# Periodic Review Report

Olean Redevelopment Parcel 1 Olean, New York BCP Site No. C905031

June 2023 0283-017-001

**Prepared For:** 

OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC

Prepared By:



## PERIODIC REVIEW REPORT

### OLEAN REDEVELOPMENT PARCEL 1 BCP SITE No. C905031

### OLEAN, NEW YORK

June 2023 0283-017-001

Prepared for:

### Olean Gateway LLC & HK Olean Hotel LLC

Prepared By:



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## PERIODIC REVIEW REPORT (2022/2023)

## Olean Redevelopment Parcel 1

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#### 1.0 Introduction

Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) on behalf of Olean Gateway LLC and HK Olean Hotel LLC (HK Olean) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C905031, commonly referred to as the Olean Redevelopment Parcel 1 (Site). The Site is in Olean, Cattaraugus County, New York (see Figure 1).

This PRR has been prepared in accordance with NYSDEC DER-10/ Technical Guidance for Site Investigation and Remediation (May 3, 2010) (Ref. 1) for the period May 9, 2022 to May 9, 2023. Appendix A includes the completed NYSDEC Institutional and Engineering Controls (IC/EC) Certification Form for the Site.

#### 1.1 Site Background

Olean Gateway LLC entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in October 2012 to investigate and remediate the 25.099-acre Olean Redevelopment Parcel 1 that consisted of two tax parcels in the City of Olean, Cattaraugus County, New York identified as 1404-1406 Buffalo Street (Tax Map # 94.047-2-29; 24.154 acres) and 1420 Buffalo Street (Tax Map # 94.047-2-30; 0.945 acres) (see Figure 1)<sup>1</sup>. The Site was remediated to NYSDEC Part 375 Track 4 restricted commercial soil cleanup objectives (CSCOs) and will be used for commercial purposes.

Olean Redevelopment Parcel 1 is a portion of a larger former refinery operation that operated in the Olean area from the mid-1800s through the 1950s. Separate refineries operated on the property and were merged in 1902 into the Vacuum Oil Company that, in 1931, became the Socony-Vacuum Oil Company until 1954 when the refinery closed. The property was divided into multiple parcels in the 1960s. Felmont Oil Company (Felmont) constructed an anhydrous ammonia plant on the northern parcels (Olean Redevelopment Parcels 2 and 3) where they manufactured ammonia from natural gas. Felmont sold the ammonia to Agway for use in manufacturing fertilizer at Agway's plant located on Olean Redevelopment Parcel 1. In 1983, Agway purchased the portion of the Felmont site that included the ammonia production plant. Agway dismantled and sold both the ammonia and fertilizer plants in 1984.



<sup>&</sup>lt;sup>1</sup> See Section 2.0 as the property tax map numbers have been changed.

The properties adjoining and surrounding the Site primarily include commercial and industrial properties. The Site is bound by a Verizon facility, Olean Redevelopment Parcel 2 (currently redeveloped as a solar farm), and an undeveloped portion of Olean Redevelopment Site 3 to the north; the Dresser-Rand Company to the east; and Buffalo Street to the south and west. Figure 2 is an aerial view of the Site prior to remediation. Figure 3 is an aerial view of the Site following remediation and prior to the redevelopment activities.

A Remedial Action Work Plan (RAWP; Ref. 2) was prepared and submitted by Olean Gateway LLC in March 2014 and approved by the NYSDEC to address the residual soil and groundwater remediation. The remedial program was successful in achieving the remedial objectives for the Site. The Site Management Plan (SMP; Ref. 3) and Final Engineering Report (FER; Ref. 4) were approved by the NYSDEC in November and December 2016. The COC was recorded on December 20, 2016.

The owner of the Site at the time of issuance of the SMP was Olean Gateway LLC. The Site has since been subdivided as illustrated by Figure 3. Ownership of approximately 5.83 acres in the southeast portion of the Site was transferred in 2018 to HK Olean. The conveyance of this portion to HK Olean changed the tax map identification numbers to 94.047-2-29.1 and 94.047-2-29.2 (see Figure 4). Olean Gateway retained the status and rights as a COC holder.

On March 5, 2019, HK Olean submitted a 60-Day Advance Notification to NYSDEC (provided in Appendix A of the 2019 PRR) of its intent to transfer a portion of the 5.83-acre property and the COC to Buffalo Olean I LLC (1.56 acres) and Buffalo Olean II LLC (1.88 acres); this transfer occurred on May 17, 2019. HK Olean retained ownership of a 2.39-acre parcel and its status and rights as a COC holder.

