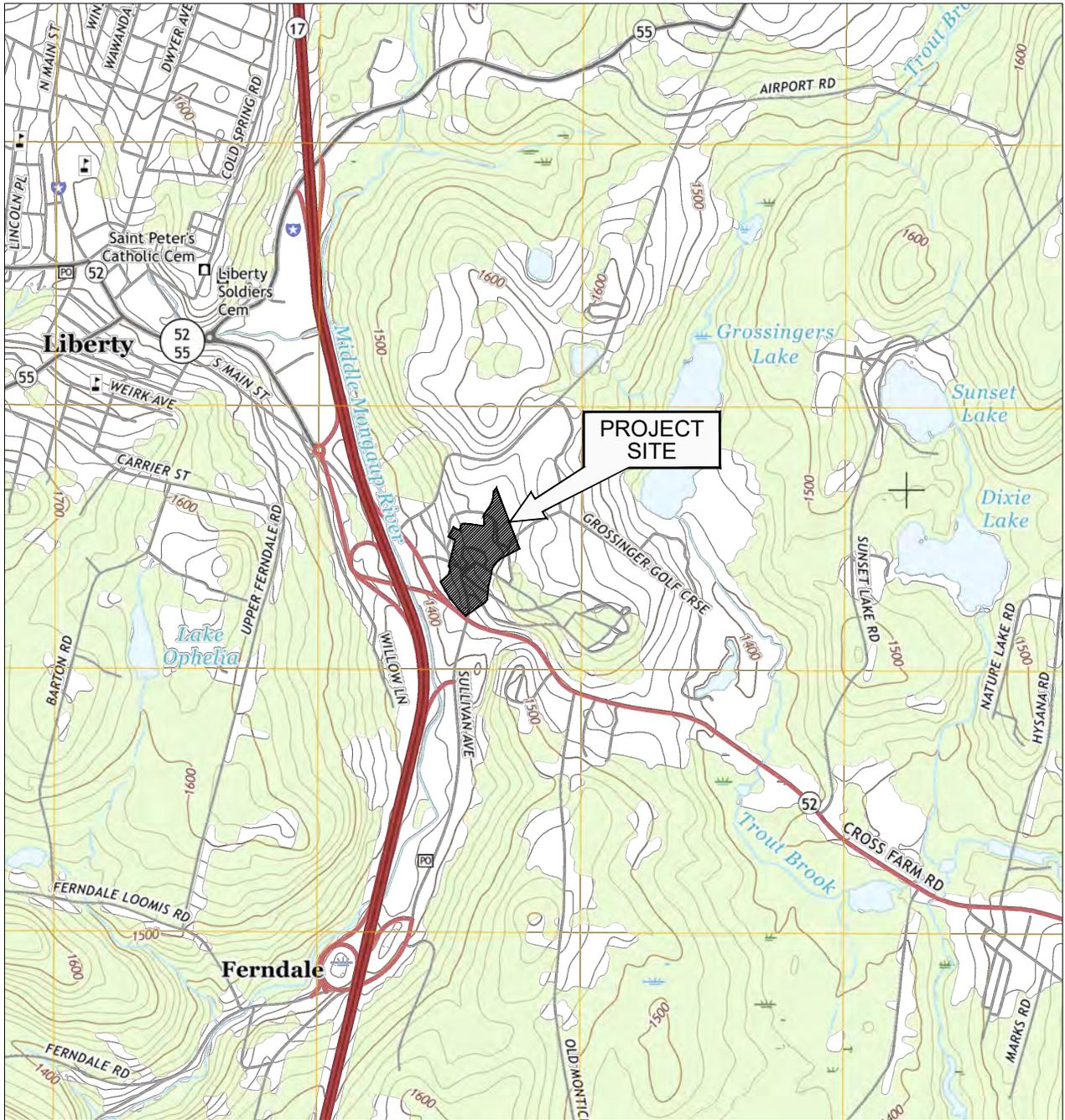


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**Appendix A:**  
Site Management Plan (SMP) Figures

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N:\ACAD\9313\SMP 2019-12-10\9313 SITE PLAN FIG-1.1.DWG 12/11/19 02:56:24PM, jenny, LAYOUT:FIG-1.1

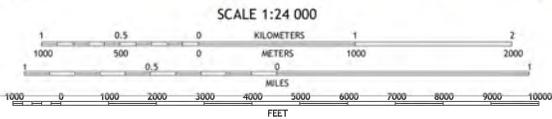
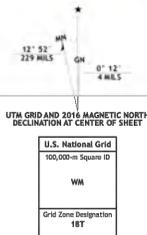


Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)  
 World Geodetic System of 1984 (WGS84). Projection and  
 1 000-meter grid: Universal Transverse Mercator, Zone 18T  
 10 000-foot ticks: New York Coordinate System of 1983 (east  
 zone)

This map is not a legal document. Boundaries may be  
 generalized for this map scale. Private lands within government  
 reservations may not be shown. Obtain permission before  
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Imagery.....NAIP, July 2013  
 Roads.....U.S. Census Bureau, 2015 - 2016  
 Names.....GNIS, 2016  
 Hydrography.....National Hydrography Dataset, 2013  
 Contours.....National Elevation Dataset, 1999  
 Boundaries.....Multiple sources; see metadata file 1972 - 2016  
 Wetlands.....FWS National Wetlands Inventory 1977 - 2014



CONTOUR INTERVAL 20 FEET  
 NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the  
 National Geospatial Program US Topo Product Standard, 2011.  
 A metadata file associated with this product is draft version 0.6.19

1	2	3	1 Livingston Manor
2	3	4	2 Willowemoc
3	4	5	3 Clayville
4	5	6	4 Liberty West
5	6	7	5 Grahamsville
6	7	8	6 White Lake
7	8		7 Monticello
8			8 Woodridge

ROUTE 17 & ROUTE 52 EAST  
 LIBERTY, NEW YORK 12754  
 NYSDEC BCP SITE NO. C353015

SITE PLAN

**SESI**  
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 ENGINEERS D.P.C.

SOILS / FOUNDATIONS  
 SITE DESIGN  
 ENVIRONMENTAL

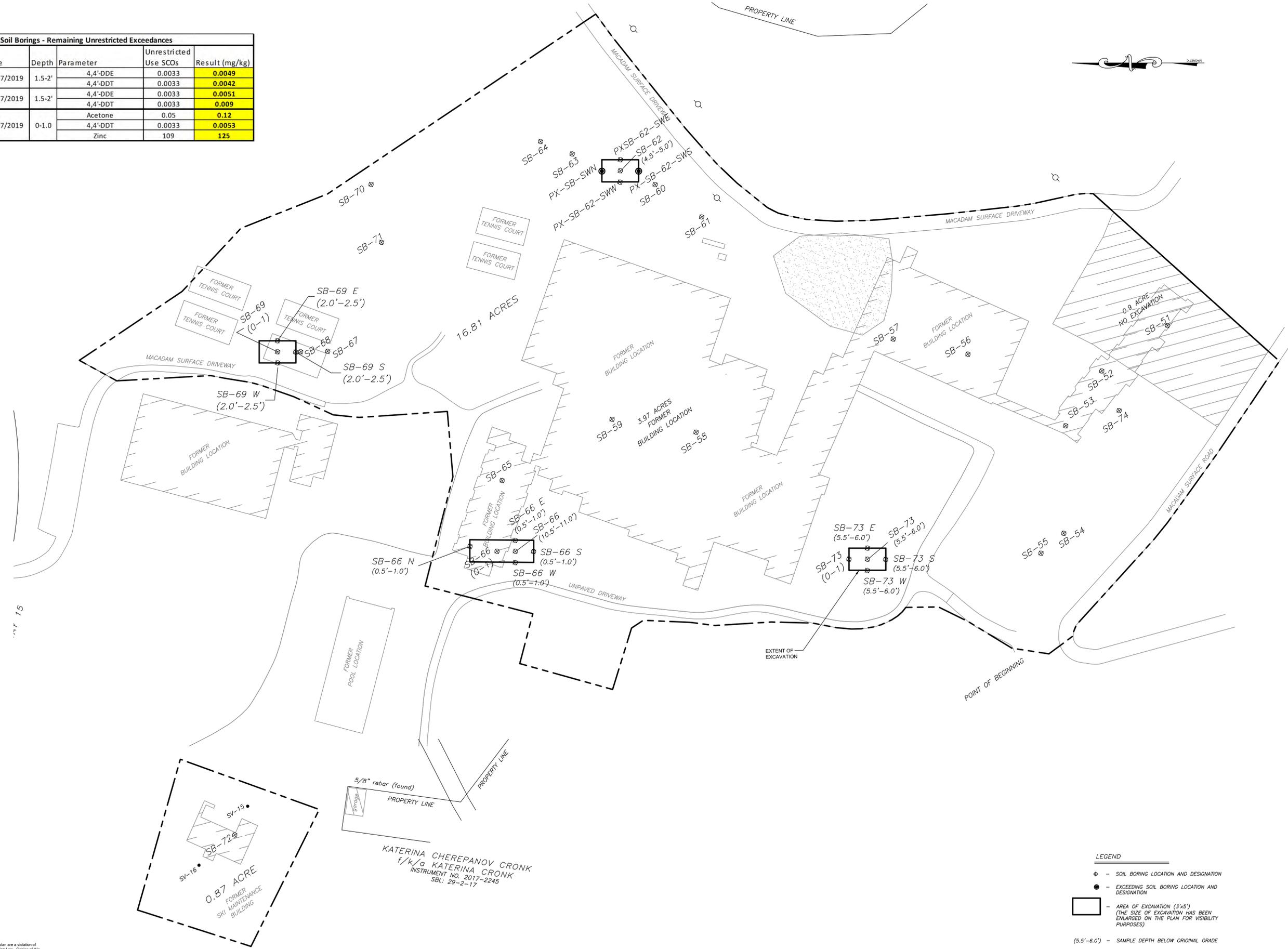
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

FIG-□□
DRAWN BY: yy
CHECKED BY: FD
SCALE: N.T.S.
DATE: 12/11/19
JOB NO.: 9313





Soil Borings - Remaining Unrestricted Exceedances					
Sample Number	Date	Depth	Parameter	Unrestricted Use SCOs	Result (mg/kg)
SB-62-SWN	1/17/2019	1.5'-2'	4,4'-DDE	0.0033	0.0049
			4,4'-DDT	0.0033	0.0042
SB-62-SWS	1/17/2019	1.5'-2'	4,4'-DDE	0.0033	0.0051
			4,4'-DDT	0.0033	0.009
SB-73 (0-1)	1/17/2019	0-1.0	Acetone	0.05	0.12
			4,4'-DDT	0.0033	0.0053
			Zinc	109	125



N:\CAD\DRAWINGS\2019\0313\_FIG-37.DWG 08/20/19 09:56:21AM www.LAYOUT19-37

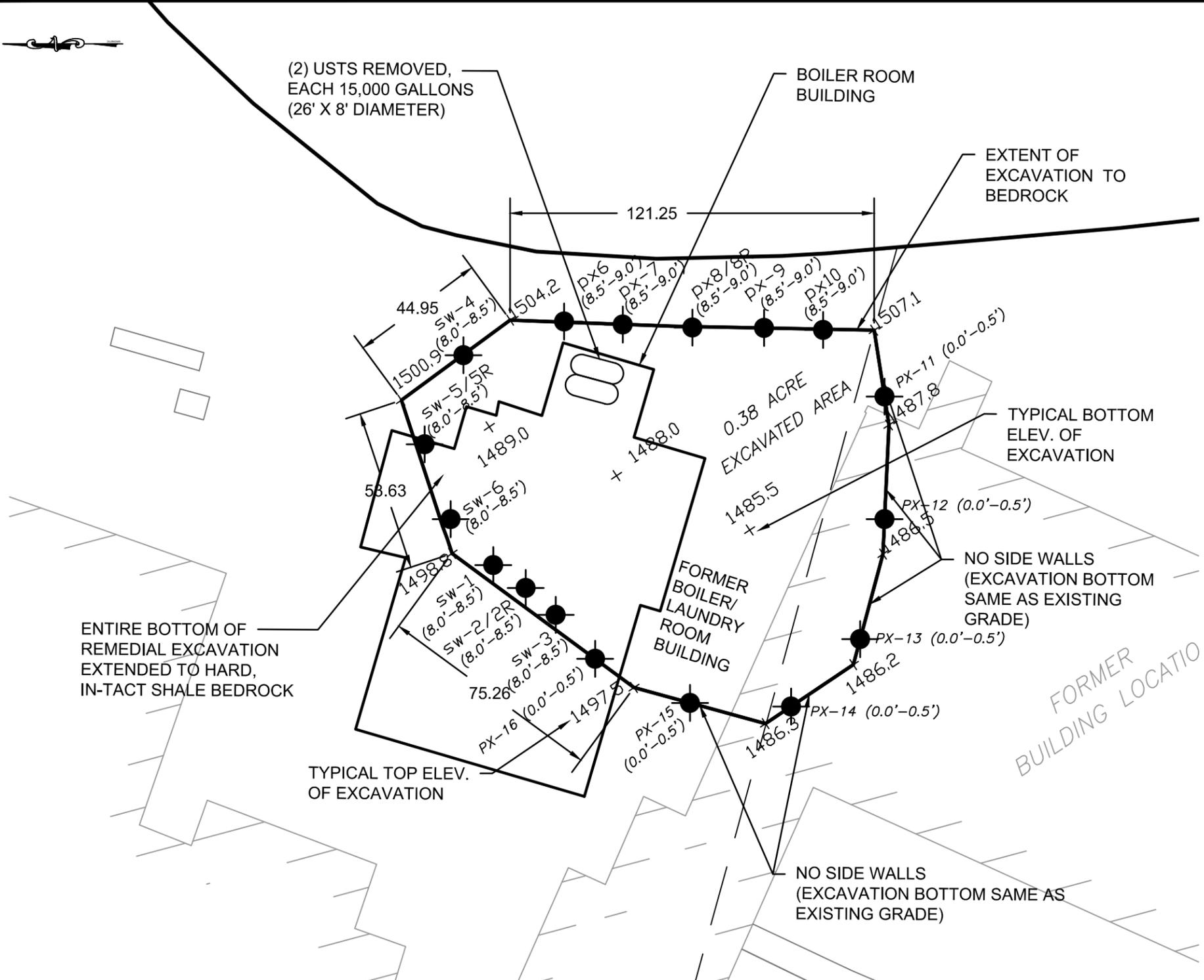
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<p><b>SESI</b> CONSULTING ENGINEERS D.P.C. 12A MAPLE AVE. PINE BROOK, N.J. 07068 PH: 973-808-9050</p>	<p><b>SOILS / FOUNDATIONS</b> <b>SITE DESIGN</b> <b>ENVIRONMENTAL</b></p>
<p>job no. <b>9313</b></p> <p>drawing no.</p>	<p><b>SOIL BORING INVESTIGATION RESULTS</b></p>
<p>ROUTE 17 &amp; ROUTE 52 EAST LIBERTY, NEW YORK 12754 NYSDEC BCP SITE NO. C353015</p>	
<p>drawing title:</p>	
<p>dwg by: JY</p> <p>chk by: FD</p> <p>scale: 1" = 60'</p> <p>date: 08/20/19</p>	<p>by:</p> <p>date:</p> <p>description:</p>





N:\ACAD\9313\FER JULY 2019\9313 FIG-3.1.DWG 08/23/19 09:18:36AM, Jenny, LAYOUT:FIG-3.1



(2) USTS REMOVED,  
EACH 15,000 GALLONS  
(26' X 8' DIAMETER)

BOILER ROOM  
BUILDING

EXTENT OF  
EXCAVATION TO  
BEDROCK

0.38 ACRE  
EXCAVATED AREA

TYPICAL BOTTOM  
ELEV. OF  
EXCAVATION

NO SIDE WALLS  
(EXCAVATION BOTTOM  
SAME AS EXISTING  
GRADE)

ENTIRE BOTTOM OF  
REMEDIAL EXCAVATION  
EXTENDED TO HARD,  
IN-TACT SHALE BEDROCK

TYPICAL TOP ELEV.  
OF EXCAVATION

NO SIDE WALLS  
(EXCAVATION BOTTOM SAME AS  
EXISTING GRADE)

FORMER  
BUILDING LOCATIO

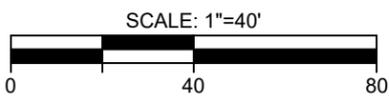
UST LNAPL AREA - REMAINING UNRESTRICTED EXCEEDANCES

Sample Number	Date	Depth	Parameter	Unrestricted Use SCOs	Result (mg/kg)
SW-5	12/7/2018	8-8.5'	Xylenes	0.26	0.52
SW-2R	6/27/2019	8-8.5	4,4'-DDT	0.0033	0.0135

REFERENCE  
SURVEY AND SAMPLES INFORMATION PROVIDED BY PACKER ASSOCIATES, INC.,  
DATED DECEMBER 10, 2018.

LEGEND

- POST EXCAVATION SAMPLE NUMBER & LOCATION
- ELEVATION OF BOTTOM/TOP OF EXCAVATION
- 1485.5
- SAMPLE DEPTH BELOW ORIGINAL GRADE
- (8.5'-9.0')



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scale: 1" = 40'  
date: 8/20/19

SOILS / FOUNDATIONS  
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project: ROUTE 17 & ROUTE 52 EAST  
LIBERTY, NEW YORK 12754  
NYSDEC BCP SITE NO. C353015

drawing title: UST REMOVAL / LNAPL  
EXCAVATION AREA

job no: 9313  
drawing no:

FIG 0.0



Ice Skating Rink Area - Remaining Unrestricted Exceedances					
Sample Number	Date	Depth	Parameter	Unrestricted Use SCOs	Result (mg/kg)
PXSB-62-SWS	1/17/2019	1.5-2'	4,4'-DDE	0.0033	0.005
			4,4'-DDT	0.0033	0.009
PXSB-62-SWN	1/17/2019	1.5-2'	4,4'-DDE	0.0033	0.005
			4,4'-DDT	0.0033	0.004

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 chk by: FD  
 scale: 1" = 40'  
 date: 8/20/19

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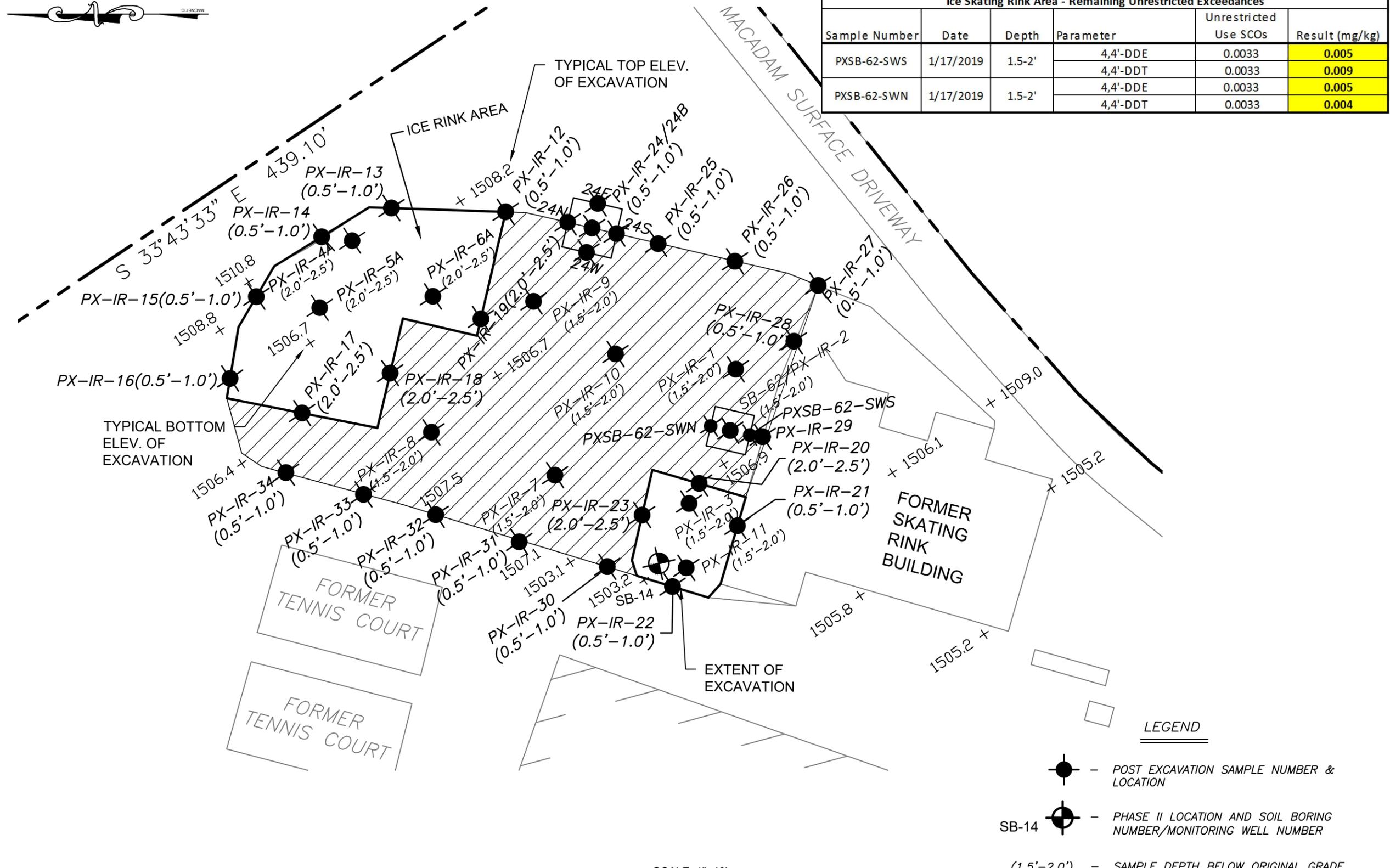
project: ROUTE 17 & ROUTE 52 EAST  
 LIBERTY, NEW YORK 12754  
 NYSDEC BCP SITE NO. C353015  
 drawing title: ICE RINK AREA  
 EXCAVATION PLAN

project: ROUTE 17 & ROUTE 52 EAST  
 LIBERTY, NEW YORK 12754  
 NYSDEC BCP SITE NO. C353015

job no: 9313  
 drawing no:

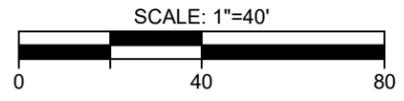
FIG- [ ] [ ]

N:\ACAD\9313\FER JULY 2019\9313 FIG-3.3.DWG 08/20/19 10:02:47AM, Jenny, LAYOUT: FIG-3.3



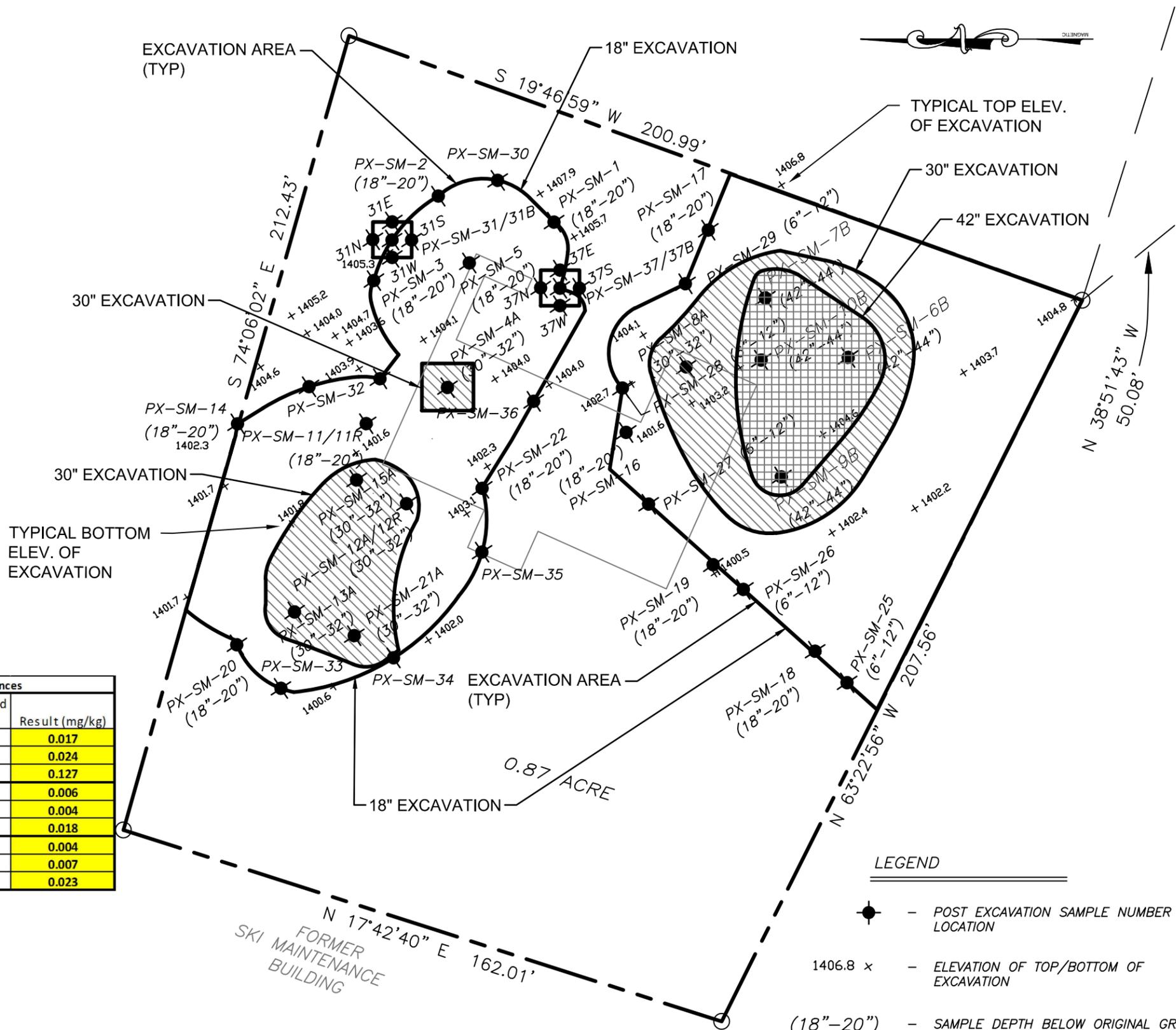
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 SURVEY AND SAMPLES INFORMATION PROVIDED BY  
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- LEGEND**
- POST EXCAVATION SAMPLE NUMBER & LOCATION
  - PHASE II LOCATION AND SOIL BORING NUMBER/MONITORING WELL NUMBER
  - SAMPLE DEPTH BELOW ORIGINAL GRADE
  - ELEVATION OF TOP/BOTTOM OF EXCAVATION
  - AREA OF CONCRETE AND STAINED SOIL REMOVAL 1.5 FEET DEPTH

N:\ACAD\9313\FER JULY 2019\9313 FIG-3.2.DWG 08/20/19 10:02:29AM, Jenny, LAYOUT:FIG-3.2



Ski Maintenance Area - Remaining Unrestricted Exceedances					
Sample Number	Date	Depth	Parameter	Unrestricted Use SCOs	Result (mg/kg)
PX-SM-37W	7/16/2019	6-12"	4,4'-DDD	0.0033	0.017
			4,4'-DDE	0.0033	0.024
			4,4'-DDT	0.0033	0.127
PX-SM-37S	7/16/2019	6-12"	4,4'-DDD	0.0033	0.006
			4,4'-DDE	0.0033	0.004
			4,4'-DDT	0.0033	0.018
PX-SM-37N	7/16/2019	6-12"	4,4'-DDD	0.0033	0.004
			4,4'-DDE	0.0033	0.007
			4,4'-DDT	0.0033	0.023