The portion of the site retained by HK Olean was redeveloped with a hotel between 2020 and 2021. Redevelopment excavation work and import/export material logs are included in the Construction Closeout Report (CCR) submitted to the Department June 2021.

### 1.2 Purpose/Scope

The SMP requires, among other things, periodic inspections, and certification that the IC/ECs implemented at the Site remain in place and are functioning as designed. This PRR serves that purpose as well as documenting post-remedial actions taken since the COC was issued.



#### 2.0 SITE OVERVIEW

The Site is a 25.099-acre area bounded by Buffalo Street to the south and west; a Verizon facility, Olean Redevelopment Site 2 (NYSDEC BCP Site C905032,) and Olean Redevelopment Parcel 3 (NYSDEC BCP Site No. C905033) to the north; and Dresser-Rand to the east. The boundaries of the Site are more fully described in the Environmental Easement (Ref. 3; Appendix D).

Prior remedial activities occurred between 2010 and 2015 and were performed under the 2009 Interim Remedial Measures (IRM) Work Plan (Ref. 5) and 2014 RAWP (Ref. 2).

#### 2.1 Interim Remedial Measures (IRM)

IRMs were previously performed in 2010 (prior to purchase of the property by Olean Gateway) by ExxonMobil in accordance with the IRM Work Plan. The IRM Report for the Buffalo Street Properties (Olean Redevelopment Parcels 1, 2 & 3) was prepared in March 2011 (Ref. 6). The previous IRM activities associated with Olean Redevelopment Parcel 1 consisted of the following:

- Closure/removal of several unidentifiable or suspected septic tanks
  - o Building 1: One vertical concrete tank of unknown size removed.
  - o Building 4: Two approx. 3,000-gallon suspected septic tanks closed in-place and one approx. 1,000-gallon aluminum lined concrete tank removed.
  - O Building 6: One approx. 700-gallon concrete and one approx. 500-gallon steel tank removed.
  - o West of Former Building 7 (BCP Site No. 1): One tank removed.
- Recovery of measurable light non-aqueous phase liquid (LNAPL) from groundwater monitoring wells via sorbent socks.

#### 2.2 Remedial Actions

The following is a summary of the remedial actions completed by Olean Gateway at the Olean Redevelopment Parcel 1:

 Approximately 1,652 tons of arsenic contaminated soil/fill was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY.



- Approximately 110 tons of mercury-contaminated soil/fill was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill.
- Approximately 357 tons of PCB-contaminated soil/fill was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill.
- Removal of apparent ammonia tank, approximately 500-gallon stainless steel vertical underground storage tank (UST) with no piping; and associated PCB- and ammonia-impacted soil/fill. Approximately 181 tons of ammonia-impacted soil/fill were transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill as non-hazardous waste. Approximately 125 tons of additional PCB-impacted soil/fill were transported off-site by US Bulk Transport, Inc. for disposal at Chemical Waste Management's Emelle Facility at 36964 Alabama Highway in Emelle, AL as hazardous waste.
- Approximately 5,722 tons of PAH (SVOC)-contaminated soil/fill was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill.
- Approximately 49,976 linear feet of subsurface metallic product piping was exposed, tapped, evacuated of contents, removed, cleaned and recycled. Smaller diameter (2"-8") piping that extended beyond the property boundary was cut and capped with plastic gripper mechanical ("end of pipe") plugs. Larger diameter piping was grouted at the apparent property line using bricks and mortar. Approximately 2,552 cubic yards (CY) of grossly contaminated petroleum soil (GCPS) were excavated during piping removal activities and treated with the onsite force-vented biopiles (FVBPs) and reused as backfill below the cover system. Approximately 578 tons of GCPS were excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill.
- Approximately 48, 55-gallon drums were generated during the remedial work, 42 of which were generated from the removal of the abandoned subsurface piping. The contents of the piping included LNAPL, residual pipe scale, and product sludge. The drums were disposed at CWM Chemical Services, LLC, located in Model City, NY. In addition to the drums, approximately 5.5 tons of tank contents, placed into roll-off containers and solidified with Portland cement due to liquid content, were disposed at Waste Management's Chaffee Landfill. Water extracted from excavations during piping removal was pumped into holding tanks, treated on-site with bag filters and granular activated carbon (GAC), pumped into a secondary on-site temporary holding tank, sampled, and discharged to the City of the Olean sanitary sewer via the on-site 8-inch sanitary sewer piping with approval under an Industrial Pretreatment Program permit. Approximately six drums of