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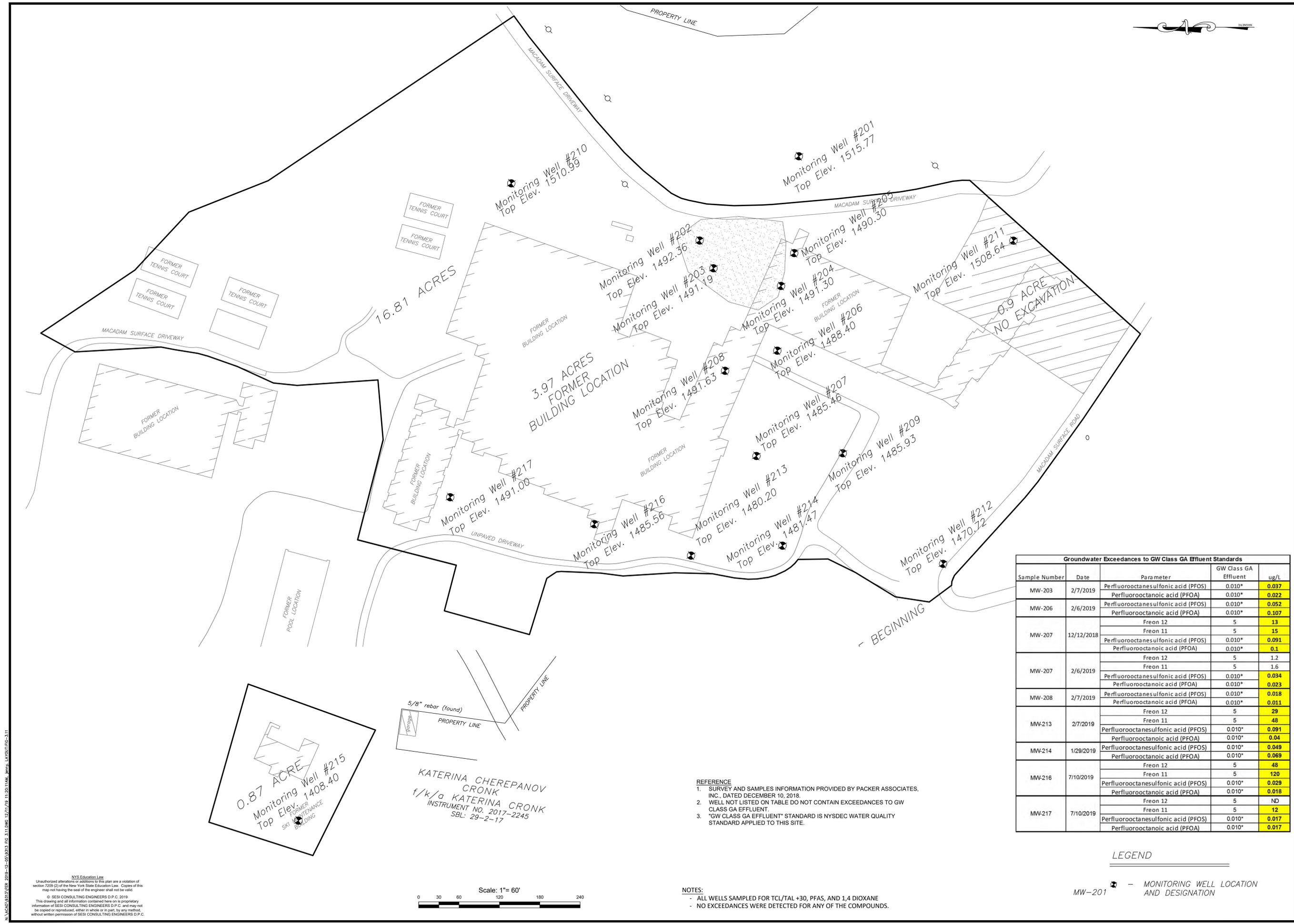
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 SOILS / FOUNDATIONS SITE DESIGN ENVIRONMENTAL  
 12A MAPLE AVE., PINE BROOK, N.J. 07058 PH: 973-808-9050

project: ROUTE 17 & ROUTE 52 EAST LIBERTY, NEW YORK 12754 NYSDEC BCP SITE NO. C353015

drawing title: EXCAVATION PLAN SKI MAINTENANCE AREA

job no: 9313  
 drawing no:

FIG



Groundwater Exceedances to GW Class GA Effluent Standards				
Sample Number	Date	Parameter	GW Class GA Effluent	ug/L
MW-203	2/7/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.037
		Perfluorooctanoic acid (PFOA)	0.010*	0.022
MW-206	2/6/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.052
		Perfluorooctanoic acid (PFOA)	0.010*	0.107
MW-207	12/12/2018	Freon 12	5	13
		Freon 11	5	15
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.091
		Perfluorooctanoic acid (PFOA)	0.010*	0.1
MW-207	2/6/2019	Freon 12	5	1.2
		Freon 11	5	1.6
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.034
		Perfluorooctanoic acid (PFOA)	0.010*	0.023
MW-208	2/7/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.018
		Perfluorooctanoic acid (PFOA)	0.010*	0.011
		Freon 12	5	29
MW-213	2/7/2019	Freon 11	5	48
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.091
		Perfluorooctanoic acid (PFOA)	0.010*	0.04
MW-214	1/29/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.049
		Perfluorooctanoic acid (PFOA)	0.010*	0.069
		Freon 12	5	48
MW-216	7/10/2019	Freon 11	5	120
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.029
		Perfluorooctanoic acid (PFOA)	0.010*	0.018
		Freon 12	5	ND
MW-217	7/10/2019	Freon 11	5	12
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.017
		Perfluorooctanoic acid (PFOA)	0.010*	0.017

- REFERENCE**
- SURVEY AND SAMPLES INFORMATION PROVIDED BY PACKER ASSOCIATES, INC., DATED DECEMBER 10, 2018.
  - WELL NOT LISTED ON TABLE DO NOT CONTAIN EXCEEDANCES TO GW CLASS GA EFFLUENT.
  - "GW CLASS GA EFFLUENT" STANDARD IS NYSDEC WATER QUALITY STANDARD APPLIED TO THIS SITE.

- NOTES:**
- ALL WELLS SAMPLED FOR TCL/TAL +30, PFAS, AND 1,4 DIOXANE
  - NO EXCEEDANCES WERE DETECTED FOR ANY OF THE COMPOUNDS.

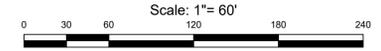
**LEGEND**

MW-201 - MONITORING WELL LOCATION AND DESIGNATION

5/8" rebar (found)

KATERINA CHEREPANOV CRONK  
f/k/a KATERINA CRONK  
INSTRUMENT NO. 2017-2245  
SBL: 29-2-17

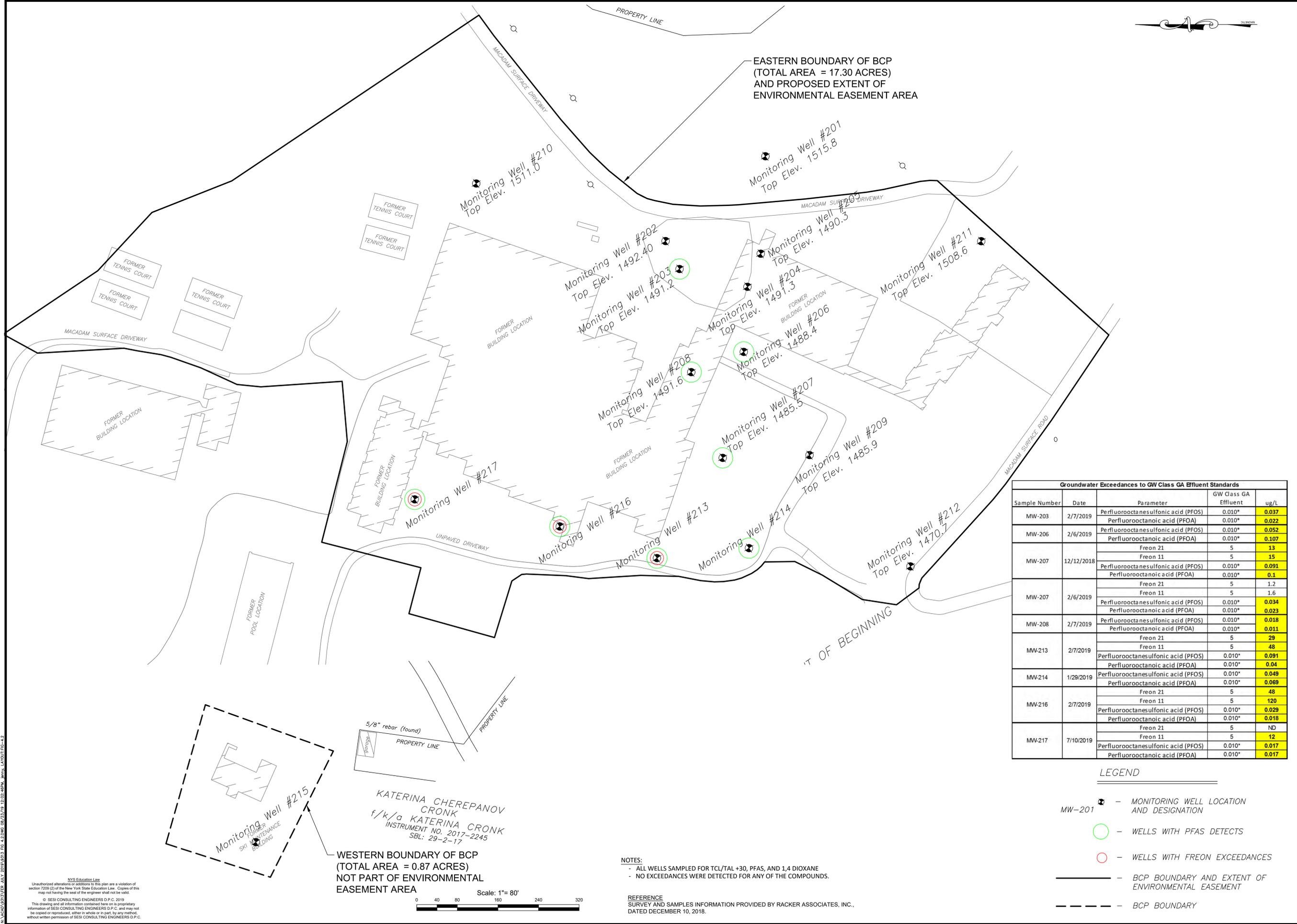
0.87 ACRE  
Monitoring Well #215  
Top Elev. 1408.40



dwg by: YJ	chk by: FD	scale: 1" = 60'	date: 12/05/19
<b>SOILS / FOUNDATIONS SITE DESIGN ENVIRONMENTAL</b>			
<b>SES</b> CONSULTING ENGINEERS D.P.C. 12A MAPLE AVE. PINE BROOK, N.J. 07068 PH: 973-808-9050			
ROUTE 17 & ROUTE 52 EAST LIBERTY, NEW YORK 12754 NYSDEC BCP SITE NO. C353015		MONITORING WELL LOCATION PLAN	
job no. 9313	drawing no.		
<b>FIG-2.8</b>			

N:\CAD\DRAWING\2019-12-05\0313.DWG 12/07/19 11:20:11AM Jerry.LAVOIE\FG-111

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Groundwater Exceedances to GW Class GA Effluent Standards				
Sample Number	Date	Parameter	GW Class GA Effluent	ug/L
MW-203	2/7/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.037
		Perfluorooctanoic acid (PFOA)	0.010*	0.022
MW-206	2/6/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.052
		Perfluorooctanoic acid (PFOA)	0.010*	0.107
MW-207	12/12/2018	Freon 21	5	13
		Freon 11	5	15
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.091
MW-207	2/6/2019	Perfluorooctanoic acid (PFOA)	0.010*	0.1
		Freon 21	5	1.2
		Freon 11	5	1.6
MW-208	2/7/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.034
		Perfluorooctanoic acid (PFOA)	0.010*	0.023
MW-213	2/7/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.018
		Perfluorooctanoic acid (PFOA)	0.010*	0.11
MW-214	1/29/2019	Freon 21	5	29
		Freon 11	5	48
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.091
MW-216	2/7/2019	Perfluorooctanoic acid (PFOA)	0.010*	0.04
		Perfluorooctanesulfonic acid (PFOS)	0.010*	0.049
MW-217	7/10/2019	Perfluorooctanoic acid (PFOA)	0.010*	0.069
		Freon 21	5	48
		Freon 11	5	120
MW-217	7/10/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.029
		Perfluorooctanoic acid (PFOA)	0.010*	0.018
MW-217	7/10/2019	Freon 21	5	ND
		Freon 11	5	12
MW-217	7/10/2019	Perfluorooctanesulfonic acid (PFOS)	0.010*	0.017
		Perfluorooctanoic acid (PFOA)	0.010*	0.017

**LEGEND**

- MW-201 - MONITORING WELL LOCATION AND DESIGNATION
- WELLS WITH PFAS DETECTS
- WELLS WITH FREON EXCEEDANCES
- BCP BOUNDARY AND EXTENT OF ENVIRONMENTAL EASEMENT
- BCP BOUNDARY

**SES I**  
CONSULTING ENGINEERS D.P.C.  
12A MAPLE AVE. PINE BROOK, N.J. 07068 PH: 973-808-9050

**SOILS / FOUNDATIONS  
SITE DESIGN  
ENVIRONMENTAL**

**FUAD DAHAN, P.E.**  
PROFESSIONAL ENGINEER  
N.Y. LIC. NO. 090531

**PROPOSED  
ENVIRONMENTAL EASEMENT AREA**

ROUTE 17 & ROUTE 52 EAST  
LIBERTY, NEW YORK 12754  
NYSDEC BCP SITE NO. C353015

job no. 9313  
drawing no.

FIG-

dwg by: JY  
chk by: FD  
scale: 1" = 80'  
date: 08/20/19

N:\MACDAM\SUBMITTER JULY 2019\0313\_FIG 4.2.DWG 08/23/19 12:02:46PM JMD\LAVIDE\FIC-4.2

NYS Education Law  
Unauthorized alterations or additions to this plan are a violation of section 2209 (2) of the New York State Education Law. Copies of this map not having the seal of the engineer shall not be valid.  
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## **Appendix B:** Inspection Checklist

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**INSPECTION CHECKLIST  
FORMER GROSSINGERS RESPORT  
LIBERTY, SULLIVAN COUNTY, NEW YORK  
NYSDEC BCP No. C353015  
SESI CONSULTING ENGINEERS  
Inspection Date: May 16, 2024**

**COMPOSITE COVER SYSTEM**

- Is the integrity of the cover system in tact? Yes X No
  
- Do the maintenance records indicate any invasive subsurface work has been completed after the last inspection? Yes     No X
  
- Has any soil been removed or imported from the Site since the last inspection? Yes     No X
  
- If soil has been disposed off-Site or imported, has this been completed in accordance with the NYSDEC approved Soil Management Plan for the Site? Yes No N/A X
  
- If subsurface invasive work was undertaken, has the demarcation geotextile and the "clean soil cover" been restored? Yes No     N/A X
  
- Did a Professional Engineer or a qualified environmental professional (approved by the NYSDEC) oversee the above work? Yes X No
  
- Was NYSDEC notified of disturbances to the "Clean Soil Cover" ? Yes     No N/A X
  
- List of all reported disturbances since last inspection:

---

## **Appendix C:** Field Reports

---



959 US-46 E  
 3<sup>rd</sup> Floor  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.SESI.org](http://www.SESI.org)

DATE: 06/29/2023	JOB NO. 9313C
PROJECT: Grossingers	
LOCATION: 3 Grossingers Rd, Liberty, NY	
CONTRACTOR:	
CLIENT: Cappelli	
WEATHER: Mostly Cloudy	TEMP: 66-79°F
TIME ON SITE: 7:59 AM	TIME OFF-SITE: 5:37 PM
PRESENT AT SITE	
SESI – Thomas Duda, Matthew Majorossy, Ronnie Reynoso Gomez, & Benjamin Roe	

CHARGEABLE EQUIPMENT USED
GilAir pump x1
Tubing and Air Canisters

## FIELD REPORT

June 29<sup>th</sup>, 2023

SESI arrived on site at 7:59 am to conduct a quarterly water sampling event at the former site of Grossingers Resort in Sullivan County, New York. Once at the site, the crew walked the site and began to gauge the monitoring wells, noting measurements for depth to water and depth to bottom. Writer and Benjamin Roe with the help of Matt M. set up equipment for sampling of ground water at Seven (7) monitoring wells across site. Writer and Benjamin purged three (3) wells via low-flow method and four (4) via volume purge. Once the wells were successfully purged, a GW sample was collected from each respective monitoring well. The sampling equipment was labeled with sample ID and sample collection time. A duplicate sample was collected at monitoring well #216. A field blank was collected prior to leaving site. Once all samples were collected, the samples were placed in an iced cooler for transport to alpha laboratories for PFAS And PCL-VOC15 analysis.

Monitoring Well	Depth to water (feet)	Depth to bottom (feet)	PID (PPM)	Sampled?
MW-201	DRY	19	0	
MW-203	5.4	25	0	X
MW-204	4.95	13.9	0	
MW-205	4.3	12.4	0	
MW-206	9.6	15.2	0	X
MW-207	9.1	15.3	0	X
MW-208	N/A	N/A	0	

MW-209	16.5	17	0	
MW-210	DRY	18.3	0	
MW-211	11.4	18	0	
MW-212	DRY	17.5	0	
MW-213	15.2	20.7	0	X
MW-214	17	24.6	0	X
MW-216	8.1	20.5	0	X
MW-217	11	19.8	0	X







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 3<sup>rd</sup> Floor  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.SESI.org](http://www.SESI.org)

DATE: 06/29/2023	JOB NO. 9313C
PROJECT: Grossingers	
LOCATION: 3 Grossingers Rd, Liberty, NY	
CONTRACTOR:	
CLIENT: Cappelli	
WEATHER: Mostly Cloudy/Smoky	TEMP: 66-79°F
TIME ON SITE: 8:00 AM	TIME OFF-SITE: 5:30 PM
PRESENT AT SITE	
SESI – Thomas Duda, Matthew Majorossy, Ronnie Reynoso Gomez, & Benjamin Roe	

CHARGEABLE EQUIPMENT USED
GilAir pump x1
Tubing and Air Canisters

## FIELD REPORT

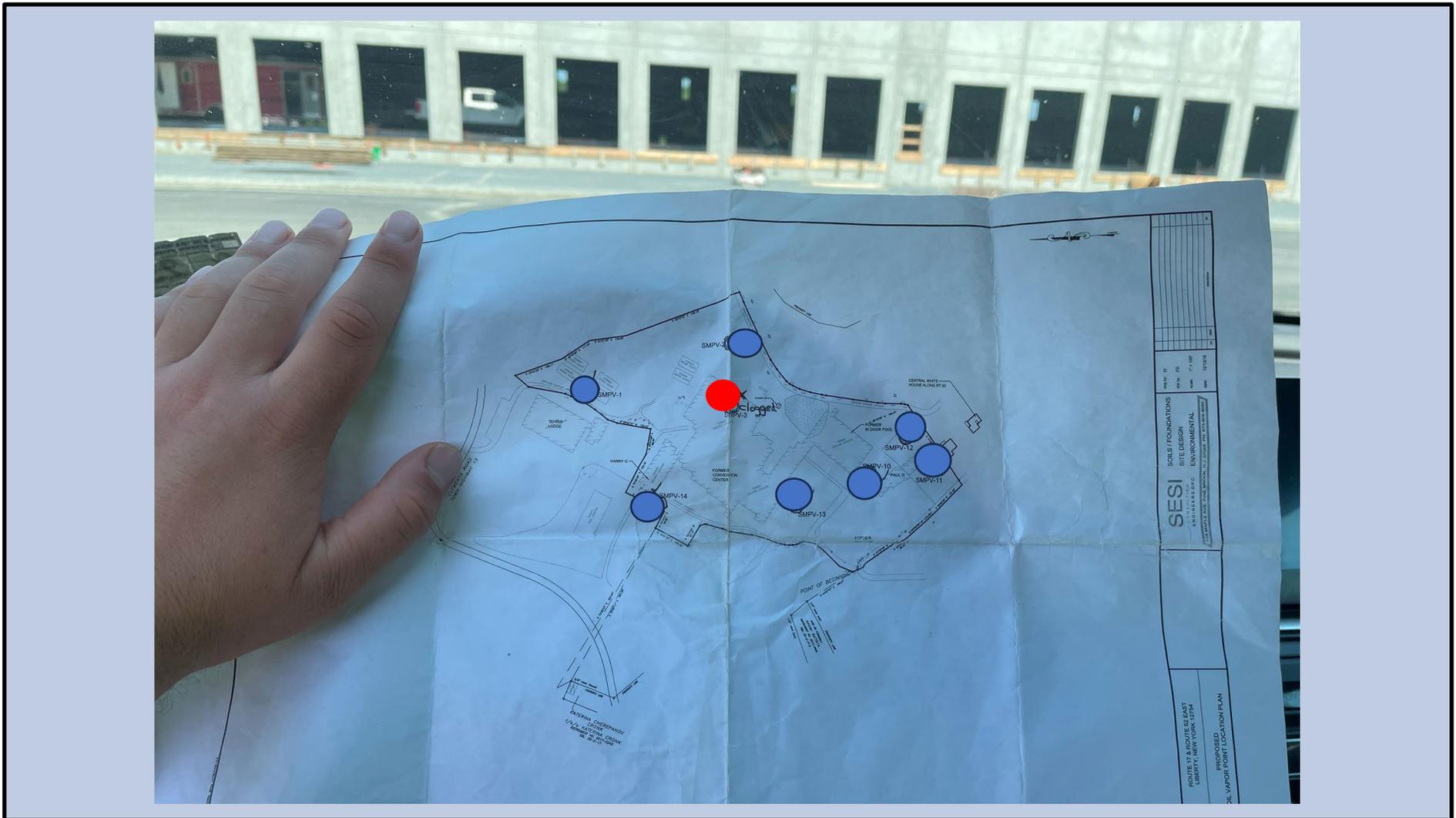
**June 29<sup>th</sup>, 2023**

SESI arrived on site at 8:00 am to set up Summa canisters for soil vapor sampling at the former Grossingers Resort. Eight (8) Summa canisters were utilized for the installed soil vapor probes. Each probe was labeled with an ID number and purged with a GilAir low-flow pump for approximately five (5) minutes each before attaching a Summa. Canister numbers, flow control numbers, sample start times/pressures, and end times/pressures were recorded. All samples were set with 30-minute flow controllers and will be submitted for EPA TO-15 analysis following sample collection. Hazy conditions were observed outside due to Canadian wildfires. SESI then dropped the samples at the testing laboratory. See table below for all sample information.

**Inspector Signature: Thomas Duda**

Sample ID	Summa Canister ID	Flow Controller ID	Start time	Start pressure (in. Hg)	End time	End Pressure (in. Hg.)	Notes
SMPV-1	1994	01290	10:23	-28.00	10:56	-4.98	
SMPV-3	593	0366	11:25	-25.20	12:05	-11.00	GilAir Pump would fault at 180 speed. This station will not be run due to a clog in the line.
SMPV-2	3622	0494	12:13	-27.96	12:41	-4.91	
SMPV-14	3357	0031	12:57	-28.83	13:35	-4.93	
SMPV-13	2271	01521	13:55	-28.71	14:29	-4.91	
SMPV-11	3610	0173	14:42	-28.46	15:11	-4.86	
SMPV-12	2805	01604	15:27	-28.00	15:56	-4.75	
SMPV-10	1693	0941	16:08	-28.60	16:40	-4.85	

## Site Mark Up Plan



**Reference:** Soil Vapor Point Location Plan by SESI Consulting Engineers, dated 12-10-2019

**Notes:** Blue areas are where sampling occurred, and the red area is where the sensor tube appeared to be clogged

Approved Signer/Reviewer:

Inspector: Thomas Duda

Signature: *Thomas Duda*

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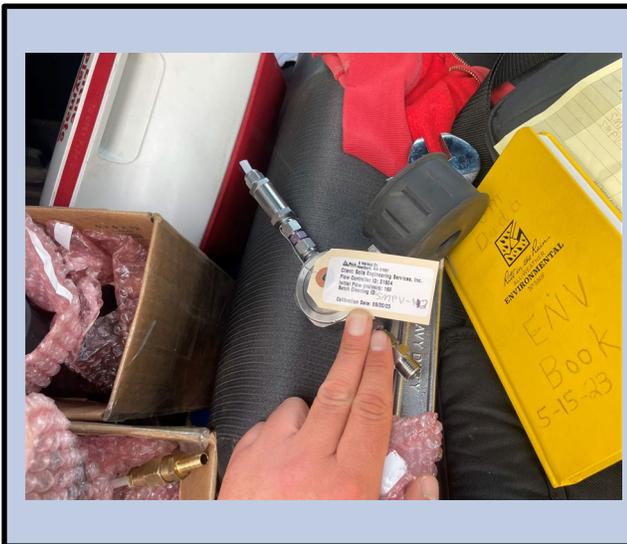
**Photos**



**Photo #1**  
Sampling soil vapors.



**Photo #2**  
Summa canister labelled for lab testing.



**Photo #3**  
Labelled flow controller.



**Photo #4**  
The Summa canisters delivered to the testing lab.

Approved Signer/Reviewer:

Inspector: Thomas Duda

Signature: *Thomas Duda*



959 US-46 E  
 3<sup>rd</sup> Floor  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.SESI.org](http://www.SESI.org)

DATE: 01/04/2024	JOB NO. 9313C
PROJECT: Grossingers	
LOCATION: 3 Grossingers Rd, Liberty, NY	
CONTRACTOR:	
CLIENT: Cappelli	
WEATHER: Mostly Cloudy	TEMP: 20-30°F
TIME ON SITE: 1220 PM	TIME OFF-SITE: 1720 PM
PRESENT AT SITE	
SESI – Thomas Duda, Ronnie Reynoso Gomez	

CHARGEABLE EQUIPMENT USED
GilAir pump x1
Tubing and Air Canisters

## FIELD REPORT

Jan 4<sup>th</sup>, 2024

SESI arrived on site at 1220 pm to conduct a quarterly water sampling event at the former site of Grossingers Resort in Sullivan County, New York. Once at the site, the crew walked the site and began to gauge the monitoring wells, noting measurements for depth to water and depth to bottom. Writer and Thomas D set up equipment for groundwater sampling. Seven (7) monitoring wells across the site (as shown in the table below) were gauged and prepared from sampling. Writer and Thomas D. purged three (3) wells via low-flow method. Once the wells (MW-213, 214 and 206) were successfully purged and the Water parameters stabilized, a GW sample was collected from each respective monitoring well. The samples were labeled with sample ID and sample collection time. A field blank was collected prior to leaving the site. Once all samples were collected, the samples were placed in an iced cooler for transport to alpha laboratories for PFAS And VOC analysis.

Monitoring Well	Depth to water (feet)	Depth to bottom (feet)	PID (PPM)	Sampled?
MW-203	4.6	25	0	
MW-206	8.4	15.2	0	X
MW-207	7.4	15.3	0	
MW-213	13.9	20.6	0	X
MW-214	16.1	24.6	0	X
MW-216	7.8	20.5	0	
MW-217	8.5	19.7	0.1	



**Photos**



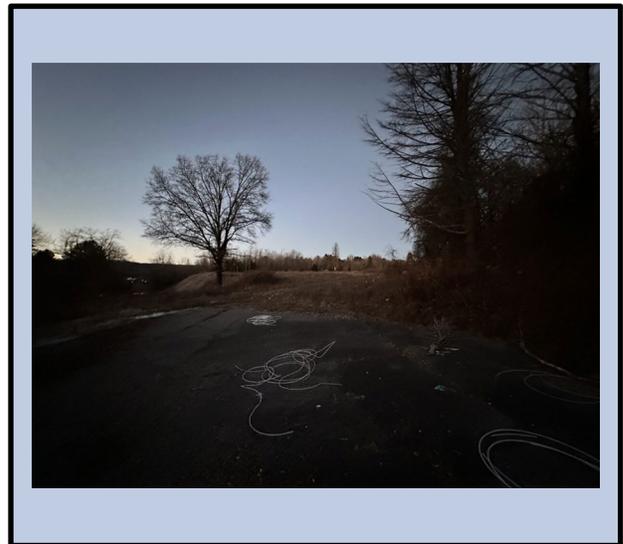
**Photo #1**  
Gate on site closed when sesi on site



**Photo #2: MW-206 purging**



**Photo #3**  
View of site



**Photo #4**  
Picture of site prior to leaving

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez  
Signature: Ronnie Reynoso-Gomez

Location Grossingers

Date 11/4/24

5

Project / Client \_\_\_\_\_

1200 onsite , 1230 Tam onsite.  
1300 gate was unlocked  
1330 got setup @ MW-214, 207, 213  
& 206 & gagged the wells  
~~1330-1440 - Begin to sample~~  
1500 sample start  
1720 finished samples, left site.

RR 11/04/24

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez  
Signature: Ronnie Reynoso-Gomez



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 3<sup>rd</sup> Floor  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.SESI.org](http://www.SESI.org)

DATE: 01/05/2024	JOB NO. 9313C
PROJECT: Grossingers	
LOCATION: 3 Grossingers Rd, Liberty, NY	
CONTRACTOR:	
CLIENT: Cappelli	
WEATHER: Mostly Cloudy	TEMP: 20-30°F
TIME ON SITE: 950 AM	TIME OFF-SITE: 1500 PM
PRESENT AT SITE	
SESI – Thomas Duda, Ronnie Reynoso Gomez	

CHARGEABLE EQUIPMENT USED
GilAir pump x1
Tubing and Air Canisters

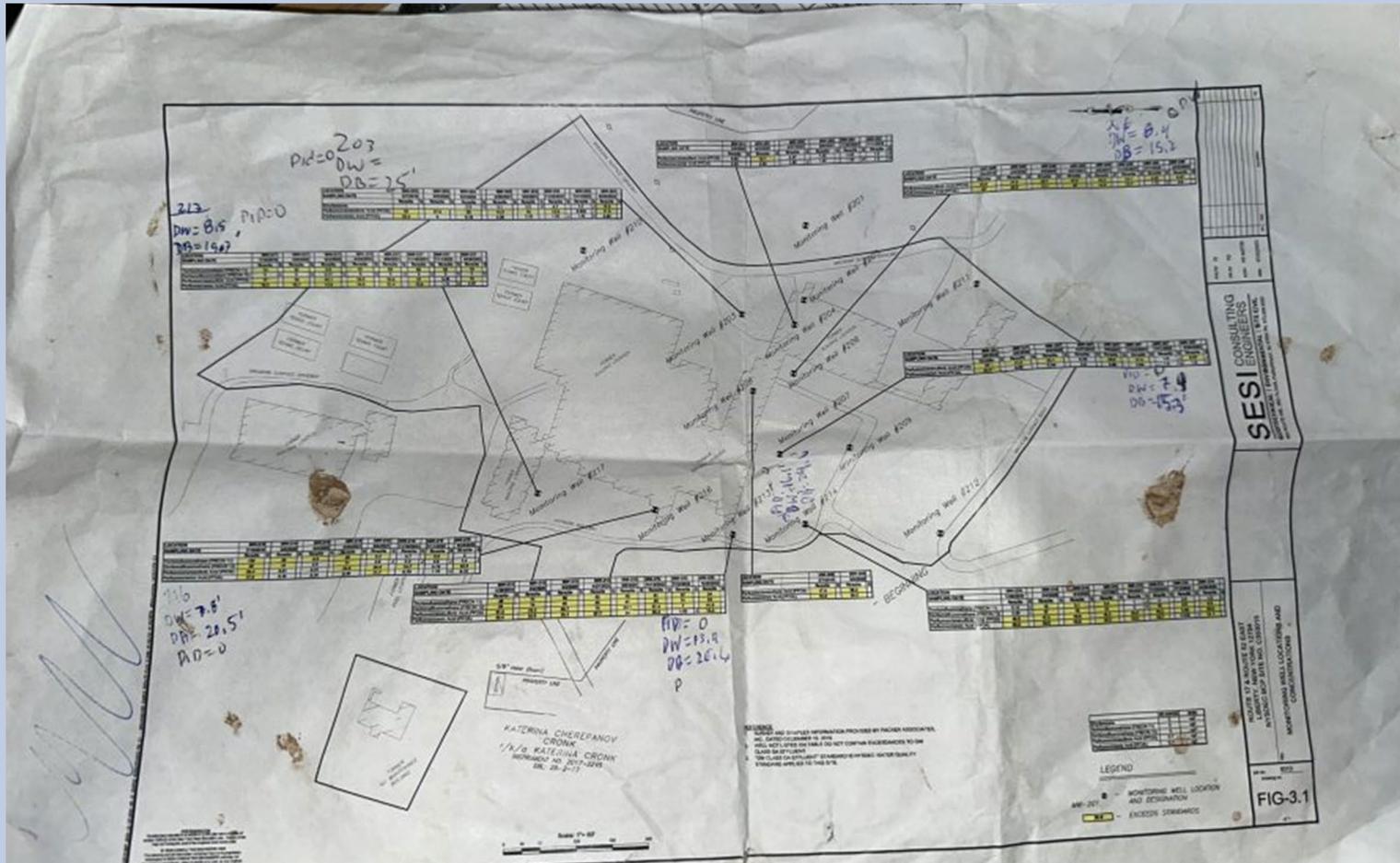
## FIELD REPORT

Jan 5<sup>th</sup>, 2024

SESI arrived on site at 950 am to conduct a quarterly water sampling event at the former site of Grossingers Resort in Sullivan County, New York. Writer and Thomas D set up equipment for groundwater sampling. The Four remaining (4) monitoring wells across the site (as shown in the table below) were gauged and prepared for sampling. Writer and Thomas D. purged four (4) wells via low-flow method. Once the wells (MW-203, 207, 216 and 217) were successfully purged and the Water parameters stabilized, a GW sample was collected from each respective monitoring well. The samples were labeled with sample ID and sample collection time. A duplicate sample was collected at monitoring well 216. A field blank was collected prior to leaving the site. Once all samples were collected, the samples were placed in an iced cooler for transport to alpha laboratories for PFAS And VOC analysis.

Monitoring Well	Depth to water (feet)	Depth to bottom (feet)	PID (PPM)	Sampled?
MW-203	4.6	25	0	x
MW-206	8.4	15.2	0	
MW-207	7.4	15.3	0	x
MW-213	13.9	20.6	0	
MW-214	16.1	24.6	0	
MW-216	7.8	20.5	0	x
MW-217	8.5	19.7	0.1	x

## Site Mark Up Plan



**Reference:** Monitoring Well location Plan, SESI, Last modified Jan 2024

**Notes:** Blue areas are where sampling occurred, and the red area is where the sensor tube appeared to be clogged

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez

Signature: Ronnie Reynoso-Gomez

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v5.2022

**Photos**



Photo #1  
Mw-216 purging



Photo #2: MW-207 purging



Photo #3  
View 216 after sample collection



Photo #4  
Picture of site prior to leaving

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez  
Signature: Ronnie Reynoso-Gomez

6

Location grossingers

Date 11/5/24

Project / Client \_\_\_\_\_

950 onsite w/ TD & TP

1030 Began Purging And Sampling

- TD told me hes going to  
store to find air sampling port  
/ fittings

MW-207 & 203 Purged & Sampled.

1445 gate closed

1500 Offsite (All parties)

1

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez  
Signature: Ronnie Reynoso-Gomez



959 US-46 E  
 3<sup>rd</sup> Floor  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.SESI.org](http://www.SESI.org)

DATE: 02/21/2024	JOB NO. 9313C
PROJECT: Grossingers	
LOCATION: 3 Grossingers Rd, Liberty, NY	
CONTRACTOR:	
CLIENT: Cappelli	
WEATHER: Mostly Cloudy	TEMP: 10-20°F
TIME ON SITE: 800 AM	TIME OFF-SITE: ~1315 PM
PRESENT AT SITE	
SESI – Ronnie Reynoso Gomez, Wesley, Jim B	

CHARGEABLE EQUIPMENT USED
GilAir pump x3
Tubing and Air Canisters

## FIELD REPORT

February 21<sup>st</sup>, 2024

SESI arrived on site at 800 am to conduct a quarterly soil vapor sampling event at the former site of Grossingers Resort in Sullivan County, New York. Ronnie R, Wesley, and James Blind began to attempt purging the soil vapor lines, however, due to the temperatures being below freezing, the lines seemed to have been waterlogged and frozen. When using Gil air pumps set for low flow (200cc/min) and high flow pump at (3000 cc/min) the pumps would attempt to get to the set low flow, however, they would turn off after reaching about 70% of the set flow rate. After attempting to purge each line twice, SESI left for the day as Soil vapor sampling was not possible.

Inspector Signature: Ronnie M Reynoso-Gomez

# Site Mark Up Plan



**Reference:** Monitoring Well location Plan, SESI, Last modified Jun 2023

**Notes:** ALL circled areas were not sampled due to frozen lines.

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez  
Signature: Ronnie Reynoso-Gomez  
Page 2 of 5

v5.2022

Photos



Photo #1  
Purging lines



Attempting high and low flow with  
purge lines



Photo #3  
View of lines inside of the stickups



Photo #4  
View of flow stopping ~70% set flow rate

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez  
Signature: Ronnie Reynoso-Gomez

6

Location grossingers

Date 11/5/24

Project / Client \_\_\_\_\_

950 onsite w/ TD & TP

1030 Began Purging and Sampling

- TD told me hes going to store to find air sampling port / fittings

MW-207 & 203 Purged & Sampled.

1445 gate closed

1500 Offsite (All parties)

1

Approved Signer/Reviewer:

Inspector: Ronnie Reynoso-Gomez

Signature: Ronnie Reynoso-Gomez



959 ROUTE 46E, FLOOR 3, SUITE 300  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.sesi.org](http://www.sesi.org)

CHARGABLE EQUIPMENT USED
2x Water Level Meter

**FIELD REPORT:**

**SCOPE OF WORK:**

SESI was on site to perform groundwater sampling of the Seven (7) wells on the site in Liberty, NY. SESI arrived on the site at approximately 730 and promptly walked onto the site. The scope of work for this event includes the purging and sampling of seven (7), the well IDs are the following:

SESI conducted a walk around the site to check out locations for sampling during the day. SESI checked and opened wells and recorded measurements for PID, Depth to Bottom of well, and Depth to water. All information can be found on table located below in the report.

(The water quality probe (Horiba) was calibrated at the start of the day using the AUTOCAL solution provided by Pine Environmental. Once calibrated, the Horiba was used to confirm stabilization for three consecutive 5 minute intervals (purging between 0.1 to 0.5 L/min) at each well prior to ground water sample collection. The sample depth for the wells was the middle of the standing water column.)

A total of seven (7) wells were purged and then sampled. The equipment used during sampling and purging was decontaminated and cleaned in between wells to avoid cross-contamination. The wells purged and sampled throughout the day are the following:

MW-206
MW-207
MW-203
MW-213
MW-214
MW-216
MW-217

The samples were submitted to Pace Analytical for analysis of VOCs and PFAS method 1633. One field blank and one trip blank were collected for the day. SESI collected samples and filled out chain of custody. After filling out chain SESI cleaned up site and gave samples to PACE. SESI left site.

DATE: 05/16/24	JOB NO. 09313
PROJECT:	
LOCATION: Liberty NY	
CLIENT: Capelli	
WEATHER: Sunny	TEMP: 60s-80s
TIME ON SITE: 0730	TIME OFF SITE: 1410
PRESENT AT SITE	
SESI- James Blind , Tracy	

CONTRACTOR, LABOR & EQUIPMENT	
QUANTITY	DESCRIPTION
2	Horiba and peristaltic pump
1	PID Minirae 3000

Reviewer:  
 Signature:

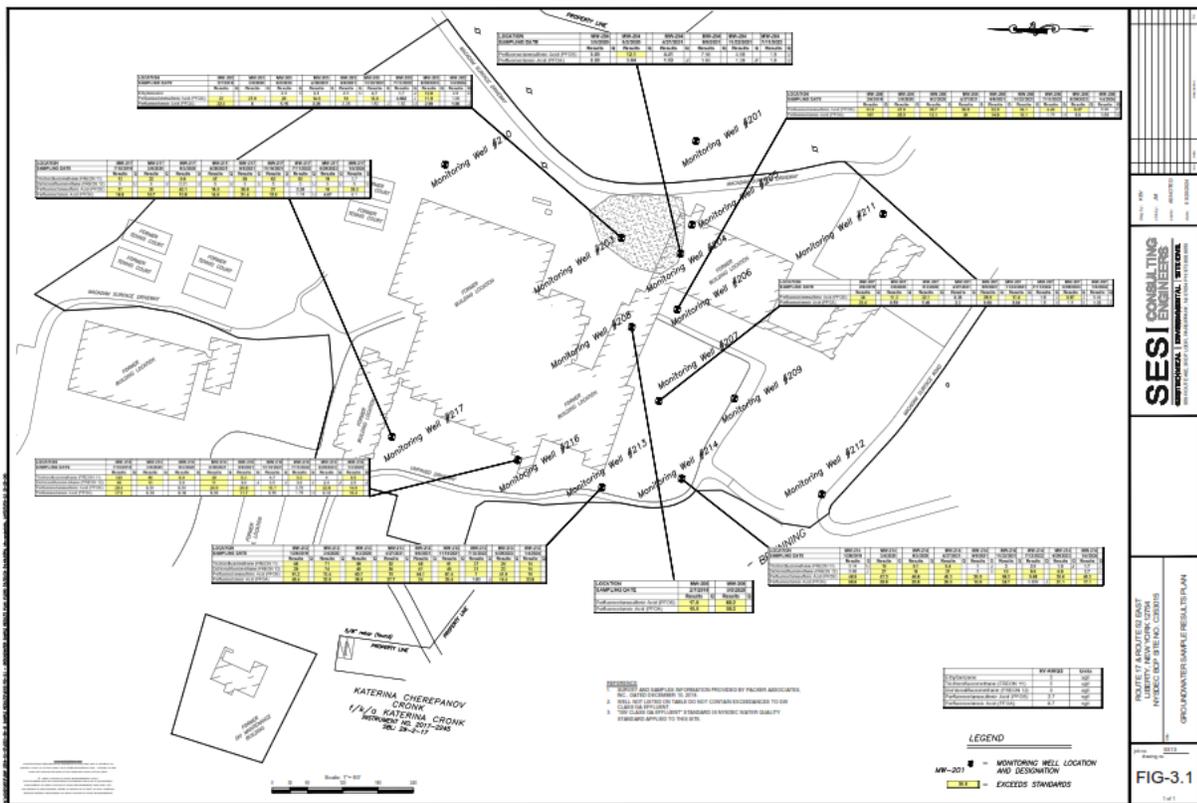
Inspector: James Blind  
 Signature: James Blind

WELL ID	PID (ppm)	DTW (feet)	DTB (feet)
MW-206	0		
MW-207	0		
MW-203	0		
MW-213	0		
MW-214	0		
MW-216	0		
MW-217	0		

**WORK IN CONFORMANCE WITH APPROVED PROJECT DOCUMENTS? YES**

It should be noted that the locations, limits, and extents of the work areas indicated in this report are approximate and the actual locations, limits and extents may vary from what is depicted. It should also be noted that all elevations stated are estimated based on available information provided on project documents and in the field by the other site contractors or consultants.

**Site Map**



Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind

Photos



Photo #1  
Set up around MW-207



Photo #2  
MW-206



Photo #3  
MW-207



Photo #4  
Entrance to site

Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind

# Chain Of Custody



**NEW YORK CHAIN OF CUSTODY**

Westborough, MA 01581  
8 Walkup Dr.  
TEL: 508-998-9220  
FAX: 508-998-9193

Mansfield, MA 02048  
320 Forbes Blvd  
TEL: 508-822-9300  
FAX: 508-822-3288

**Service Centers**  
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5  
Albany, NY 12205: 14 Walker Way  
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab

ALPHA Job #

**Client Information**  
 Client: SESI  
 Address: 959 RT 46, FL 3 Parsippany, NJ 07054  
 Phone: 862 290 5627  
 Fax: 862 290 5627  
 Email: kenneth.farah@sesi.org

**Project Information**  
 Project Name: Former Grossinger  
 Project Location: 27 Grossinger Rd, Liberty NJ  
 Project # 09313D  
 Project Manager: Ken Farah  
 ALPHAQuote #:

**Turn-Around Time**  
 Standard  SESSD Due Date:  
 Rush (only if pre approved)  # of Days:

These samples have been previously analyzed by Alpha   
 Other project specific requirements/comments:

Please specify Metals or TAL.

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS		Sample Specific Comments
		Date	Time			VOCS	PFAAS method (gas)	
	MW-207	5/16/24	9:50	GW	JB	X	X	
	MW-206		11:10		JB	X	X	
	MW-203		12:15		JB	X	X	
	MW-213		12:30		TM	X	X	
	MW-214		13:10		TM	X	X	
	MW-216		11:30		TM	X	X	
	MW-217		10:10		TM	X	X	
	FB20240516		1345	Blank	JB	X	X	
	TB20240516				GM	X		

**Deliverables**  
 ASP-A  ASP-B  
 EQUIS (1 File)  EQUIS (4 File)  
 Other

**Regulatory Requirement**  
 NY TOGS  NY Part 375  
 AWQ Standards  NY CP-51  
 NY Restricted Use  Other  
 NY Unrestricted Use  
 NYC Sewer Discharge

**Disposal Site Information**  
 Please identify below location of applicable disposal facilities.  
 Disposal Facility:  
 NJ  NY  
 Other:

**Sample Filtration**  
 Done  
 Lab to do  
 Lab to do  
 (Please Specify below)

**Preservative Code:**  
 A = None  
 B = HCl  
 C = HNO<sub>3</sub>  
 D = H<sub>2</sub>SO<sub>4</sub>  
 E = NaOH  
 F = MeOH  
 G = NaHSO<sub>4</sub>  
 H = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>  
 K/E = Zn Ac/NaOH  
 O = Other

**Container Code:**  
 P = Plastic  
 A = Amber Glass  
 V = Vial  
 G = Glass  
 B = Bacteria Cup  
 C = Cube  
 O = Other  
 E = Encore  
 D = BOD Bottle

Westboro: Certification No: MA935  
 Mansfield: Certification No: MA015

Container Type: V B  
 Preservative: B A

Relinquished By:	Date/Time	Received By:	Date/Time
<u>[Signature]</u>	<u>5/16/24</u>		

Form No: 01-25 HC (rev. 30-Sept-2013)

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind



959 ROUTE 46E, FLOOR 3, SUITE 300  
 PARSIPPANY, NJ 07054  
 (973) 808-9050  
[www.sesi.org](http://www.sesi.org)

DATE: 07/01/24	JOB NO. 09313
PROJECT:	
LOCATION: Liberty NY	
CLIENT: Capelli	
WEATHER: Sunny	TEMP: 80s
TIME ON SITE: 0900	TIME OFF SITE: 1345
PRESENT AT SITE	
SESI- James Blind	

CHARGABLE EQUIPMENT USED
6L air canisters

**FIELD REPORT:**

**SCOPE OF WORK:**

SESI was on site to perform air sampling from SMPV 13,14,2,12,11, and 10. SESI walked around the site to locate each sampling point. After locating the points SESI started air sampling on each point (SMPV-13 is extremely hard to connect with silicon due to how short the point is with the connecting piece.) SESI waited approximately two (2) hrs before collecting the samples. Each sample was set up with proper tubing and collected once the pressure in each canister exceeded -5.00. SESI then collected samples and cleaned up tubing on site.

CONTRACTOR, LABOR & EQUIPMENT	
QUANTITY	DESCRIPTION

Sample ID	Start Time	End Time	Start Pressure	End Pressure
SMPV-13	9:20	11:55	-28.41	-2.31
SMPV-14	9:34	12:27	-29.12	-4.94
SMPV-2	9:45	12:15	-26.42	-4.57
SMPV-12	10:06	12:39	-28.52	-0.29
SMPV-11	10:18	12:50	-28.32	-4.86
SMPV-10	10:30	13:02	-28.45	-0.23

SESI collected samples and filled out chain of custody. After filling out chain SESI cleaned up site and gave samples to PACE. Prior to leaving the site SESI closed and locked the gate at entrance. SESI left site.

**WORK IN CONFORMANCE WITH APPROVED PROJECT DOCUMENTS? YES**

It should be noted that the locations, limits, and extents of the work areas indicated in this report are approximate and the actual locations, limits and extents may vary from what is depicted. It should also be noted that all elevations stated are estimated based on available information provided on project documents and in the field by the other site contractors or consultants.

Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind

# Chain Of Custody

**Alpha Analytical**  
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## AIR Chain-of-Custody - NJ

Date Rec'd in Lab: \_\_\_\_\_ ALPHA Job# \_\_\_\_\_

Client Contact Information		Project Information		NJ DEP Information		Report Information - Data Deliverables:		Billing Information		of COCs								
Company: SESI		Project Name: Former Greengages		Bureau: _____ Division: _____ Contract No: _____		Analysis		Matrix										
Address: 959 RT 46 E13		Project No: 09813D		Report Information - Data Deliverables:														
City/State/Zip: Parsippany, NJ		Site/Location: _____		<input type="checkbox"/> FAX: _____														
Tel: 862 230 3627		Project Manager: Ken Farah		<input type="checkbox"/> ADEX: _____ <input type="checkbox"/> Criteria Checker: _____														
Contact: Kenneth Farah		Analysis Turn-Around Time		<input type="checkbox"/> EMail (standard pdf report)														
Contact Phone: _____		Standard (Specify): SESI STD		Billing Information														
		Rush (Specify): _____		<input type="checkbox"/> Same as Client Info PO #:														
PH/LAB ID (to Use Only)	Sample Identification	Sample Date	Time Start (24 Hr Clock)	Time Stop (24 Hr Clock)	Canister Pressure at Field (PSI)	Canister Pressure at Lab (PSI)	Inlet Temp. (F)	Inlet Temp. (C)	Outgoing Canister Pressure (Psi)	Incoming Canister Pressure (Psi)	Flow Reg. ID	Can #3	Can Size (L)	Flow Controller Readout (ml/min)	Batch Cert ID (Note 1)	TC-15	EMC	Matrix
	SMPV-15	7/12/19	11:55	12:31	28.41	28.31	75	75			01824	0168	10L					
	SMPV-14		9:34	12:27	27.72	27.94					01083	0150						
	SMPV-9		9:43	12:15	26.42	26.57					01089	782						
	SMPV-12		10:14	12:31	28.52	28.25					02839	2182						
	SMPV-11		10:17	12:50	28.21	28.16					0352	2204						
	SMPV-10		10:35	13:02	28.47	28.23												

Custody Seals: Outgoing Seal No: 0005128  
Incoming Seal No: \_\_\_\_\_

Temperature (Fahrenheit): Ambient \_\_\_\_\_ Maximum \_\_\_\_\_ Minimum \_\_\_\_\_

Pressure (Inches of Hg): Ambient \_\_\_\_\_ Maximum \_\_\_\_\_ Minimum \_\_\_\_\_

Individual Preparing Canister/Containers and Laboratory Canister Certification  
Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Footnotes:  
(1) Refer to equipment tags for these readings.  
(2) Readings provided in data deliverable package.

Special Instructions/QC Requirements & Comments: \_\_\_\_\_

Canisters Shipped by: _____	Date/Time: _____	Canisters Received by: _____	Date/Time: _____
Samples Relinquished by: _____	Date/Time: 7/11/24	Received by: _____	Date/Time: _____
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

Note: Combined External Chain of Custody and NJDEP Field Test Data Sheet

Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind

Photos



Photo #1  
SMPV-14



Photo #2  
SMPV-2



Photo #3  
SMPV-13



Photo #4  
Site View

Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind

Reviewer:  
Signature:

Inspector: James Blind  
Signature: James Blind

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**Appendix D:**  
Well and Sampling Logs

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**LOW-FLOW GROUNDWATER SAMPLING LOG**

Location: <u>3 grossingers rd</u>		Job Number: <u>9313D</u>		WELL I.D. : <u>MW-203</u>					
Personnel: <u>TAGE P.</u>		Date: <u>1/4/2024</u>							
		PID: <u>0.5</u>							
Stickup? Y	Distance From Rim to PVC	Total Depth of Well Rim	Depth to Product Rim/PVC	Depth to Water (PVC)	Standing Water Column (feet)	Middle of Saturated Zone (feet)	Depth to Sample Tube (feet)	TOV @ Well Head (ppmv)	Pump Peristaltic or Bladder
Distance ground to Stickup Rim/PVC	--	25	NA	4.6	20.4	14.8	15	NA	peri
Turbidity at collection (NTU):		2.4	(Less than 5 NTU is desirable)		Duplicate Collected? N			Filtered Sample N	
Stabilization Parameters		+/- 0.5 deg C.	+/- 0.1 Unit	+/- 10 umhos/cm or within 3% if >300umho	1 ppm	+/- 10 mV	No Limit	<.3 feet drawdown desirable	No Limit
Volume Purged (gallons)	Time (actual Time) 5 minute Intervals	TEMP. (Deg. C)	pH	Specific Conductivity uS/cm	Dissolved Oxygen (mg/L)	ORP mV millivolts	Turbidity NTUs	DTW (feet)	Odors Y/N
-	1313	5.71	6.64	0.164	1.68	115	18.2	5,2	n
-	1318	5.76	6.62	0.159	1.38	116	23	5.3	n
-	1323	5.69	6.61	0.159	1.08	112	16.4	5,2	n
-	1328	5.54	6.58	0.159	1.82	93	11.5	5,2	n
-	1333	5.23	6.59	0.159	0.76	77	6.9	5,2	n
-	1338	5.08	6.6	0.159	0.62	64	4.6	5,2	n
-	1343	4.98	6.59	0.16	0.58	61	3.6	5,2	n
-	1348	4.94	6.59	0.159	0.54	55	3.1	5,2	n
-	1353	4.95	6.59	0.16	0.54	54	2.4	5,2	n
less than 1/2 gallon									
<b>Well Condition Summary</b>									
Cover: Y		Bolts: Y		Concrete Pad OK: Y		Gripper: Y			
<b>Sample Collection Information</b>									
Sample Time:	1400 1/5/23	Appearance: Clear		Filtered Sample Turbidity:			OTHER:		
<small>Desired purge flow rate &lt;100mL/min (slow drip) &amp; turbidity &lt;10 if possible. If turbidity &gt; 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization.                  Notes/ Calculations:                  Volume? Linear Ft of well casing; 1"=0.041 gal. 2"= 0.163 gal. 4"=0.653 gal.</small>									
<b>ABSORBENT SOCK</b>									
Sock Length (ft) =		Capacity (Qt.) =			Present:	Y / N	Product Measured (Inches) :		
Sock Installation Date:				Sock Changed :		Y / N			
Sock Depth (Depth to sock mid point):									













**LOW-FLOW GROUNDWATER SAMPLING LOG**

Location: <b>3 Grossingers, Liberty, NY</b>		Job Number: <b>09313D</b>		WELL I.D. : <b>MW-213</b>					
Personnel: <b>TAJ</b>		Date: <b>5/16/2024</b>							
		PID: <b>0.1</b>							
Stickup? Y	Distance From Rim to PVC	Total Depth of Well Rim/PVC	Depth to Product Rim/PVC	Depth to Water (Rim/PVC)	Standing Water Column (feet)	Middle of Saturated Zone (feet)	Depth to Sample Tube (feet)	TOV @ Well Head (ppmv)	Pump Peristaltic or Bladder
3.6	0.2	20.85	-	13.6	7.25	17.225	18	-	Peristaltic
Turbidity at collection (NTU):		(Less than 5 NTU is desirable)		Duplicate Collected? N		Filtered Sample N			
Stabilization Parameters		+/- 0.5 deg C.	+/- 0.1 Unit	+/- 10 umhos/cm or within 3% if >300umho	1 ppm	+/- 10 mV	No Limit	<.3 feet drawdown desirable	No Limit
Volume Purged (gallons)	Time (actual Time) 5 minute Intervals	TEMP. (Deg. C)	pH	Specific Conductivity uS/cm	Dissolved Oxygen (mg/L)	ORP mV millivolts	Turbidity NTUs	DTW (feet)	Odors Y/N
FR = 200 mL/min	1150	10.34	7.21	0.284	7.32	228	230	13.7	N
	1155	10.18	7.26	0.306	6.32	223	190	14.5	N
	1200	10.04	7.13	0.327	5.45	228	112	14.6	N
	1205	10.12	6.98	0.353	4.39	230	109	14.75	N
	1210	10.81	6.65	0.418	1.62	236	73.3	14.85	N
	1215	10.79	6.64	0.417	1.58	239	59.1	14.96	N
	1220	10.61	6.65	0.418	1.69	243	43.1	15.05	N
	1225	10.59	6.66	0.417	1.71	241	42.8	15.15	N
<b>Well Condition Summary</b>									
Cover: Y		Bolts: N		Concrete Pad OK: N		Gripper: Y			
<b>Sample Collection Information</b>									
Sample Time:	1230	Appearance: Clear		Filtered Sample Turbidity:			OTHER:		
<small>Desired purge flow rate &lt;100mL/min (slow drip) &amp; turbidity &lt;10 if possible. If turbidity &gt; 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization.                  Notes/ Calculations:                  Volume? Linear Ft of well casing; 1"=0.041 gal. 2"= 0.163 gal. 4"=0.653 gal.</small>									
<b>ABSORBENT SOCK</b>									
Sock Length (ft) =	Capacity (Qt.) =		Present:		Y / N	Product Measured (Inches) :			
Sock Installation Date:		Sock Changed :		Y / N					
Sock Depth (Depth to sock mid point):									

**LOW-FLOW GROUNDWATER SAMPLING LOG**

Location: <b>3 Grossingers, Liberty, NY</b>		Job Number: <b>09313D</b>		WELL I.D. : <b>MW-214</b>					
Personnel: <b>TAJ</b>		Date: <b>5/16/2024</b>							
PID: <b>0</b>									
Stickup? <b>Y</b>	Distance From Rim to PVC	Total Depth of Well Rim/PVC	Depth to Product Rim/PVC	Depth to Water (Rim/PVC)	Standing Water Column (feet)	Middle of Saturated Zone (feet)	Depth to Sample Tube (feet)	TOV @ Well Head (ppmv)	Pump Peristaltic or Bladder
<b>3.25</b>	<b>0.2</b>	<b>24.8</b>	<b>-</b>	<b>14.8</b>	<b>10</b>	<b>19.8</b>	<b>20</b>	<b>-</b>	<b>Peristaltic</b>
Turbidity at collection (NTU):		(Less than 5 NTU is desirable)		Duplicate Collected? <b>N</b>			Filtered Sample <b>N</b>		
Stabilization Parameters		+/- 0.5 deg C.	+/- 0.1 Unit	+/- 10 umhos/cm or within 3% if >300umho	1 ppm	+/- 10 mV	No Limit	<.3 feet drawdown desirable	No Limit
Volume Purged (gallons)	Time (actual Time) 5 minute Intervals	TEMP. (Deg. C)	pH	Specific Conductivity uS/cm	Dissolved Oxygen (mg/L)	ORP mV millivolts	Turbidity NTUs	DTW (feet)	Odors Y/N
<b>FR= 200mL/min</b>	<b>1245</b>	<b>10.1</b>	<b>6.66</b>	<b>0.412</b>	<b>2.87</b>	<b>250</b>	<b>210</b>	<b>14.95</b>	<b>N</b>
	<b>1250</b>	<b>9.85</b>	<b>6.52</b>	<b>0.414</b>	<b>2.84</b>	<b>278</b>	<b>114</b>	<b>15.05</b>	<b>N</b>
	<b>1255</b>	<b>9.88</b>	<b>6.54</b>	<b>0.414</b>	<b>2.91</b>	<b>2.84</b>	<b>90.9</b>	<b>15.1</b>	<b>N</b>
	<b>1300</b>	<b>9.83</b>	<b>6.55</b>	<b>0.414</b>	<b>2.86</b>	<b>2.9</b>	<b>44.7</b>	<b>15.15</b>	<b>N</b>
	<b>1305</b>	<b>9.82</b>	<b>6.55</b>	<b>0.414</b>	<b>2.85</b>	<b>2.92</b>	<b>41.3</b>	<b>15.2</b>	<b>N</b>
<b>Well Condition Summary</b>									
Cover: <b>Y</b>		Bolts: <b>N</b>		Concrete Pad OK: <b>Y</b>		Gripper: <b>Y</b>			
<b>Sample Collection Information</b>									
Sample Time:	<b>13:10</b>	Appearance: <b>Clear</b>		Filtered Sample Turbidity:			OTHER:		
<small>Desired purge flow rate &lt;100mL/min (slow drip) &amp; turbidity &lt;10 if possible. If turbidity &gt; 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization.                  Notes/ Calculations:                  Volume? Linear Ft of well casing; 1"=0.041 gal. 2"= 0.163 gal. 4"=0.653 gal.</small>									
<b>ABSORBENT SOCK</b>									
Sock Length (ft) =		Capacity (Qt.) =		Present:	<b>Y / N</b>	Product Measured (Inches) :			
Sock Installation Date:				Sock Changed :		<b>Y / N</b>			
Sock Depth (Depth to sock mid point):									

**LOW-FLOW GROUNDWATER SAMPLING LOG**

Location: <u>3 Grossingers, Liberty, NY</u>		Job Number: <u>09313D</u>		WELL I.D. : <u>MW-216</u>					
Personnel: <u>TAJ</u>		Date: <u>5/16/2024</u>							
		PID: <u>0</u>							
Stickup? Y	Distance From Rim to PVC	Total Depth of Well Rim/PVC	Depth to Product Rim/PVC	Depth to Water (Rim/PVC)	Standing Water Column (feet)	Middle of Saturated Zone (feet)	Depth to Sample Tube (feet)	TOV @ Well Head (ppmv)	Pump Peristaltic or Bladder
3.1	2	20.1	-	6.75	13.35	13.425	16	-	Peristaltic
Turbidity at collection (NTU):		(Less than 5 NTU is desirable)		Duplicate Collected? N			Filtered Sample N		
Stabilization Parameters		+/- 0.5 deg C.	+/- 0.1 Unit	+/- 10 umhos/cm or within 3% if >300umho	1 ppm	+/- 10 mV	No Limit	<.3 feet drawdown desirable	No Limit
Volume Purged (gallons)	Time (actual Time) 5 minute Intervals	TEMP. (Deg. C)	pH	Specific Conductivity uS/cm	Dissolved Oxygen (mg/L)	ORP mV millivolts	Turbidity NTUs	DTW (feet)	Odors Y/N
FR= 200 mL/min	1105	10.97	6.35	0.14	1.67	279	27.5	6.85	N
	1110	10.99	6.37	0.143	1.62	280	30.5	6.85	N
	1115	10.84	6.38	0.151	1.46	282	35.1	6.85	N
	1120	10.79	6.38	0.154	1.33	283	22.8	6.85	N
	1125	11.85	6.36	0.152	1.08	286	21.2	6.85	N
<b>Well Condition Summary</b>									
Cover: Y		Bolts: N		Concrete Pad OK: N		Gripper: Y			
<b>Sample Collection Information</b>									
Sample Time:	1130	Appearance: Clear		Filtered Sample Turbidity:			OTHER:		
<small>Desired purge flow rate &lt;100mL/min (slow drip) &amp; turbidity &lt;10 if possible. If turbidity &gt; 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization.                  Notes/ Calculations:                  Volume? Linear Ft of well casing; 1"=0.041 gal. 2"= 0.163 gal. 4"=0.653 gal.</small>									
<b>ABSORBENT SOCK</b>									
Sock Length (ft) =	Capacity (Qt.) =		Present:		Y / N	Product Measured (Inches) :			
Sock Installation Date:		Sock Changed :		Y / N					
Sock Depth (Depth to sock mid point):									

**LOW-FLOW GROUNDWATER SAMPLING LOG**

Location: <u>3 Grossingers, Liberty, NY</u>		Job Number: <u>09313D</u>		WELL I.D. : <u>MW-217</u>					
Personnel: <u>TAJ</u>		Date: <u>5/16/2024</u>							
PID: <u>0</u>									
Stickup? Y	Distance From Rim to PVC	Total Depth of Well Rim/PVC	Depth to Product Rim/PVC	Depth to Water (Rim/PVC)	Standing Water Column (feet)	Middle of Saturated Zone (feet)	Depth to Sample Tube (feet)	TOV @ Well Head (ppmv)	Pump Peristaltic or Bladder
3.65	0.2	19.8	-	6.7	13.1	13.25	15	-	Peristaltic
Turbidity at collection (NTU):		(Less than 5 NTU is desirable)		Duplicate Collected? N			Filtered Sample N		
Stabilization Parameters		+/- 0.5 deg C.	+/- 0.1 Unit	+/- 10 umhos/cm or within 3% if >300umho	1 ppm	+/- 10 mV	No Limit	<.3 feet drawdown desirable	No Limit
Volume Purged (gallons)	Time (actual Time) 5 minute Intervals	TEMP. (Deg. C)	pH	Specific Conductivity uS/cm	Dissolved Oxygen (mg/L)	ORP mV millivolts	Turbidity NTUs	DTW (feet)	Odors Y/N
FR=200 mL/min	940	10.99	6.83	0.328	1.29	252	137	6.75	N
	945	11.61	6.98	0.314	1.01	241	77.8	6.8	N
	950	11.71	6.99	0.311	0.97	238	14.2	6.8	N
	955	11.75	7.01	0.309	0.94	233	2.9	6.8	N
	1000	11.67	7.02	0.309	0.84	227	0.1	6.95	N
	1005	11.66	7.02	0.309	0.84	226	0	6.95	N
<b>Well Condition Summary</b>									
Cover: Y		Bolts: N		Concrete Pad OK: N		Gripper: Y			
<b>Sample Collection Information</b>									
Sample Time:	1010	Appearance: Clear		Filtered Sample Turbidity:			OTHER:		
<small>Desired purge flow rate &lt;100mL/min (slow drip) &amp; turbidity &lt;10 if possible. If turbidity &gt; 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization.                  Notes/ Calculations:                  Volume? Linear Ft of well casing; 1"=0.041 gal. 2"= 0.163 gal. 4"=0.653 gal.</small>									
<b>ABSORBENT SOCK</b>									
Sock Length (ft) =		Capacity (Qt.) =			Present:	Y / N	Product Measured (Inches) :		
Sock Installation Date:				Sock Changed :		Y / N			
Sock Depth (Depth to sock mid point):									

**LOW-FLOW GROUNDWATER SAMPLING LOG**

Location: <u>3 Grossingers, Liberty, NY</u>		Job Number: <u>09313D</u>		WELL I.D. : <u>MW-208R</u>					
Personnel: <u>JB, KB</u>		Date: _____							
PID: _____		_____							
Stickup? <b>Y</b>	Distance From Rim to PVC	Total Depth of Well	Depth to Product Rim/PVC	Depth to Water (Rim/PVC)	Standing Water Column (feet)	Middle of Saturated Zone (feet)	Depth to Sample Tube (feet)	TOV @ Well Head (ppmv)	Pump Peristaltic or Bladder
3	0.2	21.1		9.15	11.95	15.125	15.125	-	Peristaltic
Turbidity at collection (NTU):		(Less than 5 NTU is desirable)		Duplicate Collected? <b>N</b>			Filtered Sample <b>N</b>		
Stabilization Parameters		+/- 0.5 deg C.	+/- 0.1 Unit	+/- 10 umhos/cm or within 3% if >300umho	1 ppm	+/- 10 mV	No Limit	<.3 feet drawdown desirable	No Limit
Volume Purged (gallons)	Time (actual Time) 5 minute Intervals	TEMP. (Deg. C)	pH	Specific Conductivity uS/cm	Dissolved Oxygen (mg/L)	ORP mV millivolts	Turbidity NTUs	DTW (feet)	Odors Y/N
	11:50	18.69	6.41	0.237	0	-48	8.8		N
	11:55	17.51	6.28	0.233	0	-55	10.8		N
	12:00	16.97	6.22	0.233	0	-56	12.4		N
	12:05	16.92	6.18	0.234	0	-58	14.2		N
	12:10	17.04	6.16	0.235	0	-62	13.4		N
<b>Well Condition Summary</b>									
Cover: <b>Y</b>		Bolts: <b>N</b>		Concrete Pad OK: <b>N</b>		Gripper: <b>Y</b>			
<b>Sample Collection Information</b>									
Sample Time:		Appearance: <b>Clear</b>		Filtered Sample Turbidity:			OTHER:		
<small>Desired purge flow rate &lt;100mL/min (slow drip) &amp; turbidity &lt;10 if possible. If turbidity &gt; 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization.                  Notes/ Calculations:                  Volume? Linear Ft of well casing; 1"=0.041 gal. 2"= 0.163 gal. 4"=0.653 gal.</small>									
<b>ABSORBENT SOCK</b>									
Sock Length (ft) =	Capacity (Qt.) =		Present:		Y / N		Product Measured (Inches) :		
Sock Installation Date:		Sock Changed :		Y / N					
Sock Depth (Depth to sock mid point):									

**Soil Vapor Sampling Form**

Date: 7/1/2024

Time: 9:45

Sample ID # SMPV-2

Weather : Overcast

Temperature: 75 °F

Wind Magnitude: \_\_\_\_\_

Barometric Pressure: \_\_\_\_\_

Sampling Team: James Blind

Sampling Location: Former Grossingers, Liberty, NY

Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)

Overgrown previously demolished hotel

Is the Summa Canister Certified Clean and within the proper holding time ?      Yes

Starting Pressure: -26.4 in. of Hg

Starting Time: 9:45

Ending Time: 12:15

Ending Pressure: -4.57 in. of Hg

Summa Canister Identification #: 01581

Flow Regulator ID # 01581

Sample ID # SMPV-2

Time 9:45

Analysis TO-15

Laboratory ALPHA/PACE

**Soil Vapor Sampling Form**

Date: 7/1/2024

Time: 10:30

Sample ID # SMPV-10

Weather : Overcast

Temperature: 75 °F

Wind Magnitude: \_\_\_\_\_

Barometric Pressure: \_\_\_\_\_

Sampling Team: James Blind

Sampling Location: Former Grossingers, Liberty, NY

Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)

Overgrown previously demolished hotel

Is the Summa Canister Certified Clean and within the proper holding time ?      Yes

Starting Pressure: -28.5 in. of Hg

Starting Time: 10:30

Ending Time: 13:02

Ending Pressure: -0.23 in. of Hg

Summa Canister Identification #: 3264

Flow Regulator ID # 0352

Sample ID # SMPV-10

Time 10:30

Analysis TO-15

Laboratory ALPHA/PACE

**Soil Vapor Sampling Form**

Date: 7/1/2024

Time: 10:18

Sample ID # SMPV-11

Weather : Overcast

Temperature: 75 °F

Wind Magnitude: \_\_\_\_\_

Barometric Pressure: \_\_\_\_\_

Sampling Team: James Blind

Sampling Location: Former Grossingers, Liberty, NY

Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)

Overgrown previously demolished hotel

Is the Summa Canister Certified Clean and within the proper holding time ?      Yes

Starting Pressure: -28.3 in. of Hg

Starting Time: 10:18

Ending Time: 12:50

Ending Pressure: -4.86 in. of Hg

Summa Canister Identification #: 2482

Flow Regulator ID # 02363

Sample ID # SMPV-11

Time 10:18

Analysis TO-15

Laboratory ALPHA/PACE

**Soil Vapor Sampling Form**

**Date:** 7/1/2024

**Time:** 9:20

**Sample ID #** SMPV-13

**Weather :** Overcast

Temperature: 75 °F

Wind Magnitude: \_\_\_\_\_

Barometric Pressure: \_\_\_\_\_

**Sampling Team:** James Blind

**Sampling Location:** Former Grossingers, Liberty, NY

**Site Condition (i.e. location, adjacent questionable facilities, vent pipes, tanks, etc. and basements type if present)**

Overgrown previously demolished hotel

Is the Summa Canister Certified Clean and within the proper holding time ?      Yes

**Starting Pressure:** -28.4 in. of Hg

**Starting Time:** 9:20

**Ending Time:** 11:55

**Ending Pressure:** -2.31 in. of Hg

**Summa Canister Identification #:** 0581

**Flow Regulator ID #** \_\_\_\_\_

**Sample ID #** SMPV-13

**Time** 9:20

**Analysis** TO-15

**Laboratory** ALPHA/PACE

**Soil Vapor Sampling Form**

Date: 7/1/2024

Time: 9:34

Sample ID # SMP-14

Weather : Cold and Dry with Overcast conditions

Temperature: 75 °F

Wind Magnitude: \_\_\_\_\_

Barometric Pressure: \_\_\_\_\_

Sampling Team: James Blind

Sampling Location: Former Grossingers, Liberty, NY

Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)

Overgrown previously demolished hotel

Is the Summa Canister Certified Clean and within the proper holding time ?      Yes

Starting Pressure: -29.1 in. of Hg

Starting Time: 9:34

Ending Time: 9:45

Ending Pressure: -4.94 in. of Hg

Summa Canister Identification #: 4295

Flow Regulator ID # 01524

Sample ID # SMPV-14

Time 9:34

Analysis TO-15

Laboratory APLHA/PACE

**Soil Vapor Sampling Form**

Date: 7/1/2024

Time: 10:06

Sample ID # SMPV-12

Weather : Overcast

Temperature: 75 °F

Wind Magnitude: \_\_\_\_\_

Barometric Pressure: \_\_\_\_\_

Sampling Team: James Blind

Sampling Location: Former Grossingers, Liberty, NY

Site Condition (i.e. any adjacent questionable facilities, vent pipes, tanks, etc. and what type of basements are present)

Overgrown previously demolished hotel

Is the Summa Canister Certified Clean and within the proper holding time ?      Yes

Starting Pressure: -28.5 in. of Hg

Starting Time: 10:06

Ending Time: 12:39

Ending Pressure: -0.29 in. of Hg

Summa Canister Identification #: 782

Flow Regulator ID # 01035

Sample ID # SMPV-12

Time 10:06

Analysis TO-15

Laboratory ALPHA/PACE

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**Appendix E:**  
Laboratory Reports

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## ANALYTICAL REPORT

Lab Number:	L2400777
Client:	Soils Engineering Services, Inc. 959 Route 46E Parsippany, NJ 07054
ATTN:	Matthew Majorossy
Phone:	(973) 808-9050
Project Name:	GROSSINGERS, NY
Project Number:	09313
Report Date:	01/16/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2400777-01	MW-213	WATER	LIBERTY, NY	01/04/24 15:40	01/04/24
L2400777-02	MW-214	WATER	LIBERTY, NY	01/04/24 16:25	01/04/24
L2400777-03	MW-206	WATER	LIBERTY, NY	01/04/24 16:45	01/04/24
L2400777-04	FIELD BLANK	WATER	LIBERTY, NY	01/04/24 17:00	01/04/24
L2400777-05	TRIP BLANK	WATER	LIBERTY, NY	01/04/24 17:00	01/04/24

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

### Case Narrative (continued)

#### Report Submission

January 16, 2024: This final report includes the results of all requested analyses.

January 11, 2024: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2400777-04: The collection date and time on the chain of custody was 04-JAN-24 17:00; however, the collection date/time on the container label was 04-JAN-24 16:45. At the client's request, the collection date/time is reported as 04-JAN-24 17:00.

L2400777-03: Headspace was noted in the sample containers submitted for TCL Volatiles - EPA 8260D. The analysis was performed at the client's request.

#### Perfluorinated Alkyl Acids by 1633

L2400777-01 and WG1872596-4: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

The WG1872596-4 MS recoveries, performed on L2400777-01, are outside the acceptance criteria for perfluoroheptanesulfonic acid (pfhps) (223%), perfluorooctanesulfonic acid (pfos) (257%), perfluorodecanoic acid (pfda) (171%), perfluorooctanesulfonamide (fosa) (156%) and n-methyl perfluorooctane sulfonamide (nmefosa) (152%).

The WG1872596-5 MSD recoveries, performed on L2400777-01, are outside the acceptance criteria for perfluorooctanesulfonic acid (pfos) (190%), 1h,1h,2h,2h-perfluorodecanesulfonic acid (8:2fts) (167%), n-methyl perfluorooctanesulfonamidoacetic acid (nmefosaa) (169%), perfluorooctanesulfonamide (fosa) (164%), 2,3,3,3-tetrafluoro-2-[1,1,2,2,3,3,3-heptafluoropropoxy]-propanoic acid (hfpo-da) (153%), 4,8-dioxa-3h-perfluorononanoic acid (adona) (172%), n-methyl perfluorooctane sulfonamide (nmefosa) (157%), n-ethyl perfluorooctane sulfonamide (netfosa) (157%) and perfluoro(2-ethoxyethane)sulfonic acid (pfeesa) (163%).

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Case Narrative (continued)**

The WG1872596-4/-5 MS/MSD RPDs, performed on L2400777-01, are outside the acceptance criteria for perfluorobutanesulfonic acid (pfbs) (34%), perfluoroheptanesulfonic acid (pfhps) (41%), and perfluorodecanoic acid (pfda) (34%).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/16/24

# ORGANICS

# VOLATILES

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-01  
 Client ID: MW-213  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 15:40  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 10:10  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	14		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-01  
**Client ID:** MW-213  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 15:40  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	14		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-01  
 Client ID: MW-213  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 15:40  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatiles Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	7.65	J	ug/l			1
Fluorodichloromethane	7.65	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	102		70-130

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-02  
 Client ID: MW-214  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 16:25  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 10:32  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	1.7	J	ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

## SAMPLE RESULTS

Lab ID: L2400777-02

Date Collected: 01/04/24 16:25

Client ID: MW-214

Date Received: 01/04/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	3.7	J	ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-02  
**Client ID:** MW-214  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 16:25  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	1.81	J	ug/l			1
Fluorodichloromethane	1.81	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	103		70-130

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-03  
 Client ID: MW-206  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 16:45  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 10:54  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

## SAMPLE RESULTS

Lab ID: L2400777-03

Date Collected: 01/04/24 16:45

Client ID: MW-206

Date Received: 01/04/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-03  
**Client ID:** MW-206  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 16:45  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	103		70-130

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-04  
 Client ID: FIELD BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 17:00  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 11:16  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

## SAMPLE RESULTS

Lab ID: L2400777-04

Date Collected: 01/04/24 17:00

Client ID: FIELD BLANK

Date Received: 01/04/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-04  
**Client ID:** FIELD BLANK  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 17:00  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-05  
 Client ID: TRIP BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 17:00  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 11:37  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-05  
 Client ID: TRIP BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 17:00  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-05  
**Client ID:** TRIP BLANK  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 17:00  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	101		70-130

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	102		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	96		91		63-132	5		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	87		84		63-130	4		20
1,1,2-Trichloroethane	94		93		70-130	1		20
Tetrachloroethene	98		86		70-130	13		20
Chlorobenzene	100		94		75-130	6		20
Trichlorofluoromethane	91		86		62-150	6		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	98		91		67-130	7		20
Bromodichloromethane	95		92		67-130	3		20
trans-1,3-Dichloropropene	97		94		70-130	3		20
cis-1,3-Dichloropropene	94		91		70-130	3		20
1,1-Dichloropropene	100		93		70-130	7		20
Bromoform	81		81		54-136	0		20
1,1,2,2-Tetrachloroethane	92		100		67-130	8		20
Benzene	100		97		70-130	3		20
Toluene	110		97		70-130	13		20
Ethylbenzene	110		98		70-130	12		20
Chloromethane	110		100		64-130	10		20
Bromomethane	86		80		39-139	7		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
Vinyl chloride	98		91		55-140	7		20
Chloroethane	110		100		55-138	10		20
1,1-Dichloroethene	92		85		61-145	8		20
trans-1,2-Dichloroethene	98		89		70-130	10		20
Trichloroethene	97		89		70-130	9		20
1,2-Dichlorobenzene	100		92		70-130	8		20
1,3-Dichlorobenzene	100		93		70-130	7		20
1,4-Dichlorobenzene	100		93		70-130	7		20
Methyl tert butyl ether	81		86		63-130	6		20
p/m-Xylene	105		95		70-130	10		20
o-Xylene	105		95		70-130	10		20
cis-1,2-Dichloroethene	99		93		70-130	6		20
Dibromomethane	88		93		70-130	6		20
1,2,3-Trichloropropane	94		100		64-130	6		20
Acrylonitrile	93		100		70-130	7		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	68		64		36-147	6		20
Acetone	89		100		58-148	12		20
Carbon disulfide	100		90		51-130	11		20
2-Butanone	80		96		63-138	18		20
Vinyl acetate	100		110		70-130	10		20
4-Methyl-2-pentanone	81		92		59-130	13		20
2-Hexanone	78		92		57-130	16		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
Bromochloromethane	89		88		70-130	1		20
2,2-Dichloropropane	110		100		63-133	10		20
1,2-Dibromoethane	90		90		70-130	0		20
1,3-Dichloropropane	100		97		70-130	3		20
1,1,1,2-Tetrachloroethane	94		86		64-130	9		20
Bromobenzene	99		92		70-130	7		20
n-Butylbenzene	110		99		53-136	11		20
sec-Butylbenzene	110		96		70-130	14		20
tert-Butylbenzene	100		94		70-130	6		20
o-Chlorotoluene	110		100		70-130	10		20
p-Chlorotoluene	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	73		79		41-144	8		20
Hexachlorobutadiene	91		79		63-130	14		20
Isopropylbenzene	110		97		70-130	13		20
p-Isopropyltoluene	110		93		70-130	17		20
Naphthalene	82		85		70-130	4		20
n-Propylbenzene	110		100		69-130	10		20
1,2,3-Trichlorobenzene	88		85		70-130	3		20
1,2,4-Trichlorobenzene	92		84		70-130	9		20
1,3,5-Trimethylbenzene	110		97		64-130	13		20
1,2,4-Trimethylbenzene	110		97		70-130	13		20
1,4-Dioxane	82		92		56-162	11		20
p-Diethylbenzene	100		90		70-130	11		20

## Lab Control Sample Analysis

Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
p-Ethyltoluene	110		98		70-130	12		20
1,2,4,5-Tetramethylbenzene	96		87		70-130	10		20
Ethyl ether	83		85		59-134	2		20
trans-1,4-Dichloro-2-butene	98		110		70-130	12		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		113		70-130
Toluene-d8	107		105		70-130
4-Bromofluorobenzene	107		109		70-130
Dibromofluoromethane	96		99		70-130

# SEMIVOLATILES

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-01  
**Client ID:** MW-213  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 15:40  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 01/11/24 01:50  
**Analyst:** LMV

**Extraction Method:** EPA 1633  
**Extraction Date:** 01/09/24 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	7.94		ng/l	6.27	1.00	1
Perfluoropentanoic Acid (PFPeA)	4.54		ng/l	3.13	0.838	1
Perfluorobutanesulfonic Acid (PFBS)	2.05		ng/l	1.57	0.525	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.27	1.64	1
Perfluorohexanoic Acid (PFHxA)	5.73		ng/l	1.57	0.462	1
Perfluoropentanesulfonic Acid (PFPeS)	1.72		ng/l	1.57	0.274	1
Perfluoroheptanoic Acid (PFHpA)	4.91		ng/l	1.57	0.313	1
Perfluorohexanesulfonic Acid (PFHxS)	6.24		ng/l	1.57	0.376	1
Perfluorooctanoic Acid (PFOA)	23.6		ng/l	1.57	0.682	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	6.37		ng/l	6.27	2.12	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.32	J	ng/l	1.57	0.423	1
Perfluorononanoic Acid (PFNA)	2.59		ng/l	1.57	0.494	1
Perfluorooctanesulfonic Acid (PFOS)	76.0		ng/l	1.57	0.713	1
Perfluorodecanoic Acid (PFDA)	1.10	J	ng/l	1.57	0.634	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.27	2.44	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.57	0.486	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.57	0.854	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.57	0.682	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.57	0.360	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.57	0.423	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.57	0.846	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.57	0.721	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.57	0.588	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.57	0.415	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.27	0.877	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.27	0.987	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.57	0.595	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-01  
**Client ID:** MW-213  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 15:40  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.27	1.29	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.27	1.29	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.57	0.682	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.57	0.721	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.7	3.68	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.7	1.92	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.13	0.446	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.13	0.415	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.13	0.345	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.13	1.85	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.83	2.58	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	39.2	9.17	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	39.2	6.18	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-01  
 Client ID: MW-213  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 15:40  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	77		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	94		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	78		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	177	Q	20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	84		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	81		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	72		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	87		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	84		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	70		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	72		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	77		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	80		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	69		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	64		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	43		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	53		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	66		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	50		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	63		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	49		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	48		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	66		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	71		20-150

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-02  
**Client ID:** MW-214  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 16:25  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 01/11/24 02:28  
**Analyst:** LMV

**Extraction Method:** EPA 1633  
**Extraction Date:** 01/09/24 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	4.20	J	ng/l	5.71	0.913	1
Perfluoropentanoic Acid (PFPeA)	1.82	J	ng/l	2.85	0.763	1
Perfluorobutanesulfonic Acid (PFBS)	1.38	J	ng/l	1.43	0.478	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.71	1.49	1
Perfluorohexanoic Acid (PFHxA)	3.00		ng/l	1.43	0.421	1
Perfluoropentanesulfonic Acid (PFPeS)	1.10	J	ng/l	1.43	0.250	1
Perfluoroheptanoic Acid (PFHpA)	2.70		ng/l	1.43	0.285	1
Perfluorohexanesulfonic Acid (PFHxS)	3.89		ng/l	1.43	0.342	1
Perfluorooctanoic Acid (PFOA)	17.1		ng/l	1.43	0.621	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	13.5		ng/l	5.71	1.93	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.30	J	ng/l	1.43	0.385	1
Perfluorononanoic Acid (PFNA)	1.25	J	ng/l	1.43	0.449	1
Perfluorooctanesulfonic Acid (PFOS)	40.3		ng/l	1.43	0.649	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.43	0.578	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.71	2.22	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.43	0.442	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.43	0.778	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.43	0.621	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.43	0.328	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.43	0.385	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.43	0.770	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.43	0.656	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.43	0.535	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.43	0.378	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.71	0.799	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.71	0.899	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.43	0.542	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-02  
**Client ID:** MW-214  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 16:25  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.71	1.18	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.71	1.18	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.43	0.621	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.43	0.656	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.3	3.35	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.3	1.75	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.85	0.407	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.85	0.378	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.85	0.314	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.85	1.68	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.13	2.35	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	35.7	8.35	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	35.7	5.63	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-02  
 Client ID: MW-214  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 16:25  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	66		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	72		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	81		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	110		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	70		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	68		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	67		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	63		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	64		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	56		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	61		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	60		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	53		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	76		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	56		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	48		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	49		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	58		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	45		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	57		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	56		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	57		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	69		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	71		20-150

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-03  
**Client ID:** MW-206  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 16:45  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 01/11/24 02:41  
**Analyst:** LMV

**Extraction Method:** EPA 1633  
**Extraction Date:** 01/09/24 23:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.11	0.977	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.05	0.817	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.53	0.512	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.11	1.60	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.53	0.450	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.53	0.267	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.53	0.305	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.53	0.366	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.53	0.664	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.11	2.06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.53	0.412	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.53	0.481	1
Perfluorooctanesulfonic Acid (PFOS)	2.95	F	ng/l	1.53	0.695	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.53	0.618	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.11	2.37	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.53	0.473	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.53	0.832	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.53	0.664	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.53	0.351	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.53	0.412	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.53	0.825	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.53	0.702	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.53	0.573	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.53	0.405	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.11	0.855	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.11	0.962	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.53	0.580	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-03  
**Client ID:** MW-206  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 16:45  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.11	1.26	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.11	1.26	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.53	0.664	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.53	0.702	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.3	3.59	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.3	1.87	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.05	0.435	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.05	0.405	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.05	0.336	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.05	1.80	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.64	2.52	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	38.2	8.93	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	38.2	6.02	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-03  
 Client ID: MW-206  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 16:45  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	80		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	95		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	93		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	134		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	81		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	82		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	79		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	89		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	85		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	77		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	72		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	91		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	79		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	69		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	80		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	63		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	62		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	69		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	53		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	63		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	75		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	70		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	88		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	92		20-150

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-04  
**Client ID:** FIELD BLANK  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 17:00  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 01/11/24 02:54  
**Analyst:** LMV

**Extraction Method:** EPA 1633  
**Extraction Date:** 01/09/24 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	5.90	0.944	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.95	0.789	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.47	0.494	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.90	1.54	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.47	0.435	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.47	0.258	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.47	0.295	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.47	0.354	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.47	0.641	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.90	1.99	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.47	0.398	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.47	0.464	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.47	0.671	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.47	0.597	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.90	2.29	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.47	0.457	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.47	0.804	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.47	0.641	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.47	0.339	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.47	0.398	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.47	0.796	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.47	0.678	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.47	0.553	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.47	0.391	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.90	0.826	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.90	0.929	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.47	0.560	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

**Lab ID:** L2400777-04  
**Client ID:** FIELD BLANK  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/04/24 17:00  
**Date Received:** 01/04/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.90	1.22	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.90	1.22	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.47	0.641	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.47	0.678	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.7	3.46	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.7	1.81	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.95	0.420	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.95	0.391	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.95	0.324	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.95	1.74	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.37	2.43	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	36.9	8.63	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	36.9	5.82	1

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**SAMPLE RESULTS**

Lab ID: L2400777-04  
 Client ID: FIELD BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/04/24 17:00  
 Date Received: 01/04/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	51		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	60		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	52		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	64		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	44		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	45		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	45		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	49		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	44		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	37		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	41		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	40		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	39		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	46		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	35		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	33		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	34		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	37		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	26		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	36		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	34		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	36		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	50		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	53		20-150

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 144,1633  
Analytical Date: 01/10/24 22:03  
Analyst: LMV

Extraction Method: EPA 1633  
Extraction Date: 01/09/24 23:32

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-04 Batch: WG1872596-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.40	1.02
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.20	0.856
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.60	0.536
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.40	1.67
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.60	0.472
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.60	0.280
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.60	0.320
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.60	0.384
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.60	0.696
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.40	2.16
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.60	0.432
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.60	0.504
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.60	0.728
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.60	0.648
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.40	2.49
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.60	0.496
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.60	0.872
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.60	0.696
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.60	0.368
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.60	0.432
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.60	0.864
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.60	0.736
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.60	0.600
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.60	0.424
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.40	0.896
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.40	1.01
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.60	0.608

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 144,1633  
Analytical Date: 01/10/24 22:03  
Analyst: LMV

Extraction Method: EPA 1633  
Extraction Date: 01/09/24 23:32

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-04 Batch: WG1872596-1					
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.40	1.32
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.40	1.32
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.60	0.696
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.60	0.736
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	16.0	3.76
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	16.0	1.96
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.20	0.456
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.20	0.424
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.20	0.352
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.20	1.89
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.00	2.64
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	40.0	9.36
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	40.0	6.31

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 144,1633  
Analytical Date: 01/10/24 22:03  
Analyst: LMV

Extraction Method: EPA 1633  
Extraction Date: 01/09/24 23:32

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-04 Batch: WG1872596-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	71		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	78		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	71		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	83		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	60		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	59		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	66		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	70		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	62		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	74		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	63		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	53		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	61		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	57		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	43		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	41		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	50		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	45		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	32		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	52		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	43		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	40		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	66		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	72		20-150

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	Low Level	Qual	Low Level	Qual	%Recovery Limits	RPD	Qual	RPD Limits
	LCS %Recovery		LCSD %Recovery					
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1872596-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	108		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	114		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	114		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	97		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	126		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	104		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	113		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	98		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	126		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	95		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	109		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	118		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	111		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	98		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	109		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	83		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	113		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	100		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	88		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	100		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	77		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	116		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	Low Level	Qual	Low Level	Qual	%Recovery Limits	RPD	Qual	RPD Limits
	LCS %Recovery		LCS %Recovery					
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1872596-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTTrDA)	108		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	123		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	101		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	110		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	101		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	96		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUS)	86		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	116		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	113		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	95		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	104		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	98		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	95		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	150		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	121		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	111		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	95		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	65		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	Low Level LCS		Low Level LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1872596-2 LOW LEVEL								

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	83				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	98				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	69				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	110				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	57				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	76				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	84				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	84				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	95				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	56				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	78				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	80				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	73				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	90				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	69				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	59				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	75				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	60				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	49				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	63				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	64				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	64				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	83				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	90				20-150

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS	Qual	LCSD	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1872596-3								
Perfluorobutanoic Acid (PFBA)	113		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	121		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	116		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	111		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	108		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	116		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	126		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	110		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	106		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	113		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	118		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	98		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	114		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	105		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	136		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	89		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	134		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	120		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	82		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	112		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	107		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	106		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1872596-3								
Perfluorotridecanoic Acid (PFTTrDA)	127		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTTeDA)	120		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	115		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	134		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	87		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	141		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	111		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	129		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	119		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	113		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	122		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	112		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	97		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	114		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	120		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	96		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	83		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	60		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS, NY

Lab Number: L2400777

Project Number: 09313

Report Date: 01/16/24

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1872596-3									

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	82				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	128				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	83				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	93				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	99				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	94				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	82				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	82				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	81				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	61				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	82				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	92				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	68				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	66				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	78				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	50				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	62				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	74				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	62				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	77				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	53				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	64				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	83				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	80				20-150

## Matrix Spike Analysis

Batch Quality Control

**Project Name:** GROSSINGERS, NY

**Lab Number:** L2400777

**Project Number:** 09313

**Report Date:** 01/16/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1872596-4 WG1872596-5 QC Sample: L2400777-01 Client ID: MW-213												
Perfluorobutanoic Acid (PFBA)	7.94	80.4	104	120		116	132		40-150	11		30
Perfluoropentanoic Acid (PFPeA)	4.54	40.2	56.7	130		63.1	143		40-150	11		30
Perfluorobutanesulfonic Acid (PFBS)	2.05	17.8	20.6	104		29.1	149		40-150	34	Q	30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	75.3	83.2	110		109	142		40-150	27		30
Perfluorohexanoic Acid (PFHxA)	5.73	20.1	31.8	130		35.6	146		40-150	11		30
Perfluoropentanesulfonic Acid (PFPeS)	1.72	18.9	27.8	138		27.0	131		40-150	3		30
Perfluoroheptanoic Acid (PFHpA)	4.91	20.1	28.4	117		33.6	140		40-150	17		30
Perfluorohexanesulfonic Acid (PFHxS)	6.24	18.4	31.4	137		28.4	119		40-150	10		30
Perfluorooctanoic Acid (PFOA)	23.6	20.1	44.3	103		54.3	150		40-150	20		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	6.37	76.4	89.7	109		113	137		40-150	23		30
Perfluoroheptanesulfonic Acid (PFHpS)	1.32J	19.1	44.0	223	Q	29.0	142		40-150	41	Q	30
Perfluorononanoic Acid (PFNA)	2.59	20.1	27.8	125		30.6	137		40-150	10		30
Perfluorooctanesulfonic Acid (PFOS)	76.0	18.6	124	257	Q	112	190	Q	40-150	10		30
Perfluorodecanoic Acid (PFDA)	1.10J	20.1	35.4	171	Q	25.0	117		40-150	34	Q	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	77.2	99.6	129		131	167	Q	40-150	27		30
Perfluorononanesulfonic Acid (PFNS)	ND	19.3	19.7	102		22.2	113		40-150	12		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	20.1	29.3	146		34.5	169	Q	40-150	16		30
Perfluoroundecanoic Acid (PFUnA)	ND	20.1	29.7	148		27.5	135		40-150	8		30
Perfluorodecanesulfonic Acid (PFDS)	ND	19.4	24.2	125		22.0	112		40-150	10		30
Perfluorooctanesulfonamide (PFOSA)	ND	20.1	31.3	156	Q	33.5	164	Q	40-150	7		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	20.1	27.4	136		27.1	133		40-150	1		30
Perfluorododecanoic Acid (PFDoA)	ND	20.1	23.9	119		26.7	131		40-150	11		30

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** GROSSINGERS, NY

**Project Number:** 09313

**Lab Number:** L2400777

**Report Date:** 01/16/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1872596-4 WG1872596-5 QC Sample: L2400777-01 Client ID: MW-213												
Perfluorotridecanoic Acid (PFTrDA)	ND	20.1	27.2	135		26.1	128		40-150	4		30
Perfluorotetradecanoic Acid (PFTeDA)	ND	20.1	25.3	126		26.6	130		40-150	5		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	80.4	100	124		125	153	Q	40-150	22		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	75.9	112	147		133	172	Q	40-150	17		30
Perfluorododecanesulfonic Acid (PFDoS)	ND	19.5	21.6	111		22.5	113		40-150	4		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	75.1	91.5	122		110	144		40-150	18		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	75.9	90.2	119		114	148		40-150	23		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND	20.1	30.6	152	Q	32.0	157	Q	40-150	4		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND	20.1	27.7	138		32.0	157	Q	40-150	14		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND	201	260	129		264	129		40-150	2		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND	201	274	136		295	144		40-150	7		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	40.2	39.5	98		47.5	116		40-150	18		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	40.2	49.3	123		61.4	150		40-150	22		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	35.8	45.3	127		59.3	163	Q	40-150	27		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	40.2	47.0	117		57.6	141		40-150	20		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND	100	138	137		141	138		40-150	2		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND	502	483	96		581	114		40-150	18		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND	502	432	86		511	100		40-150	17		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** GROSSINGERS, NY

**Lab Number:** L2400777

**Project Number:** 09313

**Report Date:** 01/16/24

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1872596-4 WG1872596-5 QC Sample: L2400777-01  
Client ID: MW-213

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	108		66		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	<b>196</b>	Q	123		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	114		66		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	73		64		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	73		63		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	87		83		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	68		65		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	86		72		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	92		84		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	88		74		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	56		53		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	73		77		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	109		68		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	68		77		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	57		87		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	79		74		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	81		81		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	62		71		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	53		56		20-150
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	83		76		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	90		98		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	88		67		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	70		67		20-150

### Matrix Spike Analysis Batch Quality Control

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1872596-4 WG1872596-5 QC Sample: L2400777-01 Client ID: MW-213												

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>MS Qualifier</b>	<b>MSD % Recovery</b>	<b>MSD Qualifier</b>	<b>Acceptance Criteria</b>
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	59		62		20-150

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

Serial\_No:01162417:27  
**Lab Number:** L2400777  
**Report Date:** 01/16/24

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

**Cooler**                      **Custody Seal**  
A                                      Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2400777-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-01D	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-01E	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-01F	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-02A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-02B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-02C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-02D	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-02E	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-02F	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-03D	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-03E	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-03F	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-04A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-04B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-04C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-04D	Plastic 500ml unpreserved	A	NA		2.5	Y	Absent		A2-1633-DRAFT(28)
L2400777-04E	Plastic 500ml unpreserved	NA	NA			Y	Absent		-

\*Values in parentheses indicate holding time in days



**Project Name:** GROSSINGERS, NY

**Project Number:** 09313

Serial\_No:01162417:27

**Lab Number:** L2400777

**Report Date:** 01/16/24

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2400777-04F	Plastic 500ml unpreserved	NA	NA			Y	Absent		-
L2400777-05A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)
L2400777-05B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260(14)

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

Serial\_No:01162417:27  
**Lab Number:** L2400777  
**Report Date:** 01/16/24

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

Serial\_No:01162417:27  
**Lab Number:** L2400777  
**Report Date:** 01/16/24

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** GROSSINGERS, NY  
**Project Number:** 09313

**Lab Number:** L2400777  
**Report Date:** 01/16/24

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 144 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS. Draft EPA Method 1633, EPA Document 821-D-22-001, June 2022.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW JERSEY</b> <b>CHAIN OF</b> <b>CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	11/5/24	ALPHA Job # 2400777		
		of					
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Project Information</b>		<b>Deliverables</b>		<b>Billing Information</b>	
<b>Client Information</b>		Project Name: <u>Grossingers, NY</u>		<input type="checkbox"/> NJ Full / Reduced <input type="checkbox"/> EQulS (1 File) <input type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #	
Client: <u>SESI Engineers</u>		Project Location: <u>Liberty, NY</u>		<b>Regulatory Requirement</b>		<b>Site Information</b>	
Address: <u>959 US46</u>		Project # <u>09313</u>					
Phone: <u>(973)-2808-9050</u>		(Use Project name as Project #) <input checked="" type="checkbox"/>		<input type="checkbox"/> SRS Residential/Non Residential <input type="checkbox"/> SRS Impact to Groundwater <input type="checkbox"/> NJ Ground Water Quality Standards <input type="checkbox"/> NJ IGW SPLP Leachate Criteria <input type="checkbox"/> Other		Is this site impacted by Petroleum? Yes <input type="checkbox"/>  Petroleum Product:	
Email:		Project Manager: <u>Matthew Majorosy</u>					
These samples have been previously analyzed by Alpha <input type="checkbox"/>		ALPHAQuote #:		<b>ANALYSIS</b>		<b>Sample Filtration</b>	
For EPH, selection is REQUIRED: <input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2		For VOC, selection is REQUIRED: <input type="checkbox"/> 1,4-Dioxane <input type="checkbox"/> 8011					
Other project specific requirements/comments:  Please specify Metals or TAL.		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		VOCs PFAS		Preservation <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do  (Please Specify below)	
ALPHA Lab ID (Lab Use Only)						Sample ID	
		Collection Date      Time		Sample Matrix		Sampler's Initials	
		<u>01 MW-213 1-4-24 3:40 pm</u>		<u>RR</u>		<u>RR</u>	
		<u>02 MW-214 1-4-24 4:25 pm</u>		<u>RR</u>		<u>RR</u>	
		<u>03 MW-206 1-4-24 3:50 pm</u>		<u>TD</u>		<u>TD</u>	
		<u>04 Field Blank 1-4-24 5:00 pm</u>		<u>RR</u>		<u>RR</u>	
		<u>05 Trip Blank 1-4-24 5:00 pm</u>		<u>RR</u>		<u>RR</u>	
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type  Preservative	
Form No: 01-14 HC (rev. 30-Sept-2013)		Relinquished By: <u>Thomas Duda</u> Date/Time: <u>1-4-2024 7:05 p</u>		Received By: <u>[Signature]</u> Date/Time: <u>1/4/24 19:05</u>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By: <u>[Signature]</u> Date/Time: <u>1/4/24 19:08</u>		Received By: <u>[Signature]</u> Date/Time: <u>1/4/24 19:15</u>			
		Relinquished By: <u>[Signature]</u> Date/Time: <u>11/5/24</u>		Received By: <u>[Signature]</u> Date/Time: <u>11/5/24 00:30</u>			



## ANALYTICAL REPORT

Lab Number:	L2400969
Client:	Soils Engineering Services, Inc. 959 Route 46E Parsippany, NJ 07054
ATTN:	Matthew Majorossy
Phone:	(973) 808-9050
Project Name:	GROSSINGERS
Project Number:	09313
Report Date:	01/18/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2400969-01	MW-207	WATER	LIBERTY, NY	01/05/24 13:50	01/05/24
L2400969-02	MW-203	WATER	LIBERTY, NY	01/05/24 14:00	01/05/24
L2400969-03	MW-216	WATER	LIBERTY, NY	01/05/24 11:40	01/05/24
L2400969-04	MW-217	WATER	LIBERTY, NY	01/05/24 12:05	01/05/24
L2400969-05	DUP2024-01-05	WATER	LIBERTY, NY	01/05/24 00:00	01/05/24
L2400969-06	TRIP BLANK	WATER	LIBERTY, NY	01/05/24 00:00	01/05/24

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

### Case Narrative (continued)

#### Report Submission

January 18, 2024: This final report includes the results of all requested analyses.

January 10, 2024: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Perfluorinated Alkyl Acids by 1633

L2400969-02, -03, -04, -05, WG1873126-4, and WG1873126-5: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1873126-2R: The sample was re-analyzed due to QC failures in the original analysis. The results of the re-analysis are reported.

The WG1873126-4/-5 MS/MSD recoveries, performed on L2400969-02, are outside the acceptance criteria for perfluorodecanoic acid (pfda) (MS 155%), n-methyl perfluorooctanesulfonamidoacetic acid (nmefosaa) (179%/157%), perfluorooctanesulfonamide (fosa) (MS 151%), n-ethyl perfluorooctanesulfonamidoacetic acid (netfosaa) (MS 202%), perfluorododecanoic acid (pfdoa) (MS 185%), perfluorotridecanoic acid (pftdda) (MS 186%), perfluorotetradecanoic acid (pfta) (MS 207%), n-methyl perfluorooctane sulfonamide (nmefosa) (195%/172%), n-ethyl perfluorooctane sulfonamide (netfosa) (194%/153%), n-methyl perfluorooctanesulfonamido ethanol (nmefose) (MS 188%), and n-ethyl perfluorooctanesulfonamido ethanol (netfose) (MS 200%).

The WG1873126-4/-5 MS/MSD RPDs, performed on L2400969-02, are outside the acceptance criteria for perfluorodecanoic acid (pfda) (32%), 1h,1h,2h,2h-perfluorodecanesulfonic acid (8:2fts) (33%), n-ethyl perfluorooctanesulfonamidoacetic acid (netfosaa) (38%), perfluorododecanoic acid (pfdoa) (35%), perfluorotridecanoic acid (pftdda) (42%), perfluorotetradecanoic acid (pfta) (37%), n-methyl perfluorooctanesulfonamido ethanol (nmefose) (32%), and n-ethyl perfluorooctanesulfonamido ethanol (netfose) (37%).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 01/18/24

# ORGANICS

# VOLATILES

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-01  
 Client ID: MW-207  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 13:50  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 11:59  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-01  
 Client ID: MW-207  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 13:50  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-01  
 Client ID: MW-207  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 13:50  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds ND ug/l 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	103		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-02  
 Client ID: MW-203  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 14:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 12:21  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-02  
 Client ID: MW-203  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 14:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-02  
 Client ID: MW-203  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 14:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	101		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-03  
 Client ID: MW-216  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 11:40  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 12:43  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	8.5		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-03  
 Client ID: MW-216  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 11:40  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	2.5	J	ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-03  
 Client ID: MW-216  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 11:40  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	3.78	J	ug/l			1
Fluorodichloromethane	3.78	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	103		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-04  
 Client ID: MW-217  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 12:05  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 13:04  
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	3.7		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-04  
 Client ID: MW-217  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 12:05  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-04  
 Client ID: MW-217  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 12:05  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	103		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-05  
 Client ID: DUP2024-01-05  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 00:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 13:26  
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	1.2	J	ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-05  
 Client ID: DUP2024-01-05  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 00:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1



**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-06  
 Client ID: TRIP BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 00:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 01/09/24 15:11  
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-06  
 Client ID: TRIP BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 00:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-06  
 Client ID: TRIP BLANK  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 00:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds ND ug/l 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

#### Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 08:22  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1872354-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	102		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 10:26  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1872490-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 10:26  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1872490-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 10:26  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1872490-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 01/09/24 10:26  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1872490-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	96		91		63-132	5		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	87		84		63-130	4		20
1,1,2-Trichloroethane	94		93		70-130	1		20
Tetrachloroethene	98		86		70-130	13		20
Chlorobenzene	100		94		75-130	6		20
Trichlorofluoromethane	91		86		62-150	6		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	98		91		67-130	7		20
Bromodichloromethane	95		92		67-130	3		20
trans-1,3-Dichloropropene	97		94		70-130	3		20
cis-1,3-Dichloropropene	94		91		70-130	3		20
1,1-Dichloropropene	100		93		70-130	7		20
Bromoform	81		81		54-136	0		20
1,1,2,2-Tetrachloroethane	92		100		67-130	8		20
Benzene	100		97		70-130	3		20
Toluene	110		97		70-130	13		20
Ethylbenzene	110		98		70-130	12		20
Chloromethane	110		100		64-130	10		20
Bromomethane	86		80		39-139	7		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Project Number: 09313

Lab Number: L2400969

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
Vinyl chloride	98		91		55-140	7		20
Chloroethane	110		100		55-138	10		20
1,1-Dichloroethene	92		85		61-145	8		20
trans-1,2-Dichloroethene	98		89		70-130	10		20
Trichloroethene	97		89		70-130	9		20
1,2-Dichlorobenzene	100		92		70-130	8		20
1,3-Dichlorobenzene	100		93		70-130	7		20
1,4-Dichlorobenzene	100		93		70-130	7		20
Methyl tert butyl ether	81		86		63-130	6		20
p/m-Xylene	105		95		70-130	10		20
o-Xylene	105		95		70-130	10		20
cis-1,2-Dichloroethene	99		93		70-130	6		20
Dibromomethane	88		93		70-130	6		20
1,2,3-Trichloropropane	94		100		64-130	6		20
Acrylonitrile	93		100		70-130	7		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	68		64		36-147	6		20
Acetone	89		100		58-148	12		20
Carbon disulfide	100		90		51-130	11		20
2-Butanone	80		96		63-138	18		20
Vinyl acetate	100		110		70-130	10		20
4-Methyl-2-pentanone	81		92		59-130	13		20
2-Hexanone	78		92		57-130	16		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
Bromochloromethane	89		88		70-130	1		20
2,2-Dichloropropane	110		100		63-133	10		20
1,2-Dibromoethane	90		90		70-130	0		20
1,3-Dichloropropane	100		97		70-130	3		20
1,1,1,2-Tetrachloroethane	94		86		64-130	9		20
Bromobenzene	99		92		70-130	7		20
n-Butylbenzene	110		99		53-136	11		20
sec-Butylbenzene	110		96		70-130	14		20
tert-Butylbenzene	100		94		70-130	6		20
o-Chlorotoluene	110		100		70-130	10		20
p-Chlorotoluene	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	73		79		41-144	8		20
Hexachlorobutadiene	91		79		63-130	14		20
Isopropylbenzene	110		97		70-130	13		20
p-Isopropyltoluene	110		93		70-130	17		20
Naphthalene	82		85		70-130	4		20
n-Propylbenzene	110		100		69-130	10		20
1,2,3-Trichlorobenzene	88		85		70-130	3		20
1,2,4-Trichlorobenzene	92		84		70-130	9		20
1,3,5-Trimethylbenzene	110		97		64-130	13		20
1,2,4-Trimethylbenzene	110		97		70-130	13		20
1,4-Dioxane	82		92		56-162	11		20
p-Diethylbenzene	100		90		70-130	11		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Project Number: 09313

Lab Number: L2400969

Report Date: 01/18/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1872354-3 WG1872354-4								
p-Ethyltoluene	110		98		70-130	12		20
1,2,4,5-Tetramethylbenzene	96		87		70-130	10		20
Ethyl ether	83		85		59-134	2		20
trans-1,4-Dichloro-2-butene	98		110		70-130	12		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	105		113		70-130
Toluene-d8	107		105		70-130
4-Bromofluorobenzene	107		109		70-130
Dibromofluoromethane	96		99		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1872490-3 WG1872490-4								
Methylene chloride	98		95		70-130	3		20
1,1-Dichloroethane	100		97		70-130	3		20
Chloroform	98		95		70-130	3		20
Carbon tetrachloride	100		98		63-132	2		20
1,2-Dichloropropane	99		97		70-130	2		20
Dibromochloromethane	96		93		63-130	3		20
1,1,2-Trichloroethane	98		97		70-130	1		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	92		89		62-150	3		20
1,2-Dichloroethane	93		92		70-130	1		20
1,1,1-Trichloroethane	98		95		67-130	3		20
Bromodichloromethane	94		91		67-130	3		20
trans-1,3-Dichloropropene	98		98		70-130	0		20
cis-1,3-Dichloropropene	95		92		70-130	3		20
1,1-Dichloropropene	100		95		70-130	5		20
Bromoform	91		91		54-136	0		20
1,1,1,2-Tetrachloroethane	94		93		67-130	1		20
Benzene	100		96		70-130	4		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	90		88		64-130	2		20
Bromomethane	27	Q	31	Q	39-139	14		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1872490-3 WG1872490-4								
Vinyl chloride	90		87		55-140	3		20
Chloroethane	92		88		55-138	4		20
1,1-Dichloroethene	88		84		61-145	5		20
trans-1,2-Dichloroethene	96		94		70-130	2		20
Trichloroethene	94		91		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	87		85		63-130	2		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	96		94		70-130	2		20
Dibromomethane	91		89		70-130	2		20
1,2,3-Trichloropropane	97		96		64-130	1		20
Acrylonitrile	93		89		70-130	4		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	73		69		36-147	6		20
Acetone	91		90		58-148	1		20
Carbon disulfide	88		85		51-130	3		20
2-Butanone	87		85		63-138	2		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	92		87		59-130	6		20
2-Hexanone	82		81		57-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Project Number: 09313

Lab Number: L2400969

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1872490-3 WG1872490-4								
Bromochloromethane	96		94		70-130	2		20
2,2-Dichloropropane	100		96		63-133	4		20
1,2-Dibromoethane	98		95		70-130	3		20
1,3-Dichloropropane	100		98		70-130	2		20
1,1,1,2-Tetrachloroethane	100		99		64-130	1		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		100		53-136	10		20
sec-Butylbenzene	110		100		70-130	10		20
tert-Butylbenzene	110		100		70-130	10		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	84		84		41-144	0		20
Hexachlorobutadiene	110		100		63-130	10		20
Isopropylbenzene	110		100		70-130	10		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	85		87		70-130	2		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	90		90		70-130	0		20
1,2,4-Trichlorobenzene	95		96		70-130	1		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
1,4-Dioxane	62		64		56-162	3		20
p-Diethylbenzene	110		100		70-130	10		20

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1872490-3 WG1872490-4								
p-Ethyltoluene	110		100		70-130	10		20
1,2,4,5-Tetramethylbenzene	100		99		70-130	1		20
Ethyl ether	82		81		59-134	1		20
trans-1,4-Dichloro-2-butene	95		94		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	106		104		70-130
4-Bromofluorobenzene	104		105		70-130
Dibromofluoromethane	98		98		70-130

# SEMIVOLATILES

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-01  
 Client ID: MW-207  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 13:50  
 Date Received: 01/05/24  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Water  
 Analytical Method: 144,1633  
 Analytical Date: 01/11/24 16:43  
 Analyst: JW

Extraction Method: EPA 1633  
 Extraction Date: 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.02	0.963	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.01	0.805	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.50	0.504	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.02	1.57	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.50	0.444	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.50	0.263	1
Perfluoroheptanoic Acid (PFHpA)	0.474	J	ng/l	1.50	0.301	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.50	0.361	1
Perfluorooctanoic Acid (PFOA)	1.32	J	ng/l	1.50	0.654	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	3.04	J	ng/l	6.02	2.03	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.50	0.406	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.50	0.474	1
Perfluorooctanesulfonic Acid (PFOS)	5.44		ng/l	1.50	0.684	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.50	0.609	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.02	2.34	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.50	0.466	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.50	0.820	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.50	0.654	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.50	0.346	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.50	0.406	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.50	0.812	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.50	0.692	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.50	0.564	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.50	0.399	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.02	0.842	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.02	0.948	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.50	0.572	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-01  
**Client ID:** MW-207  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 13:50  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.02	1.24	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.02	1.24	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.50	0.654	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.50	0.692	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.0	3.53	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.0	1.84	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.01	0.429	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.01	0.399	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.01	0.331	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.01	1.77	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.52	2.48	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.6	8.80	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.6	5.93	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-01  
 Client ID: MW-207  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 13:50  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	92		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	92		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	81		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	140		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	76		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	102		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	93		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	85		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	102		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	83		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	74		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	88		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	97		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	79		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	74		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	54		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	67		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	58		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	49		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	70		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	49		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	50		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	64		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	77		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-02  
 Client ID: MW-203  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 14:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Water  
 Analytical Method: 144,1633  
 Analytical Date: 01/11/24 16:56  
 Analyst: JW

Extraction Method: EPA 1633  
 Extraction Date: 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	7.23	1.16	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.62	0.967	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.81	0.606	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	7.23	1.89	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.81	0.533	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.81	0.316	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.81	0.362	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.81	0.434	1
Perfluorooctanoic Acid (PFOA)	1.06	J	ng/l	1.81	0.787	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	19.0		ng/l	7.23	2.44	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.81	0.488	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.81	0.570	1
Perfluorooctanesulfonic Acid (PFOS)	10.8		ng/l	1.81	0.823	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.81	0.732	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	7.23	2.81	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.81	0.560	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.81	0.986	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.81	0.787	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.81	0.416	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.81	0.488	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.81	0.976	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.81	0.832	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.81	0.678	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.81	0.479	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	7.23	1.01	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	7.23	1.14	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.81	0.687	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-02  
**Client ID:** MW-203  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 14:00  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	7.23	1.49	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	7.23	1.49	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.81	0.787	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.81	0.832	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	18.1	4.25	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	18.1	2.22	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.62	0.515	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.62	0.479	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.62	0.398	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.62	2.13	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	9.04	2.98	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	45.2	10.6	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	45.2	7.13	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-02  
 Client ID: MW-203  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 14:00  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	97		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	104		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	86		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	218	Q	20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	94		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	114		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	101		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	97		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	123		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	71		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	69		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	118		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	35		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	45		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	31		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	35		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	31		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	21		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	96		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	30		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	25		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	31		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	31		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-03  
**Client ID:** MW-216  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 11:40  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 01/11/24 17:34  
**Analyst:** JW

**Extraction Method:** EPA 1633  
**Extraction Date:** 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	5.49	J	ng/l	6.04	0.966	1
Perfluoropentanoic Acid (PFPeA)	2.04	J	ng/l	3.02	0.807	1
Perfluorobutanesulfonic Acid (PFBS)	1.53		ng/l	1.51	0.505	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.04	1.58	1
Perfluorohexanoic Acid (PFHxA)	2.62		ng/l	1.51	0.445	1
Perfluoropentanesulfonic Acid (PFPeS)	0.588	J	ng/l	1.51	0.264	1
Perfluoroheptanoic Acid (PFHpA)	1.82		ng/l	1.51	0.302	1
Perfluorohexanesulfonic Acid (PFHxS)	2.47		ng/l	1.51	0.362	1
Perfluorooctanoic Acid (PFOA)	10.4		ng/l	1.51	0.656	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	3.33	J	ng/l	6.04	2.04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.51	0.407	1
Perfluorononanoic Acid (PFNA)	0.604	J	ng/l	1.51	0.475	1
Perfluorooctanesulfonic Acid (PFOS)	14.9		ng/l	1.51	0.686	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.51	0.611	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.04	2.35	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.51	0.468	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.51	0.822	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.51	0.656	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.51	0.347	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.51	0.407	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.51	0.815	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.51	0.694	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.51	0.566	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.51	0.400	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.04	0.845	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.04	0.951	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.51	0.573	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-03  
**Client ID:** MW-216  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 11:40  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.04	1.24	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.04	1.24	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.51	0.656	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.51	0.694	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.1	3.54	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.1	1.85	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.02	0.430	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.02	0.400	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.02	0.332	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.02	1.78	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.54	2.49	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.7	8.83	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.7	5.95	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-03  
 Client ID: MW-216  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 11:40  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	90		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	83		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	87		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	165	Q	20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	83		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	88		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	86		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	83		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	96		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	95		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	91		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	91		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	97		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	97		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	68		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	62		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	73		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	67		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	50		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	73		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	57		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	58		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	87		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	92		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-04  
 Client ID: MW-217  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 12:05  
 Date Received: 01/05/24  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Water  
 Analytical Method: 144,1633  
 Analytical Date: 01/11/24 17:47  
 Analyst: JW

Extraction Method: EPA 1633  
 Extraction Date: 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.79	1.09	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.39	0.908	1
Perfluorobutanesulfonic Acid (PFBS)	0.865	J	ng/l	1.70	0.568	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.79	1.77	1
Perfluorohexanoic Acid (PFHxA)	0.959	J	ng/l	1.70	0.501	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.70	0.297	1
Perfluoroheptanoic Acid (PFHpA)	0.772	J	ng/l	1.70	0.339	1
Perfluorohexanesulfonic Acid (PFHxS)	1.48	J	ng/l	1.70	0.407	1
Perfluorooctanoic Acid (PFOA)	6.08		ng/l	1.70	0.738	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	9.59		ng/l	6.79	2.29	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.518	J	ng/l	1.70	0.458	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.70	0.534	1
Perfluorooctanesulfonic Acid (PFOS)	35.2		ng/l	1.70	0.772	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.70	0.687	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.79	2.64	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.70	0.526	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.70	0.925	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.70	0.738	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.70	0.390	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.70	0.458	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.70	0.916	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.70	0.781	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.70	0.636	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.70	0.450	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.79	0.950	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.79	1.07	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.70	0.645	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-04  
**Client ID:** MW-217  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 12:05  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.79	1.40	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.79	1.40	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.70	0.738	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.70	0.781	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	17.0	3.99	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	17.0	2.08	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.39	0.484	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.39	0.450	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.39	0.373	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.39	2.00	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.48	2.80	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	42.4	9.93	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	42.4	6.69	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

Lab ID: L2400969-04  
 Client ID: MW-217  
 Sample Location: LIBERTY, NY

Date Collected: 01/05/24 12:05  
 Date Received: 01/05/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	82		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	81		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	71		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	125		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	64		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	81		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	76		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	79		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	81		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	86		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	64		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	51		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	55		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	31		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	37		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	28		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	28		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	37		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	21		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	70		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	19	Q	20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	24		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	35		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	37		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-05  
**Client ID:** DUP2024-01-05  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 00:00  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 01/11/24 18:00  
**Analyst:** JW

**Extraction Method:** EPA 1633  
**Extraction Date:** 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	5.48	J	ng/l	5.79	0.926	1
Perfluoropentanoic Acid (PFPeA)	2.25	J	ng/l	2.89	0.774	1
Perfluorobutanesulfonic Acid (PFBS)	1.24	J	ng/l	1.45	0.485	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.79	1.51	1
Perfluorohexanoic Acid (PFHxA)	2.71		ng/l	1.45	0.427	1
Perfluoropentanesulfonic Acid (PFPeS)	0.637	J	ng/l	1.45	0.253	1
Perfluoroheptanoic Acid (PFHpA)	1.71		ng/l	1.45	0.289	1
Perfluorohexanesulfonic Acid (PFHxS)	2.13		ng/l	1.45	0.347	1
Perfluorooctanoic Acid (PFOA)	8.42		ng/l	1.45	0.629	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	4.30	J	ng/l	5.79	1.95	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.45	0.391	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.45	0.456	1
Perfluorooctanesulfonic Acid (PFOS)	13.1		ng/l	1.45	0.658	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.45	0.586	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.79	2.25	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.45	0.449	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.45	0.789	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.45	0.629	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.45	0.333	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.45	0.391	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.45	0.781	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.45	0.666	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.45	0.543	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.45	0.383	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.79	0.810	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.79	0.912	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.45	0.550	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-05  
**Client ID:** DUP2024-01-05  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 00:00  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.79	1.19	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.79	1.19	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.45	0.629	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.45	0.666	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.5	3.40	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.5	1.77	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.89	0.412	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.89	0.383	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.89	0.318	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.89	1.71	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.24	2.39	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	36.2	8.46	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	36.2	5.71	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**SAMPLE RESULTS**

**Lab ID:** L2400969-05  
**Client ID:** DUP2024-01-05  
**Sample Location:** LIBERTY, NY

**Date Collected:** 01/05/24 00:00  
**Date Received:** 01/05/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	89		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	90		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	83		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	160	Q	20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	89		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	88		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	88		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	90		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	95		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	88		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	62		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	74		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	79		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	52		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	64		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	38		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	36		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	52		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	44		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	73		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	34		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	34		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	46		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	51		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 144,1633  
Analytical Date: 01/11/24 15:13  
Analyst: JW

Extraction Method: EPA 1633  
Extraction Date: 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-05 Batch: WG1873126-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.40	1.02
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.20	0.856
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.60	0.536
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.40	1.67
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.60	0.472
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.60	0.280
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.60	0.320
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.60	0.384
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.60	0.696
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.40	2.16
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.60	0.432
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.60	0.504
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.60	0.728
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.60	0.648
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.40	2.49
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.60	0.496
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.60	0.872
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.60	0.696
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.60	0.368
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.60	0.432
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.60	0.864
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.60	0.736
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.60	0.600
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.60	0.424
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.40	0.896
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.40	1.01
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.60	0.608

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 144,1633  
Analytical Date: 01/11/24 15:13  
Analyst: JW

Extraction Method: EPA 1633  
Extraction Date: 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-05 Batch: WG1873126-1					
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.40	1.32
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.40	1.32
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.60	0.696
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.60	0.736
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	16.0	3.76
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	16.0	1.96
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.20	0.456
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.20	0.424
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.20	0.352
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.20	1.89
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.00	2.64
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	40.0	9.36
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	40.0	6.31

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 144,1633  
Analytical Date: 01/11/24 15:13  
Analyst: JW

Extraction Method: EPA 1633  
Extraction Date: 01/11/24 08:14

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-05 Batch: WG1873126-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	94		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	101		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	101		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	112		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	85		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	91		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	89		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	89		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	98		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	92		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	85		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	117		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	86		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	74		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	61		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	76		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	67		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	59		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	69		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	34		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	42		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	87		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	95		20-150

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	Low Level	Qual	Low Level	Qual	%Recovery Limits	RPD	Qual	RPD Limits
	LCS %Recovery		LCS %Recovery					
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 Batch: WG1873126-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	103		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	106		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	112		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	100		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	95		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	94		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	100		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	96		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	112		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	99		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	113		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	87		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	93		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	109		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	108		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	83		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	138		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	94		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	95		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	98		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	97		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	102		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 Batch: WG1873126-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTTrDA)	92		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	104		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	101		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	115		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	92		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	113		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	96		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	101		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	116		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	102		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	103		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	86		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	86		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	103		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	108		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	93		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	57		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	43		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	Low Level LCS		Low Level LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 Batch: WG1873126-2 LOW LEVEL								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	94				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	102				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	84				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	104				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	94				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	90				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	89				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	88				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	86				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	91				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	103				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	85				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	87				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	103				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	89				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	78				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	104				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	86				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	59				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	79				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	44				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	48				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	105				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	123				20-150

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 Batch: WG1873126-3								
Perfluorobutanoic Acid (PFBA)	100		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	102		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	103		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	125		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	99		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	107		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	95		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	88		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	89		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	96		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	109		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	95		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	122		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	126		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	97		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	100		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	128		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	79		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	98		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	99		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	105		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	97		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 Batch: WG1873126-3								
Perfluorotridecanoic Acid (PFTTrDA)	107		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	102		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	110		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	110		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	113		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	130		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUS)	105		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	122		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	112		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	101		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	100		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	103		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	102		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	138		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	116		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	108		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	83		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	59		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2400969

Project Number: 09313

Report Date: 01/18/24

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits			Qual	Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 Batch: WG1873126-3									

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	96				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	103				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	95				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	99				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	88				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	106				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	100				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	100				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	94				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	82				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	95				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	78				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	95				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	122				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	113				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	88				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	102				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	83				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	72				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	88				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	64				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	69				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	118				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	134				20-150

## Matrix Spike Analysis

Batch Quality Control

**Project Name:** GROSSINGERS

**Lab Number:** L2400969

**Project Number:** 09313

**Report Date:** 01/18/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1873126-4 WG1873126-5 QC Sample: L2400969-02 Client ID: MW-203												
Perfluorobutanoic Acid (PFBA)	ND	87.2	85.5	98		92.9	111		40-150	8		30
Perfluoropentanoic Acid (PFPeA)	ND	43.6	41.6	95		47.8	115		40-150	14		30
Perfluorobutanesulfonic Acid (PFBS)	ND	19.3	20.8	108		23.6	128		40-150	13		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	81.7	71.3	87		84.0	108		40-150	16		30
Perfluorohexanoic Acid (PFHxA)	ND	21.8	21.6	99		25.4	122		40-150	16		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	20.5	18.3	89		23.0	117		40-150	23		30
Perfluoroheptanoic Acid (PFHpA)	ND	21.8	19.9	91		24.2	116		40-150	20		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	19.9	19.5	98		21.5	113		40-150	10		30
Perfluorooctanoic Acid (PFOA)	1.06J	21.8	21.8	95		22.4	102		40-150	3		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	19.0	82.8	94.2	91		103	106		40-150	9		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	20.8	29.3	141		27.1	136		40-150	8		30
Perfluorononanoic Acid (PFNA)	ND	21.8	18.9	87		21.6	104		40-150	13		30
Perfluorooctanesulfonic Acid (PFOS)	10.8	20.2	35.2	121		28.9	94		40-150	20		30
Perfluorodecanoic Acid (PFDA)	ND	21.8	33.8	155	Q	24.6	118		40-150	32	Q	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	83.7	119	142		85.0	106		40-150	33	Q	30
Perfluorononanesulfonic Acid (PFNS)	ND	21	18.2	87		14.4	72		40-150	23		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	21.8	38.9	179	Q	32.8	157	Q	40-150	17		30
Perfluoroundecanoic Acid (PFUnA)	ND	21.8	27.1	124		30.6	147		40-150	12		30
Perfluorodecanesulfonic Acid (PFDS)	ND	21	14.4	68		12.8	64		40-150	12		30
Perfluorooctanesulfonamide (PFOSA)	ND	21.8	32.8	151	Q	24.3F	117		40-150	30		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	21.8	44.1	202	Q	29.9	144		40-150	38	Q	30
Perfluorododecanoic Acid (PFDoA)	ND	21.8	40.3	185	Q	28.3	136		40-150	35	Q	30

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** GROSSINGERS

**Project Number:** 09313

**Lab Number:** L2400969

**Report Date:** 01/18/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1873126-4 WG1873126-5 QC Sample: L2400969-02 Client ID: MW-203												
Perfluorotridecanoic Acid (PFTTrDA)	ND	21.8	40.6	186	Q	26.4	127		40-150	42	Q	30
Perfluorotetradecanoic Acid (PFTTeDA)	ND	21.8	45.1	207	Q	31.1	149		40-150	37	Q	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	87.2	91.0	104		82.2	99		40-150	10		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	82.4	105	127		104	132		40-150	1		30
Perfluorododecanesulfonic Acid (PFDoS)	ND	21.1	13.9	66		14.3	71		40-150	3		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	81.5	86.3	106		80.1	103		40-150	7		30
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	82.4	62.9	76		53.4	68		40-150	16		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND	21.8	42.5	195	Q	35.9	172	Q	40-150	17		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND	21.8	42.3	194	Q	31.8	153	Q	40-150	28		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND	218	410	188	Q	297	143		40-150	32	Q	30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND	218	436	200	Q	299	144		40-150	37	Q	30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	43.6	39.9	92		39.6	95		40-150	1		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	43.6	44.0	101		49.0	118		40-150	11		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	38.8	41.5	107		48.9	132		40-150	16		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	43.6	34.7	80		45.4	109		40-150	27		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND	109	122	112		145	139		40-150	17		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND	545	393	72		509	98		40-150	26		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND	545	333	61		349	67		40-150	5		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** GROSSINGERS

**Lab Number:** L2400969

**Project Number:** 09313

**Report Date:** 01/18/24

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1873126-4 WG1873126-5 QC Sample: L2400969-02  
Client ID: MW-203

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	86		106		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	<b>161</b>	Q	<b>188</b>	Q	20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	102		109		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	26		30		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	35		43		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	32		46		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	27		32		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	42		54		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	31		40		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	94		89		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	30		40		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	69		74		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	74		88		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	52		56		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	53		74		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	106		81		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	119		94		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	29		48		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	20		32		20-150
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	87		87		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	94		80		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	88		86		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	93		101		20-150

### Matrix Spike Analysis Batch Quality Control

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1873126-4 WG1873126-5 QC Sample: L2400969-02 Client ID: MW-203												

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	84		75		20-150

**Project Name:** GROSSINGERS**Lab Number:** L2400969**Project Number:** 09313**Report Date:** 01/18/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2400969-01A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-01B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-01C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-01D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-01E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-01F	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-02A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-02B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-02C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-02D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-02E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-02F	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-03A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-03B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-03C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-03D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-03E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-03F	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-04A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-04B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-04C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-04D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)

**Project Name:** GROSSINGERS  
**Project Number:** 09313

Serial\_No:01182414:04  
**Lab Number:** L2400969  
**Report Date:** 01/18/24

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2400969-04E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-04F	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-05A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-05B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-05C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-05D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-05E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-05F	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-1633-DRAFT(28)
L2400969-06A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)
L2400969-06B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYTCL-8260(14)

Project Name: GROSSINGERS

Project Number: 09313

Serial\_No:01182414:04  
Lab Number: L2400969

Report Date: 01/18/24

## PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEEA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** GROSSINGERS

**Project Number:** 09313

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**Lab Number:** L2400969

**Report Date:** 01/18/24

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

#### **Data Qualifiers**

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** GROSSINGERS  
**Project Number:** 09313

**Lab Number:** L2400969  
**Report Date:** 01/18/24

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 144 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS. Draft EPA Method 1633, EPA Document 821-D-22-001, June 2022.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW JERSEY CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page <u>1</u> of <u>1</u>	Date Rec'd in Lab <u>1/5/24</u>	ALPHA Job # <u>L2400969</u>			
	Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Project Information</b>		<b>Deliverables</b>	<b>Billing Information</b>	
<b>Client Information</b>		<b>Regulatory Requirement</b>		<b>Site Information</b>			
Client: <u>SESI Engineers</u> Address: <u>959 US46 Parsippany, NJ 07054</u> Phone: <u>(973)-808-9050</u> Fax: _____ Email: _____		Project Name: <u>Grossingers</u> Project Location: <u>Liberty, NY</u> Project # <u>09313</u> (Use Project name as Project #) <input type="checkbox"/>		<input type="checkbox"/> NJ Full / Reduced <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other			
Project Manager: <u>Matthew Majorossy</u> ALPHAQuote #: _____ Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		<input type="checkbox"/> SRS Residential/Non Residential <input type="checkbox"/> SRS Impact to Groundwater <input type="checkbox"/> NJ Ground Water Quality Standards <input type="checkbox"/> NJ IGW SPLP Leachate Criteria <input type="checkbox"/> Other		PO # _____ Is this site impacted by Petroleum? Yes <input type="checkbox"/> Petroleum Product: _____			
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>ANALYSIS</b>		<b>Sample Filtration</b>			
For EPH, selection is REQUIRED: <input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2	For VOC, selection is REQUIRED: <input type="checkbox"/> 1,4-Dioxane <input type="checkbox"/> 8011	Other project specific requirements/comments: Please specify Metals or TAL.		<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)			
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection	Sample Matrix	Sampler's Initials	VOCs PFAs	Total Bottle	
		Date    Time					
<u>00969-01</u>	<u>MW-202</u>	<u>1-5-24</u> <u>13:50</u>	<u>GW</u>	<u>RR</u>	<u>/</u>		
<u>-02</u>	<u>MW-203</u>	<u>1-5-24</u> <u>14:00</u>	<u>GW</u>	<u>TP</u>	<u>/</u>		
<u>-03</u>	<u>MW-216</u>	<u>1-5-24</u> <u>11:40</u>	<u>GW</u>	<u>RR</u>	<u>/</u>		
<u>-04</u>	<u>MW-217</u>	<u>1-5-24</u> <u>12:05</u>	<u>GW</u>	<u>TP</u>	<u>/</u>		
<u>-05</u>	<u>DUP2024-01-05</u>	<u>1-5-24</u> <u>---</u>	<u>GW</u>	<u>+</u>	<u>/</u>		
<u>-06</u>	<u>Trip Blank</u>	<u>1-5-24</u> <u>---</u>	<u>AQ</u>	<u>---</u>	<u>/</u>		
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative	
Relinquished By:		Date/Time		Received By:		Date/Time	
<u>Thomas Duda</u>		<u>1-5-24 16:09</u>		<u>Claudia Ferris AAL</u>		<u>1/5/24 16:11</u>	
<u>Claudia Ferris AAL</u>		<u>1/5/24 16:21</u>		<u>Paul Mazzella</u>		<u>1/5/24 16:50</u>	
<u>Paul Mazzella</u>		<u>1/5/24</u>		<u>Chris - minor</u>		<u>1/5/24 22:50</u>	
Form No: 01-14 HC (rev. 30-Sept-2013)		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)					

JOB: L2427566      REPORT STYLE: Data Usability Report  
0010: Alpha Analytical Report Cover Page - OK  
0015: Sample Cross Reference Summary - OK  
0060: Case Narrative - OK  
0100: Volatiles Cover Page - OK  
0110: Volatiles Sample Results - OK  
0120: Volatiles Method Blank Report - OK  
0130: Volatiles LCS Report - OK  
5100: Sample Receipt & Container Information Report - OK  
5200: Glossary - OK  
5400: References - OK

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No results found for sample L2427566-01 for product A2-1633-DRAFT  
No results found for sample L2427566-02 for product A2-1633-DRAFT  
No results found for sample L2427566-03 for product A2-1633-DRAFT  
No results found for sample L2427566-04 for product A2-1633-DRAFT  
No results found for sample L2427566-05 for product A2-1633-DRAFT  
No results found for sample L2427566-06 for product A2-1633-DRAFT  
No results found for sample L2427566-07 for product A2-1633-DRAFT  
No results found for sample L2427566-08 for product A2-1633-DRAFT



## ANALYTICAL REPORT

Lab Number:	L2427566
Client:	Soils Engineering Services, Inc. 959 Route 46E Parsippany, NJ 07054
ATTN:	Kenneth Farah
Phone:	(973) 808-9050
Project Name:	FORMER GROSSINGER
Project Number:	09313D
Report Date:	05/24/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2427566-01	MW-207	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 09:50	05/17/24
L2427566-02	MW-206	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 11:10	05/17/24
L2427566-03	MW-203	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 12:15	05/17/24
L2427566-04	MW-213	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 12:30	05/17/24
L2427566-05	MW-214	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 13:10	05/17/24
L2427566-06	MW-216	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 11:30	05/17/24
L2427566-07	MW-217	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 10:10	05/17/24
L2427566-08	FB20240516	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 13:45	05/17/24
L2427566-09	TB20240516	WATER	27 GROSSINGER RD, LIBERTY NY	05/16/24 00:00	05/17/24

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**Case Narrative (continued)**

Report Submission

May 24, 2024: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L2427566-01 and -02: The pH was greater than two; however, the sample was analyzed within the method required holding time.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 05/24/24

# ORGANICS

# VOLATILES

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-01  
 Client ID: MW-207  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 09:50  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 11:18  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER**Lab Number:** L2427566**Project Number:** 09313D**Report Date:** 05/24/24**SAMPLE RESULTS**

Lab ID: L2427566-01

Date Collected: 05/16/24 09:50

Client ID: MW-207

Date Received: 05/17/24

Sample Location: 27 GROSSINGER RD, LIBERTY NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1



**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-02  
 Client ID: MW-206  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 11:10  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 11:44  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER**Lab Number:** L2427566**Project Number:** 09313D**Report Date:** 05/24/24**SAMPLE RESULTS**

Lab ID: L2427566-02  
 Client ID: MW-206  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 11:10  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-02  
 Client ID: MW-206  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 11:10  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	101		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-03  
 Client ID: MW-203  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 12:15  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 12:11  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: FORMER GROSSINGER

Lab Number: L2427566

Project Number: 09313D

Report Date: 05/24/24

## SAMPLE RESULTS

Lab ID: L2427566-03  
 Client ID: MW-203  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 12:15  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-03  
 Client ID: MW-203  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 12:15  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds ND ug/l 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	106		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-04  
**Client ID:** MW-213  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 12:30  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8260D  
**Analytical Date:** 05/21/24 12:37  
**Analyst:** PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	11		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-04  
**Client ID:** MW-213  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 12:30  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	11		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-04  
**Client ID:** MW-213  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 12:30  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	8.04	J	ug/l			1
Fluorodichloromethane	8.04	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	101		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-05  
 Client ID: MW-214  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 13:10  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 13:03  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-05  
**Client ID:** MW-214  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 13:10  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-05  
 Client ID: MW-214  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 13:10  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds ND ug/l 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	103		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-06  
 Client ID: MW-216  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 11:30  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 13:30  
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	1.7	J	ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-06  
**Client ID:** MW-216  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 11:30  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-06  
 Client ID: MW-216  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 11:30  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	1.09	J	ug/l			1
Fluorodichloromethane	1.09	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	102		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-07  
**Client ID:** MW-217  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 10:10  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8260D  
**Analytical Date:** 05/21/24 13:56  
**Analyst:** MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	7.2		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-07  
**Client ID:** MW-217  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 10:10  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

**Lab ID:** L2427566-07  
**Client ID:** MW-217  
**Sample Location:** 27 GROSSINGER RD, LIBERTY NY

**Date Collected:** 05/16/24 10:10  
**Date Received:** 05/17/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	104		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-08  
 Client ID: FB20240516  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 13:45  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 14:23  
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER**Lab Number:** L2427566**Project Number:** 09313D**Report Date:** 05/24/24**SAMPLE RESULTS**

Lab ID: L2427566-08  
 Client ID: FB20240516  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 13:45  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-08  
 Client ID: FB20240516  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 13:45  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds ND ug/l 1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	105		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-09  
 Client ID: TB20240516  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 00:00  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 05/21/24 14:49  
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER**Lab Number:** L2427566**Project Number:** 09313D**Report Date:** 05/24/24**SAMPLE RESULTS**

Lab ID: L2427566-09  
 Client ID: TB20240516  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 00:00  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**SAMPLE RESULTS**

Lab ID: L2427566-09  
 Client ID: TB20240516  
 Sample Location: 27 GROSSINGER RD, LIBERTY NY

Date Collected: 05/16/24 00:00  
 Date Received: 05/17/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/l	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	104		70-130

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 05/21/24 09:07  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1923859-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 05/21/24 09:07  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1923859-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.17
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D  
Analytical Date: 05/21/24 09:07  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1923859-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

#### Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/l

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 05/21/24 09:07  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1923859-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	102		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: FORMER GROSSINGER

Lab Number: L2427566

Project Number: 09313D

Report Date: 05/24/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1923859-3 WG1923859-4								
Methylene chloride	95		98		70-130	3		20
1,1-Dichloroethane	96		100		70-130	4		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	93		95		70-130	2		20
Dibromochloromethane	95		98		63-130	3		20
1,1,2-Trichloroethane	96		100		70-130	4		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	120		120		62-150	0		20
1,2-Dichloroethane	96		100		70-130	4		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	96		99		67-130	3		20
trans-1,3-Dichloropropene	86		88		70-130	2		20
cis-1,3-Dichloropropene	91		95		70-130	4		20
1,1-Dichloropropene	97		100		70-130	3		20
Bromoform	86		94		54-136	9		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		100		70-130	0		20
Toluene	98		100		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	77		80		64-130	4		20
Bromomethane	34	Q	40		39-139	16		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: FORMER GROSSINGER

Lab Number: L2427566

Project Number: 09313D

Report Date: 05/24/24

Parameter	LCS		LCSD		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	Limits	RPD			
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1923859-3 WG1923859-4									
Vinyl chloride	100		110		55-140	10			20
Chloroethane	130		130		55-138	0			20
1,1-Dichloroethene	110		120		61-145	9			20
trans-1,2-Dichloroethene	100		100		70-130	0			20
Trichloroethene	90		96		70-130	6			20
1,2-Dichlorobenzene	97		100		70-130	3			20
1,3-Dichlorobenzene	99		100		70-130	1			20
1,4-Dichlorobenzene	98		100		70-130	2			20
Methyl tert butyl ether	88		91		63-130	3			20
p/m-Xylene	100		105		70-130	5			20
o-Xylene	100		100		70-130	0			20
cis-1,2-Dichloroethene	100		100		70-130	0			20
Dibromomethane	98		100		70-130	2			20
1,2,3-Trichloropropane	89		92		64-130	3			20
Acrylonitrile	87		95		70-130	9			20
Styrene	100		100		70-130	0			20
Dichlorodifluoromethane	87		91		36-147	4			20
Acetone	130		100		58-148	26	Q		20
Carbon disulfide	110		120		51-130	9			20
2-Butanone	94		93		63-138	1			20
Vinyl acetate	150	Q	150	Q	70-130	0			20
4-Methyl-2-pentanone	76		82		59-130	8			20
2-Hexanone	74		78		57-130	5			20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: FORMER GROSSINGER

Lab Number: L2427566

Project Number: 09313D

Report Date: 05/24/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1923859-3 WG1923859-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	94		97		63-133	3		20
1,2-Dibromoethane	98		100		70-130	2		20
1,3-Dichloropropane	93		97		70-130	4		20
1,1,1,2-Tetrachloroethane	99		100		64-130	1		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	94		100		53-136	6		20
sec-Butylbenzene	96		100		70-130	4		20
tert-Butylbenzene	95		100		70-130	5		20
o-Chlorotoluene	94		98		70-130	4		20
p-Chlorotoluene	93		97		70-130	4		20
1,2-Dibromo-3-chloropropane	85		90		41-144	6		20
Hexachlorobutadiene	99		110		63-130	11		20
Isopropylbenzene	95		100		70-130	5		20
p-Isopropyltoluene	95		100		70-130	5		20
Naphthalene	84		96		70-130	13		20
n-Propylbenzene	96		100		69-130	4		20
1,2,3-Trichlorobenzene	91		100		70-130	9		20
1,2,4-Trichlorobenzene	93		100		70-130	7		20
1,3,5-Trimethylbenzene	94		99		64-130	5		20
1,2,4-Trimethylbenzene	94		99		70-130	5		20
1,4-Dioxane	162		172	Q	56-162	6		20
p-Diethylbenzene	94		100		70-130	6		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: FORMER GROSSINGER

Project Number: 09313D

Lab Number: L2427566

Report Date: 05/24/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1923859-3 WG1923859-4								
p-Ethyltoluene	95		100		70-130	5		20
1,2,4,5-Tetramethylbenzene	88		95		70-130	8		20
Ethyl ether	120		120		59-134	0		20
trans-1,4-Dichloro-2-butene	82		85		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	88		90		70-130
Dibromofluoromethane	103		104		70-130

**Project Name:** FORMER GROSSINGER**Lab Number:** L2427566**Project Number:** 09313D**Report Date:** 05/24/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2427566-01A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-01B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-01C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-01D	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-01E	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-01F	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-02A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-02B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-02C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-02D	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-02E	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-02F	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-03A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-03B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-03C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-03D	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-03E	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-03F	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-04A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-04B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-04C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-04D	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)

**Project Name:** FORMER GROSSINGER**Lab Number:** L2427566**Project Number:** 09313D**Report Date:** 05/24/24**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2427566-04E	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-04F	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-05A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-05B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-05C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-05D	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-05E	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-05F	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-06A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-06B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-06C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYTCL-8260(14)
L2427566-06D	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-06E	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-06F	Plastic 500ml unpreserved	A	NA		2.1	Y	Absent		A2-1633-DRAFT(28)
L2427566-07A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-07B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-07C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-07D	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-07E	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-07F	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-08A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-08B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-08C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-08D	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-08E	Plastic 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1633-DRAFT(28)
L2427566-09A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L2427566-09B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)

**Project Name:** FORMER GROSSINGER  
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**Lab Number:** L2427566  
**Report Date:** 05/24/24

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** FORMER GROSSINGER  
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### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** FORMER GROSSINGER  
**Project Number:** 09313D

**Lab Number:** L2427566  
**Report Date:** 05/24/24

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Nonpotable Water:** EPA RSK-175 Dissolved Gases

**Biological Tissue Matrix:** EPA 3050B

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The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.





## ANALYTICAL REPORT

Lab Number:	L2434280
Client:	Soils Engineering Services, Inc. 959 Route 46E Parsippany, NJ 07054
ATTN:	Kenneth Farah
Phone:	(973) 808-9050
Project Name:	GROSSINGERS
Project Number:	09313D
Report Date:	06/21/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2434280-01	MW-208A	WATER	LIBERTY, NY	06/17/24 11:30	06/18/24
L2434280-02	MW-208R	WATER	LIBERTY, NY	06/17/24 12:22	06/18/24

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2434280-02: A sample identified as "MW-208R" was received, but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 06/21/24

# ORGANICS

# SEMIVOLATILES

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

**Lab ID:** L2434280-01  
**Client ID:** MW-208A  
**Sample Location:** LIBERTY, NY

**Date Collected:** 06/17/24 11:30  
**Date Received:** 06/18/24  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 144,1633  
**Analytical Date:** 06/20/24 19:49  
**Analyst:** PNB

**Extraction Method:** EPA 1633  
**Extraction Date:** 06/20/24 05:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	4.08	J	ng/l	5.76	0.922	1
Perfluoropentanoic Acid (PFPeA)	0.943	J	ng/l	2.88	0.770	1
Perfluorobutanesulfonic Acid (PFBS)	0.979	J	ng/l	1.44	0.482	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.76	1.50	1
Perfluorohexanoic Acid (PFHxA)	1.17	J	ng/l	1.44	0.425	1
Perfluoropentanesulfonic Acid (PFPeS)	0.562	J	ng/l	1.44	0.252	1
Perfluoroheptanoic Acid (PFHpA)	1.29	J	ng/l	1.44	0.288	1
Perfluorohexanesulfonic Acid (PFHxS)	2.16		ng/l	1.44	0.346	1
Perfluorooctanoic Acid (PFOA)	12.7		ng/l	1.44	0.626	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.76	1.94	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.655	J	ng/l	1.44	0.389	1
Perfluorononanoic Acid (PFNA)	0.994	J	ng/l	1.44	0.454	1
Perfluorooctanesulfonic Acid (PFOS)	33.2		ng/l	1.44	0.655	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.44	0.583	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.76	2.24	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.44	0.446	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.44	0.785	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.44	0.626	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.44	0.331	1
Perfluorooctanesulfonamide (PFOSA)	1.13	JF	ng/l	1.44	0.389	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.24	J	ng/l	1.44	0.778	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.44	0.662	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.44	0.540	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.44	0.382	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.76	0.806	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.76	0.907	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.44	0.547	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

**Lab ID:** L2434280-01  
**Client ID:** MW-208A  
**Sample Location:** LIBERTY, NY

**Date Collected:** 06/17/24 11:30  
**Date Received:** 06/18/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.76	1.19	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.76	1.19	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.44	0.626	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.44	0.662	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.4	3.38	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.4	1.76	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.88	0.410	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.88	0.382	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	2.88	0.317	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.88	1.70	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.20	2.38	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	36.0	8.42	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	36.0	5.68	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

Lab ID: L2434280-01  
 Client ID: MW-208A  
 Sample Location: LIBERTY, NY

Date Collected: 06/17/24 11:30  
 Date Received: 06/18/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	82		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	75		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	78		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	122		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	85		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	87		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	83		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	73		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	72		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	77		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	78		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	67		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	72		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	48		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	69		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	62		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	42		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	65		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	63		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	86		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	68		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	67		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	64		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	60		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

Lab ID: L2434280-02  
 Client ID: MW-208R  
 Sample Location: LIBERTY, NY

Date Collected: 06/17/24 12:22  
 Date Received: 06/18/24  
 Field Prep: Not Specified

## Sample Depth:

Matrix: Water  
 Analytical Method: 144,1633  
 Analytical Date: 06/20/24 20:02  
 Analyst: PNB

Extraction Method: EPA 1633  
 Extraction Date: 06/20/24 05:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	3.32	J	ng/l	6.00	0.960	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.00	0.803	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.50	0.503	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.00	1.57	1
Perfluorohexanoic Acid (PFHxA)	0.555	J	ng/l	1.50	0.443	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.50	0.263	1
Perfluoroheptanoic Acid (PFHpA)	0.705	J	ng/l	1.50	0.300	1
Perfluorohexanesulfonic Acid (PFHxS)	0.908	J	ng/l	1.50	0.360	1
Perfluorooctanoic Acid (PFOA)	5.72		ng/l	1.50	0.653	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.00	2.02	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.50	0.405	1
Perfluorononanoic Acid (PFNA)	0.578	J	ng/l	1.50	0.473	1
Perfluorooctanesulfonic Acid (PFOS)	17.8		ng/l	1.50	0.683	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.50	0.608	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.00	2.33	1
Perfluoronanesulfonic Acid (PFNS)	ND		ng/l	1.50	0.465	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.50	0.818	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.50	0.653	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.50	0.345	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.50	0.405	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.09	J	ng/l	1.50	0.810	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.50	0.690	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.50	0.563	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.50	0.398	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.00	0.840	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.00	0.945	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.50	0.570	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

**Lab ID:** L2434280-02  
**Client ID:** MW-208R  
**Sample Location:** LIBERTY, NY

**Date Collected:** 06/17/24 12:22  
**Date Received:** 06/18/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab</b>						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.00	1.24	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.00	1.24	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.50	0.653	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.50	0.690	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.0	3.53	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.0	1.84	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.00	0.428	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.00	0.398	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEEESA)	ND		ng/l	3.00	0.330	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.00	1.77	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.50	2.48	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.5	8.78	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.5	5.92	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

Lab ID: L2434280-02  
 Client ID: MW-208R  
 Sample Location: LIBERTY, NY

Date Collected: 06/17/24 12:22  
 Date Received: 06/18/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	80		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	76		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	85		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	118		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	82		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	86		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	82		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	72		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	77		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	74		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	72		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	66		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	48		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	68		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	68		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	44		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	65		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	69		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	88		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	68		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	68		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	62		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	62		20-150

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 144,1633  
Analytical Date: 06/20/24 12:32  
Analyst: PNB

Extraction Method: EPA 1633  
Extraction Date: 06/20/24 05:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-02 Batch: WG1936835-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.40	1.02
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.20	0.856
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.60	0.536
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.40	1.67
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.60	0.472
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.60	0.280
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.60	0.320
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.60	0.384
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.60	0.696
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.40	2.16
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.60	0.432
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.60	0.504
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.60	0.728
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.60	0.648
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.40	2.49
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.60	0.496
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.60	0.872
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.60	0.696
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.60	0.368
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.60	0.432
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.60	0.864
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.60	0.736
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.60	0.600
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.60	0.424
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.40	0.896
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.40	1.01
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.60	0.608

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 144,1633  
Analytical Date: 06/20/24 12:32  
Analyst: PNB

Extraction Method: EPA 1633  
Extraction Date: 06/20/24 05:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-02 Batch: WG1936835-1					
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.40	1.32
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.40	1.32
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.60	0.696
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.60	0.736
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	16.0	3.76
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	16.0	1.96
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.20	0.456
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.20	0.424
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.20	0.352
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.20	1.89
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.00	2.64
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	40.0	9.36
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	40.0	6.31

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 144,1633  
Analytical Date: 06/20/24 12:32  
Analyst: PNB

Extraction Method: EPA 1633  
Extraction Date: 06/20/24 05:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-02 Batch: WG1936835-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	89		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	85		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	98		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	90		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	92		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	81		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	83		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	82		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	65		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	85		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	78		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	81		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	92		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	54		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	83		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	72		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	53		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	86		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	91		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	90		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	57		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	60		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	69		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	74		20-150

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434280

Project Number: 09313D

Report Date: 06/21/24

Parameter	Low Level	Qual	Low Level	Qual	%Recovery Limits	RPD	Qual	RPD Limits
	LCS %Recovery		LCSD %Recovery					
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1936835-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	132		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	116		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	109		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	114		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	103		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	121		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	114		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	113		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	126		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	115		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	109		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	115		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	100		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	117		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	134		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	105		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	122		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	128		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	102		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	111		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	126		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	112		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434280

Project Number: 09313D

Report Date: 06/21/24

Parameter	Low Level	Qual	Low Level	Qual	%Recovery Limits	RPD	Qual	RPD Limits
	LCS %Recovery		LCS %Recovery					
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1936835-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTTrDA)	115		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	117		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	119		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	102		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	90		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	94		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUS)	83		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	103		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	105		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	103		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	108		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	107		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	110		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	109		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	135		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	97		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	70		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	43		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434280

Project Number: 09313D

Report Date: 06/21/24

Parameter	Low Level LCS		Low Level LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1936835-2 LOW LEVEL								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	84				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	88				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	90				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	75				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	89				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	85				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	82				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	77				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	66				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	83				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	79				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	86				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	68				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	50				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	78				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	70				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	50				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	84				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	84				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	93				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	58				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	61				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	73				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	73				20-150

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434280

Project Number: 09313D

Report Date: 06/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1936835-3								
Perfluorobutanoic Acid (PFBA)	94		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	96		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	103		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	92		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	102		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	105		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	95		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	93		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	101		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	99		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	96		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	94		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	96		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	100		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	95		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	93		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	90		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	102		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	89		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	98		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	108		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	98		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434280

Project Number: 09313D

Report Date: 06/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1936835-3								
Perfluorotridecanoic Acid (PFTTrDA)	97		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	89		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	100		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	82		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	86		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	69		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	68		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	97		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	94		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	96		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	95		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	92		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	92		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	98		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	122		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	84		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	62		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	42		-		40-150	-		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434280

Project Number: 09313D

Report Date: 06/21/24

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits			Qual	Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1936835-3									

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	74				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	72				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	72				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	64				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	71				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	69				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	65				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	64				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	53				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	68				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	66				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	65				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	63				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	49				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	66				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	66				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	41				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	71				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	72				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	78				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	58				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	63				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	65				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	65				20-150

**Project Name:** GROSSINGERS**Lab Number:** L2434280**Project Number:** 09313D**Report Date:** 06/21/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2434280-01A	Plastic 500ml unpreserved	A	NA		3.7	Y	Absent		A2-1633-DRAFT(28)
L2434280-01B	Plastic 500ml unpreserved	A	NA		3.7	Y	Absent		A2-1633-DRAFT(28)
L2434280-01C	Plastic 500ml unpreserved	A	NA		3.7	Y	Absent		A2-1633-DRAFT(28)
L2434280-02A	Plastic 500ml unpreserved	A	NA		3.7	Y	Absent		A2-1633-DRAFT(28)
L2434280-02B	Plastic 500ml unpreserved	A	NA		3.7	Y	Absent		A2-1633-DRAFT(28)
L2434280-02C	Plastic 500ml unpreserved	A	NA		3.7	Y	Absent		A2-1633-DRAFT(28)

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

Serial\_No:06212416:13  
**Lab Number:** L2434280  
**Report Date:** 06/21/24

### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
<b>PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)</b>		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
<b>PERFLUOROALKYL SULFONIC ACIDS (PFSAs)</b>		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
<b>FLUOROTELOMERS</b>		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
<b>PERFLUOROALKANE SULFONAMIDES (FASAs)</b>		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
<b>PERFLUOROALKANE SULFONYL SUBSTANCES</b>		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
<b>PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS</b>		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
<b>CHLORO-PERFLUOROALKYL SULFONIC ACIDS</b>		
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
<b>PERFLUOROETHER SULFONIC ACIDS (PFESAs)</b>		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
<b>PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)</b>		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

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### PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
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## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



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### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS  
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#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434280  
**Report Date:** 06/21/24

## REFERENCES

- 144 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS. Draft EPA Method 1633, EPA Document 821-D-22-001, June 2022.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Nonpotable Water:** EPA RSK-175 Dissolved Gases

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-896-9220 FAX: 508-896-9193	<b>NEW YORK CHAIN OF CUSTODY</b> Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab <span style="font-size: 1.2em;">6/18/24</span>	ALPHA Job # <span style="font-size: 1.2em;">22434250</span>		
		<b>Project Information</b> Project Name: <i>Grossingers</i> Project Location: <i>Liberty NY</i> Project # <i>295130</i> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input checked="" type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #	
<b>Client Information</b> Client: <i>SESI</i> Address: <i>959 RT46 F13 Parsippany NJ</i> Phone: <i>908 280 5627</i> Fax: Email: <i>Kenneth.Farah@sesi.org</i>		<b>Project Manager:</b> <i>Ken Farah</i> <b>ALPHAQuote #:</b> <b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> <i>SESI</i> Due Date: Rush (only if pre approved) <input checked="" type="checkbox"/> <i>5th</i> # of Days: <i>3-day TAT</i>		<b>Regulatory Requirement</b> <input checked="" type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input checked="" type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:	
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>Other project specific requirements/comments:</b>		<b>ANALYSIS</b> <span style="font-size: 1.5em; color: blue;">17251633</span>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)	
Please specify Metals or TAL.		Sample Specific Comments					
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials		
		Date	Time				
<i>24250-01</i>	<i>MW 208 A</i>	<i>6/17/24</i>	<i>11:30</i>	<i>Water</i>	<i>AB</i>	<i>X</i>	
<b>Preservative Code:</b> A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		<b>Container Code</b> P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		<b>Container Type</b>  <b>Preservative</b>	
Form No: 01-25 HC (rev. 30-Sept-2013)		<b>Relinquished By:</b> <i>Ken Farah</i>		<b>Date/Time</b> <i>6/17/24 12:15</i>		<b>Received By:</b> <i>Paul Mazzeo</i>	
		<i>Paul Mazzeo 6/18/24 14:50</i>		<i>Ken Farah 6-18-24 14:50</i>		<i>Paul Mazzeo 6/18/24 16:00</i>	
		<i>Ken Farah 6/18/24</i>		<i>Ken Farah 6/18/24 22:55</i>		<i>Ken Farah 6/18/24 22:55</i>	

TOTAL BOTTLES

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)



## ANALYTICAL REPORT

Lab Number:	L2434281
Client:	Soils Engineering Services, Inc. 959 Route 46E Parsippany, NJ 07054
ATTN:	Kenneth Farah
Phone:	(973) 808-9050
Project Name:	GROSSINGERS
Project Number:	09313D
Report Date:	06/21/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2434281-01	MW-208R	WATER	27 GROSSINGERS RD, LIBERTY, NY	06/17/24 12:22	06/18/24
L2434281-02	MW-208A	WATER	27 GROSSINGERS RD, LIBERTY, NY	06/17/24 11:30	06/18/24

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2434281-02: A sample identified as "MW-208A" was received, but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 06/21/24

# ORGANICS

# VOLATILES

**Project Name:** GROSSINGERS**Lab Number:** L2434281**Project Number:** 09313D**Report Date:** 06/21/24**SAMPLE RESULTS**

Lab ID: L2434281-01  
 Client ID: MW-208R  
 Sample Location: 27 GROSSINGERS RD, LIBERTY, NY

Date Collected: 06/17/24 12:22  
 Date Received: 06/18/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 06/20/24 00:11  
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.26	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GROSSINGERS

Lab Number: L2434281

Project Number: 09313D

Report Date: 06/21/24

## SAMPLE RESULTS

Lab ID: L2434281-01

Date Collected: 06/17/24 12:22

Client ID: MW-208R

Date Received: 06/18/24

Sample Location: 27 GROSSINGERS RD, LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.38	J	ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	2.0	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	3.9		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

**Lab ID:** L2434281-01  
**Client ID:** MW-208R  
**Sample Location:** 27 GROSSINGERS RD, LIBERTY, NY

**Date Collected:** 06/17/24 12:22  
**Date Received:** 06/18/24  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	0.71	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	1.3	J	ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	2.8		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	50.5	J	ug/l			1
Indane	8.90	NJ	ug/l			1
Unknown Aromatic	4.27	J	ug/l			1
Unknown Aromatic	7.17	J	ug/l			1
Unknown Cycloalkane	3.58	J	ug/l			1
Unknown Aromatic	4.84	J	ug/l			1
Cyclohexane, 1,1-dimethyl-	4.04	NJ	ug/l			1
Cyclopentane, 1,1,3-trimethyl-	3.79	NJ	ug/l			1
Unknown	3.91	J	ug/l			1
Unknown Aromatic	3.64	J	ug/l			1
Unknown Cycloalkane	6.32	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	99		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

Lab ID: L2434281-02  
 Client ID: MW-208A  
 Sample Location: 27 GROSSINGERS RD, LIBERTY, NY

Date Collected: 06/17/24 11:30  
 Date Received: 06/18/24  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 06/20/24 00:34  
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GROSSINGERS

Lab Number: L2434281

Project Number: 09313D

Report Date: 06/21/24

## SAMPLE RESULTS

Lab ID: L2434281-02

Date Collected: 06/17/24 11:30

Client ID: MW-208A

Date Received: 06/18/24

Sample Location: 27 GROSSINGERS RD, LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.29	J	ug/l	2.5	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.0	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**SAMPLE RESULTS**

Lab ID: L2434281-02  
 Client ID: MW-208A  
 Sample Location: 27 GROSSINGERS RD, LIBERTY, NY

Date Collected: 06/17/24 11:30  
 Date Received: 06/18/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	0.61	J	ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

**Tentatively Identified Compounds**

Total TIC Compounds	12.6	J	ug/l			1
Unknown Aromatic	1.01	J	ug/l			1
Cyclopentane, 1,1,3-trimethyl-	1.23	NJ	ug/l			1
Unknown Aromatic	1.47	J	ug/l			1
Unknown Aromatic	1.92	J	ug/l			1
Cyclohexane, 1,1-dimethyl-	1.17	NJ	ug/l			1
Cyclohexane, 1,1,3-trimethyl-	1.10	NJ	ug/l			1
Unknown Cyclohexane	1.19	J	ug/l			1
Unknown Aromatic	2.39	J	ug/l			1
Butane, 2,3-Dimethyl-	1.10	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 06/19/24 19:19  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1936975-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 06/19/24 19:19  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1936975-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.17
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 06/19/24 19:19  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1936975-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 06/19/24 19:19  
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1936975-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	111		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434281

Project Number: 09313D

Report Date: 06/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1936975-3 WG1936975-4								
Methylene chloride	97		95		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		99		70-130	1		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	100		97		63-130	3		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	99		89		70-130	11		20
Chlorobenzene	98		93		75-130	5		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Bromodichloromethane	110		100		67-130	10		20
trans-1,3-Dichloropropene	110		100		70-130	10		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	110		98		70-130	12		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	110		120		67-130	9		20
Benzene	100		98		70-130	2		20
Toluene	100		95		70-130	5		20
Ethylbenzene	100		97		70-130	3		20
Chloromethane	94		92		64-130	2		20
Bromomethane	44		45		39-139	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434281

Project Number: 09313D

Report Date: 06/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1936975-3 WG1936975-4								
Vinyl chloride	100		98		55-140	2		20
Chloroethane	98		84		55-138	15		20
1,1-Dichloroethene	95		93		61-145	2		20
trans-1,2-Dichloroethene	97		89		70-130	9		20
Trichloroethene	100		94		70-130	6		20
1,2-Dichlorobenzene	97		92		70-130	5		20
1,3-Dichlorobenzene	99		91		70-130	8		20
1,4-Dichlorobenzene	97		90		70-130	7		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	96		95		70-130	1		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	120		120		64-130	0		20
Acrylonitrile	110		120		70-130	9		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	95		92		36-147	3		20
Acetone	130		140		58-148	7		20
Carbon disulfide	100		90		51-130	11		20
2-Butanone	120		120		63-138	0		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	110		120		59-130	9		20
2-Hexanone	110		120		57-130	9		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Lab Number: L2434281

Project Number: 09313D

Report Date: 06/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1936975-3 WG1936975-4								
Bromochloromethane	94		94		70-130	0		20
2,2-Dichloropropane	93		89		63-133	4		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	100		92		64-130	8		20
Bromobenzene	95		89		70-130	7		20
n-Butylbenzene	110		99		53-136	11		20
sec-Butylbenzene	110		99		70-130	11		20
tert-Butylbenzene	100		93		70-130	7		20
o-Chlorotoluene	110		100		70-130	10		20
p-Chlorotoluene	100		98		70-130	2		20
1,2-Dibromo-3-chloropropane	100		110		41-144	10		20
Hexachlorobutadiene	96		82		63-130	16		20
Isopropylbenzene	100		96		70-130	4		20
p-Isopropyltoluene	100		94		70-130	6		20
Naphthalene	100		100		70-130	0		20
n-Propylbenzene	110		100		69-130	10		20
1,2,3-Trichlorobenzene	97		93		70-130	4		20
1,2,4-Trichlorobenzene	93		87		70-130	7		20
1,3,5-Trimethylbenzene	100		98		64-130	2		20
1,2,4-Trimethylbenzene	100		98		70-130	2		20
1,4-Dioxane	110		120		56-162	9		20
p-Diethylbenzene	97		89		70-130	9		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: GROSSINGERS

Project Number: 09313D

Lab Number: L2434281

Report Date: 06/21/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1936975-3 WG1936975-4								
p-Ethyltoluene	100		97		70-130	3		20
1,2,4,5-Tetramethylbenzene	96		88		70-130	9		20
Ethyl ether	99		100		59-134	1		20
trans-1,4-Dichloro-2-butene	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	116		116		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	104		103		70-130
Dibromofluoromethane	97		100		70-130

**Project Name:** GROSSINGERS**Lab Number:** L2434281**Project Number:** 09313D**Report Date:** 06/21/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2434281-01A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L2434281-01B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L2434281-01C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L2434281-02A	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L2434281-02B	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)
L2434281-02C	Vial HCl preserved	A	NA		3.7	Y	Absent		NYTCL-8260(14)

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS  
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### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



**Project Name:** GROSSINGERS  
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**Lab Number:** L2434281  
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#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2434281  
**Report Date:** 06/21/24

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Nonpotable Water:** EPA RSK-175 Dissolved Gases

**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	<b>NEW YORK CHAIN OF CUSTODY</b> Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page / of /	Date Rec'd in Lab 6/18/24	ALPHA Job # 29484281	
		<b>Project Information</b> Project Name: <u>Grossinger</u> Project Location: <u>27 Grosinger Rd Liberty, NY</u> Project # <u>6931315</u> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input checked="" type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input checked="" type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #
		<b>Client Information</b> Client: <u>SESE</u> Address: <u>959 RT 46 ELS Passippany NJ</u> Phone: <u>862-280-5027</u> Fax: _____ Email: <u>Kenneth.Paul@sesi.org</u>		<b>Project Manager:</b> <u>Ken Foran</u> <b>ALPHAQuote #:</b> _____ <b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> <u>30 days</u> Due Date: _____ Rush (only if pre approved) <input checked="" type="checkbox"/> <u>30</u> # of Days: <u>3-day</u>		<b>Regulatory Requirement</b> <input checked="" type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input checked="" type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>ANALYSIS</b>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		
Other project specific requirements/comments:						
Please specify Metals or TAL.						
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Total Bottles
		Date	Time			
<u>34261-01</u>	<u>MW 208 R</u>	<u>6/17/24</u>	<u>12:22</u>	<u>water</u>	<u>BS</u>	

Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Container Type  Preservative	Relinquished By: <u>BS</u> Date/Time: <u>6/17/24 12:15</u> <u>AC Paul</u> Date/Time: <u>6-18-24 1430</u> <u>NSC</u> Date/Time: <u>6-18-24 1430</u> <u>Paul Marcella</u> Date/Time: <u>6/18/24</u> <u>Chi-Mike</u> Date/Time: <u>6/18/24 22:55</u>	Received By: <u>Paul Marcella</u> Date/Time: <u>6-18-24 12:18</u> <u>NSC</u> Date/Time: <u>6-18-24 1430</u> <u>Paul Marcella</u> Date/Time: <u>6/18/24/1640</u> <u>Chi-Mike</u> Date/Time: <u>6/18/24 20:00</u> <u>Chi-Mike</u> Date/Time: <u>6/18/24 22:55</u>	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
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## ANALYTICAL REPORT

Lab Number:	L2437481
Client:	Soils Engineering Services, Inc. 959 Route 46E Parsippany, NJ 07054
ATTN:	Kenneth Farah
Phone:	(973) 808-9050
Project Name:	FORMER GROSSINGERS
Project Number:	09313D
Report Date:	07/08/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (9110), MN (025-999-495), NJ (MA015), NY (11627), NC (685), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708A1), USFWS (Permit #A24920).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2437481-01	SMPV-13	SOIL_VAPOR	LIBERTY, NY	07/01/24 11:55	07/02/24
L2437481-02	SMPV-14	SOIL_VAPOR	LIBERTY, NY	07/01/24 12:27	07/02/24
L2437481-03	SMPV-2	SOIL_VAPOR	LIBERTY, NY	07/01/24 12:15	07/02/24
L2437481-04	SMPV-12	SOIL_VAPOR	LIBERTY, NY	07/01/24 12:39	07/02/24
L2437481-05	SMPV-11	SOIL_VAPOR	LIBERTY, NY	07/01/24 12:50	07/02/24
L2437481-06	SMPV-10	SOIL_VAPOR	LIBERTY, NY	07/01/24 13:02	07/02/24

**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on June 28, 2024. The canister certification data is provided as an addendum.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/08/24

**AIR**

**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-01  
 Client ID: SMPV-13  
 Sample Location: LIBERTY, NY

Date Collected: 07/01/24 11:55  
 Date Received: 07/02/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/05/24 15:44  
 Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.817	0.200	--	4.04	0.989	--		1
Chloromethane	0.536	0.200	--	1.11	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	24.6	5.00	--	46.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.17	1.00	--	14.7	2.38	--		1
Trichlorofluoromethane	0.368	0.200	--	2.07	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.29	0.500	--	3.91	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### SAMPLE RESULTS

Lab ID: L2437481-01  
 Client ID: SMPV-13  
 Sample Location: LIBERTY, NY

Date Collected: 07/01/24 11:55  
 Date Received: 07/02/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.593	0.200	--	2.04	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.516	0.200	--	2.11	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.28	0.200	--	4.82	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.242	0.200	--	1.05	0.869	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-01

Date Collected: 07/01/24 11:55

Client ID: SMPV-13

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	0.831	0.400	--	3.61	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.228	0.200	--	0.990	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.313	0.200	--	1.54	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### SAMPLE RESULTS

Lab ID: L2437481-02  
 Client ID: SMPV-14  
 Sample Location: LIBERTY, NY

Date Collected: 07/01/24 12:27  
 Date Received: 07/02/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/05/24 16:23  
 Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.539	0.200	--	2.67	0.989	--		1
Chloromethane	0.529	0.200	--	1.09	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	386	5.00	--	727	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	55.9	1.00	--	133	2.38	--		1
Trichlorofluoromethane	2.72	0.200	--	15.3	1.12	--		1
Isopropanol	4.07	0.500	--	10.0	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	6.43	0.500	--	19.5	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.52	0.500	--	7.43	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### SAMPLE RESULTS

Lab ID: L2437481-02  
 Client ID: SMPV-14  
 Sample Location: LIBERTY, NY

Date Collected: 07/01/24 12:27  
 Date Received: 07/02/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	0.540	0.500	--	1.95	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.442	0.200	--	1.56	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	2.09	0.200	--	6.68	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	1.03	0.200	--	3.55	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.528	0.200	--	2.47	0.934	--		1
Heptane	1.20	0.200	--	4.92	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	2.20	0.500	--	9.02	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.95	0.200	--	11.1	0.754	--		1
2-Hexanone	0.476	0.200	--	1.95	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.233	0.200	--	1.58	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.507	0.200	--	2.20	0.869	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-02

Date Collected: 07/01/24 12:27

Client ID: SMPV-14

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	1.61	0.400	--	6.99	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.555	0.200	--	2.41	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.437	0.200	--	2.15	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-03

Date Collected: 07/01/24 12:15

Client ID: SMPV-2

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/05/24 17:02

Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.499	0.200	--	2.47	0.989	--		1
Chloromethane	0.234	0.200	--	0.483	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	333	5.00	--	627	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	32.6	1.00	--	77.4	2.38	--		1
Trichlorofluoromethane	0.690	0.200	--	3.88	1.12	--		1
Isopropanol	4.40	0.500	--	10.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	3.86	0.500	--	11.7	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.42	0.500	--	4.19	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-03

Date Collected: 07/01/24 12:15

Client ID: SMPV-2

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.314	0.200	--	1.11	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.80	0.200	--	5.75	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.799	0.200	--	2.75	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.955	0.200	--	4.46	0.934	--		1
Heptane	0.856	0.200	--	3.51	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	2.04	0.500	--	8.36	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.84	0.200	--	6.93	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.469	0.200	--	2.04	0.869	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-03

Date Collected: 07/01/24 12:15

Client ID: SMPV-2

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	1.54	0.400	--	6.69	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.587	0.200	--	2.55	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.580	0.200	--	2.85	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-04

Date Collected: 07/01/24 12:39

Client ID: SMPV-12

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/05/24 17:41

Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.497	0.200	--	2.46	0.989	--		1
Chloromethane	0.289	0.200	--	0.597	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	135	5.00	--	254	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	17.1	1.00	--	40.6	2.38	--		1
Trichlorofluoromethane	0.286	0.200	--	1.61	1.12	--		1
Isopropanol	1.70	0.500	--	4.18	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.70	0.500	--	5.15	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.966	0.500	--	2.85	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### SAMPLE RESULTS

Lab ID: L2437481-04  
 Client ID: SMPV-12  
 Sample Location: LIBERTY, NY

Date Collected: 07/01/24 12:39  
 Date Received: 07/02/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	1.02	0.200	--	3.26	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.381	0.200	--	1.31	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.301	0.200	--	1.41	0.934	--		1
Heptane	0.419	0.200	--	1.72	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.26	0.500	--	5.16	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.856	0.200	--	3.23	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.223	0.200	--	0.969	0.869	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-04

Date Collected: 07/01/24 12:39

Client ID: SMPV-12

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	0.773	0.400	--	3.36	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.292	0.200	--	1.27	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.375	0.200	--	1.84	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	0.383	0.200	--	2.30	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-05

Date Collected: 07/01/24 12:50

Client ID: SMPV-11

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/05/24 18:20

Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.522	0.200	--	2.58	0.989	--		1
Chloromethane	0.574	0.200	--	1.19	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	242	5.00	--	456	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.0	1.00	--	28.5	2.38	--		1
Trichlorofluoromethane	0.235	0.200	--	1.32	1.12	--		1
Isopropanol	0.714	0.500	--	1.76	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	1.03	0.500	--	3.58	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-05

Date Collected: 07/01/24 12:50

Client ID: SMPV-11

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-05

Date Collected: 07/01/24 12:50

Client ID: SMPV-11

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	88		60-140



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### SAMPLE RESULTS

Lab ID: L2437481-06  
 Client ID: SMPV-10  
 Sample Location: LIBERTY, NY

Date Collected: 07/01/24 13:02  
 Date Received: 07/02/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/05/24 19:37  
 Analyst: JMB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.657	0.200	--	3.25	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	55.7	5.00	--	105	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.19	1.00	--	14.7	2.38	--		1
Trichlorofluoromethane	2.20	0.200	--	12.4	1.12	--		1
Isopropanol	0.966	0.500	--	2.37	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.993	0.500	--	3.01	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.504	0.500	--	1.49	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-06

Date Collected: 07/01/24 13:02

Client ID: SMPV-10

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.270	0.200	--	1.32	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.302	0.200	--	0.965	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.265	0.200	--	0.912	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.661	0.200	--	3.09	0.934	--		1
Heptane	0.305	0.200	--	1.25	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.799	0.500	--	3.27	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.705	0.200	--	2.66	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.285	0.200	--	1.93	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**SAMPLE RESULTS**

Lab ID: L2437481-06

Date Collected: 07/01/24 13:02

Client ID: SMPV-10

Date Received: 07/02/24

Sample Location: LIBERTY, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	0.681	0.400	--	2.96	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.273	0.200	--	1.19	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.513	0.200	--	2.52	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	0.215	0.200	--	1.29	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140



Project Name: FORMER GROSSINGERS

Lab Number: L2437481

Project Number: 09313D

Report Date: 07/08/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/05/24 12:48

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1943565-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: FORMER GROSSINGERS

Lab Number: L2437481

Project Number: 09313D

Report Date: 07/08/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/05/24 12:48

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1943565-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: FORMER GROSSINGERS

Lab Number: L2437481

Project Number: 09313D

Report Date: 07/08/24

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/05/24 12:48

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1943565-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** FORMER GROSSINGERS

**Lab Number:** L2437481

**Project Number:** 09313D

**Report Date:** 07/08/24

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1943565-3								
Dichlorodifluoromethane	101		-		70-130	-		
Chloromethane	91		-		70-130	-		
Freon-114	106		-		70-130	-		
Vinyl chloride	97		-		70-130	-		
1,3-Butadiene	103		-		70-130	-		
Bromomethane	100		-		70-130	-		
Chloroethane	97		-		70-130	-		
Ethanol	86		-		40-160	-		
Vinyl bromide	95		-		70-130	-		
Acetone	112		-		40-160	-		
Trichlorofluoromethane	103		-		70-130	-		
Isopropanol	90		-		40-160	-		
1,1-Dichloroethene	106		-		70-130	-		
Tertiary butyl Alcohol	89		-		70-130	-		
Methylene chloride	101		-		70-130	-		
3-Chloropropene	114		-		70-130	-		
Carbon disulfide	103		-		70-130	-		
Freon-113	104		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	103		-		70-130	-		
Methyl tert butyl ether	102		-		70-130	-		
2-Butanone	101		-		70-130	-		
cis-1,2-Dichloroethene	105		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: FORMER GROSSINGERS

Lab Number: L2437481

Project Number: 09313D

Report Date: 07/08/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1943565-3								
Ethyl Acetate	112		-		70-130	-		
Chloroform	105		-		70-130	-		
Tetrahydrofuran	101		-		70-130	-		
1,2-Dichloroethane	101		-		70-130	-		
n-Hexane	104		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
Benzene	99		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	106		-		70-130	-		
1,2-Dichloropropane	102		-		70-130	-		
Bromodichloromethane	112		-		70-130	-		
1,4-Dioxane	108		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	105		-		70-130	-		
Heptane	108		-		70-130	-		
cis-1,3-Dichloropropene	109		-		70-130	-		
4-Methyl-2-pentanone	107		-		70-130	-		
trans-1,3-Dichloropropene	109		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	92		-		70-130	-		
2-Hexanone	121		-		70-130	-		
Dibromochloromethane	117		-		70-130	-		
1,2-Dibromoethane	107		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** FORMER GROSSINGERS

**Lab Number:** L2437481

**Project Number:** 09313D

**Report Date:** 07/08/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1943565-3								
Tetrachloroethene	102		-		70-130	-		
Chlorobenzene	105		-		70-130	-		
Ethylbenzene	102		-		70-130	-		
p/m-Xylene	103		-		70-130	-		
Bromoform	118		-		70-130	-		
Styrene	107		-		70-130	-		
1,1,2,2-Tetrachloroethane	110		-		70-130	-		
o-Xylene	105		-		70-130	-		
4-Ethyltoluene	105		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	105		-		70-130	-		
Benzyl chloride	104		-		70-130	-		
1,3-Dichlorobenzene	107		-		70-130	-		
1,4-Dichlorobenzene	107		-		70-130	-		
1,2-Dichlorobenzene	105		-		70-130	-		
1,2,4-Trichlorobenzene	89		-		70-130	-		
Naphthalene	80		-		70-130	-		
Hexachlorobutadiene	76		-		70-130	-		

## Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER GROSSINGERS

Project Number: 09313D

Lab Number: L2437481

Report Date: 07/08/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1943565-5 QC Sample: L2437481-05 Client ID: SMPV-11						
Dichlorodifluoromethane	0.522	0.515	ppbV	1		25
Chloromethane	0.574	0.564	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	242	201	ppbV	19		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	12.0	12.0	ppbV	0		25
Trichlorofluoromethane	0.235	0.241	ppbV	3		25
Isopropanol	0.714	0.735	ppbV	3		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	1.03	1.21	ppbV	16		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER GROSSINGERS

Project Number: 09313D

Lab Number: L2437481

Report Date: 07/08/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1943565-5 QC Sample: L2437481-05 Client ID: SMPV-11						
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER GROSSINGERS

Project Number: 09313D

Lab Number: L2437481

Report Date: 07/08/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1943565-5 QC Sample: L2437481-05 Client ID: SMPV-11						
Toluene	ND	ND	ppbV	NC		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Naphthalene	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER GROSSINGERS

Project Number: 09313D

Lab Number: L2437481

Report Date: 07/08/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1943565-5 QC Sample: L2437481-05 Client ID: SMPV-11						
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: FORMER GROSSINGERS

Serial\_No:07082414:12  
Lab Number: L2437481

Project Number: 09313D

Report Date: 07/08/24

### Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2437481-01	SMPV-13	02348	Flow 1	06/28/24	474634		-	-	-	Pass	40.6	28.4	35
L2437481-01	SMPV-13	2955	6.0L Can	06/28/24	474634	L2435318-04	Pass	-29.2	-3.8	-	-	-	-
L2437481-02	SMPV-14	01524	Flow 1	06/28/24	474634		-	-	-	Pass	40.5	17.5	79
L2437481-02	SMPV-14	4295	6.0L Can	06/28/24	474634	L2435318-04	Pass	-29.2	-7.5	-	-	-	-
L2437481-03	SMPV-2	02336	Flow 1	06/28/24	474634		-	-	-	Pass	40.5	24.1	51
L2437481-03	SMPV-2	2773	6.0L Can	06/28/24	474634	L2433590-04	Pass	-29.2	-7.5	-	-	-	-
L2437481-04	SMPV-12	01035	Flow 1	06/28/24	474634		-	-	-	Pass	40.5	35.3	14
L2437481-04	SMPV-12	782	6.0L Can	06/28/24	474634	L2435318-04	Pass	-29.2	-2.1	-	-	-	-
L2437481-05	SMPV-11	02363	Flow 1	06/28/24	474634		-	-	-	Pass	40.2	22.3	57
L2437481-05	SMPV-11	2482	6.0L Can	06/28/24	474634	L2433590-04	Pass	-29.2	-8.0	-	-	-	-
L2437481-06	SMPV-10	0352	Flow 1	06/28/24	474634		-	-	-	Pass	40.0	25.4	45
L2437481-06	SMPV-10	3264	6.0L Can	06/28/24	474634	L2435318-04	Pass	-29.2	-2.8	-	-	-	-

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 06/25/24 01:07  
 Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	84		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	84		60-140



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 06/25/24 01:07  
 Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2433590  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2433590-04  
 Client ID: CAN 595 SHELF 57  
 Sample Location:

Date Collected: 06/13/24 18:00  
 Date Received: 06/14/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	90		60-140



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2435318  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 06/24/24 23:49  
 Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2435318  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2435318  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
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**Lab Number:** L2435318  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
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**Lab Number:** L2435318  
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### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Tentatively Identified Compounds	Results	Qualifier	Units	RDL	Dilution Factor
	Unknown	1.1	J	ppbV	

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	83		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	83		60-140



**Project Name:** BATCH CANISTER CERTIFICATION  
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**Lab Number:** L2435318  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 06/24/24 23:49  
 Analyst: JFI

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2435318  
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### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2435318  
**Report Date:** 07/08/24

### Air Canister Certification Results

Lab ID: L2435318-04  
 Client ID: CAN 1540 SHELF 52  
 Sample Location:

Date Collected: 06/21/24 11:00  
 Date Received: 06/21/24  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140

**Project Name:** FORMER GROSSINGERS**Lab Number:** L2437481**Project Number:** 09313D**Report Date:** 07/08/24**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information****Cooler**                      **Custody Seal**

NA                                      Present/Intact

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2437481-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30)
L2437481-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30)
L2437481-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30)
L2437481-04A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30)
L2437481-05A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30)
L2437481-06A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30)

**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

#### **Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

**Project Name:** FORMER GROSSINGERS  
**Project Number:** 09313D

**Lab Number:** L2437481  
**Report Date:** 07/08/24

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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The following analytes are not included in our Primary NELAP Scope of Accreditation:

### Westborough Facility

**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Nonpotable Water:** EPA RSK-175 Dissolved Gases

**Biological Tissue Matrix:** EPA 3050B

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The following analytes are included in our Massachusetts DEP Scope of Accreditation

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

**EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).

**Microbiology:** SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

**EPA 522, EPA 537.1.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.



# Alpha Analytical

320 Forbes Blvd  
Mansfield, MA 02048-1806  
Tel: 508-822-9300  
Fax: 508-822-3288

# AIR Chain-of-Custody - NJ

Date Rec'd in Lab **7/3/24** ALPHA Job# **L2437481**

Client Contact Information		Project Information		NJ DEP Information		1 of 1 COCs	
Company: <b>SESI</b>	Project Name: <b>Former Grossingers</b>	Bureau:	Division:	Contract No:		Analysis	
Address: <b>959 RT 46 F13</b>	Project No: <b>09813A</b>	<b>Report Information - Data Deliverables:</b>				Matrix	
City/State/Zip: <b>Parsippany, NJ</b>	Site/Location: <b>Liberty, NY</b>	<input type="checkbox"/> FAX: <input type="checkbox"/> ADEx <input type="checkbox"/> Criteria Checker: <input checked="" type="checkbox"/> EMail (standard pdf report)					
Phone: <b>862 280 5627</b>	Project Manager: <b>Ken Farah</b>	<b>Billing Information</b>					
FAX:		<input type="checkbox"/> Same as Client Info    PO #:					
Email: <b>Kenneth.Farah@sesi.org</b>	<b>Analysis Turn-Around Time</b>						
Site Contact:	Standard (Specify) <b>SESI STD</b>						
Site Contact Phone:	Rush (Specify)						

ALPHA LAB ID (Lab Use Only)	Sample Identification	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field (Hg) (Start)	Canister Pressure in Field (Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Outgoing Canister Pressure (Hg) (Note 1)	Incoming Canister Pressure (Hg) (Note 2)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout (ml/min) (Note 1)	Batch Cert ID (Note 1)	TO-15	EPA 3C	Indoor / Ambient Air	Soil Gas
37481-01	SMPV-13	7/1/24	9:20	11:55	-28.41	-2.31	75°	75°				01581	6L			✓			✓
-02	SMPV-14	7/1/24	9:34	12:20	-29.72	-4.94					01524	4295				✓			✓
-03	SMPV-2	7/1/24	9:45	12:15	-26.42	-4.57					01581	01552				✓			✓
-04	SMPV-12	7/1/24	10:06	12:31	-28.52	-0.29					01035	782				✓			✓
-05	SMPV-11	7/1/24	10:18	12:50	-28.32	-4.86					02363	2482				✓			✓
-06	SMPV-10	7/1/24	10:30	13:02	-28.45	-0.23					0362	3204				✓			✓

Custody Seals: Outgoing Seal No: <b>0005128</b> (refer to crate seal) Incoming Seal No: _____ (if applicable)	Temperature (Fahrenheit)				Individual Preparing Canister/Containers and Laboratory Canister Certification			
	Ambient	Maximum	Minimum		Name: <b>Matthew Godwin</b>	Signature:		
	Pressure (inches of Hg)				Footnotes: (1) Refer to equipment tags for these readings. (2) Readings provided in data deliverable package.			
	Ambient	Maximum	Minimum					
	Start							
	Stop							

Special Instructions/QC Requirements & Comments:  
**3-day TAT if possible.**

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until all ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.
Samples Relinquished by:	Date/Time:	Received by:	Date/Time:	
Relinquished by: <b>Paul Maggella</b>	Date/Time: <b>7/2/24 1343</b>	Received by: <b>Paul Maggella</b>	Date/Time: <b>7/2/24 1228</b>	

Relinquished by: <b>Paul Maggella</b>	Date/Time: <b>7/2/24 0040</b>	Received by: <b>Erin Domick</b>	Date/Time: <b>7/3/24 0510</b>
Relinquished by: <b>Erin Domick</b>	Date/Time: <b>7/3/24 0500</b>	Received by: <b>Erin Domick</b>	Date/Time: <b>7/3/24 0510</b>

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**Appendix F:**  
NYSDEC IC & EC Certification Form

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**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b>	<b>C353015</b>		
<b>Site Name Former Grossingers Resort</b>			
Site Address: Clements and Grossinger Roads		Zip Code: 12754	
City/Town: Liberty			
County: Sullivan			
Site Acreage: 18.170			
Reporting Period: April 30, 2023 to April 30, 2024			
		YES	NO
1.	Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>			
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<b>Box 2</b>	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			

**Box 2A**

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?  YES  NO

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  YES  NO  
(The Qualitative Exposure Assessment must be certified every five years)

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

SITE NO. C353015

**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control

30-1-1.1 (portion of)

Sullivan Resorts, LLC

Ground Water Use Restriction  
Monitoring Plan  
Site Management Plan  
IC/EC Plan

The remedy is conditional track 1. The site meets unrestricted SCOs for soil. Residual VOCs and PFAS in groundwater must be addressed by a Site Management Plan.

The use of groundwater underlying the property is prohibited without treatment rendering it safe for intended use.

Evaluation of vapor intrusion with mitigation as required prior to the construction of new buildings on site.

Monitoring of on-site groundwater.

**Box 4****Description of Engineering Controls**ParcelEngineering Control

30-1-1.1 (portion of)

Monitoring Wells

Groundwater will be monitored until residual concentrations of VOCs and PFAS meet Department standards. If VOCs and PFAS do not naturally attenuate, groundwater treatment will be required.

### Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

**IC CERTIFICATIONS  
SITE NO. C353015**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I \_\_\_\_\_ at \_\_\_\_\_,  
print name print business address

am certifying as \_\_\_\_\_(Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

\_\_\_\_\_  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

\_\_\_\_\_  
Date

**EC CERTIFICATIONS**

**Box 7**

**Qualified Environmental Professional Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Fuad Dahan, P.E. at SESI Consulting Engineers,  
print name print business address

am certifying as a Qualified Environmental Professional for the Sullivan Resorts LLC  
(Owner or Remedial Party)

\_\_\_\_\_  
Signature of Qualified Environmental Professional, for  
the Owner or Remedial Party, Rendering Certification

\_\_\_\_\_  
Stamp  
(Required for PE)

\_\_\_\_\_  
Date