- wash water generated during holding tank cleaning were disposed at CWM Chemical Services, LLC.
- Installation and operation of a soil vapor extraction (SVE) system to address GCPS from approximately 2 to 15 feet below ground surface (fbgs). The SVE system included the installation of seven SVE wells, associated conveyance piping, and placement of an SVE blower. Emissions from the SVE system are controlled using a biofilter contained within an approximate 20-foot by 8-foot steel roll-off box outfitted with perforated pipe. The biofilter contains an approximate 1-foot thick gravel layer at the base of the box overlain by approximately three feet of wood chip and compost filter medium, which allows the naturally occurring microbes to bioremediate the air stream and control the nuisance odors from the SVE system. Operation of the SVE system is more fully described in Section 3.2.3.
- LNAPL recovery was completed using hydrocarbon absorbent socks and/or manual bailing at monitoring wells W7, W9, W10, W26, W27 and MW4 and a skimmer at W5. New LNAPL monitoring well W32 was installed in June 2016 near an unknown well-like subsurface structure that showed evidence of product; the unknown structure was grouted in-place and no measurable product has been observed in W32 since installation. Recovered LNAPL was transferred to properly labeled and sealed 55-gallon drums at the Site for future off-site disposal, which ultimately occurred in September 2016.
- Construction and maintenance of a Site cover system installed at the Site between August 2015 and September 2016 (see Figure 5).
- Execution and recording of an Environmental Easement to restrict land use to commercial/industrial operations and prevent future exposure to any contamination remaining at the Site. The Environmental Easement was recorded with the Cattaraugus County in June 2015.
- Development and implementation of an SMP for management of remaining contamination as required by the Environmental Easement, which includes plans for (1) institutional and engineering controls, (2) excavation, (3) monitoring and reporting, and (4) operation and maintenance.

### 2.3 Site Redevelopment Activities

Site improvements have occurred in previous reporting years. As shown on Figure 3, a 1.02-acre portion of the Site was conveyed to the City of Olean to be used as a public roadway (Jack Murphy Boulevard). The portion of the Site retained by HK Olean was developed into a hotel. The Site is otherwise undeveloped.



HK Olean Hotel, LLC redeveloped the Site with an approximately 15,766 square foot four-story hotel with associated parking, walkways, and landscaping. In accordance with the SMP, a soil vapor intrusion (SVI) evaluation was conducted in the building at the completion of hotel construction and prior to occupancy to evaluate if measures are required to mitigate potential vapor intrusion into the newly constructed building. Based on this assessment, no contaminants were detected above NYSDOH matrices, and no other contaminants were detected at concentrations requiring mitigation. Therefore, soil vapor intrusion was not identified within the Site building and no further action was recommended. Complete findings of the SVI assessment were submitted to the NYSDEC on May 12, 2021 and approved in a letter dated May 24, 2021.



#### 3.0 SITE MANAGEMENT PLAN

The SMP was approved by the NYSDEC on November 10, 2016 and includes an IC/EC Plan, a Monitoring and Sampling Plan, an Operation & Maintenance (O&M) Plan, an Excavation Work Plan (EWP), and a copy of the Environmental Easement. A brief description of the components of the SMP is presented below.

#### 3.1 IC/EC Plan

As detailed in the Environmental Easement, several IC/ECs need to be maintained as a requirement of the BCAs for the Site.

#### 3.1.1 Institutional Controls

- Groundwater-Use Restriction: The use of groundwater for potable and non-potable purposes is prohibited.
- Land-Use Restriction: The controlled property may be used for commercial and/or industrial use.
- Implementation of the SMP: The O&M Plan and EWP must be followed.

#### 3.1.2 Engineering Controls

- Vapor Mitigation: The HK Olean Hotel was constructed with an active sub-slab depressurization (ASD) system. Based on the SVI assessment, no further action was recommended, and the system was not turned on.
- SVE System: The SVE system was operated and monitored nearly continuously between November 2014 and May 2022 and continues to operate.
- LNAPL Recovery/Monitoring: LNAPL recovery and monitoring is performed monthly.
- Groundwater Monitoring: Annual groundwater monitoring was completed in June 2021.
- Cover System: The cover system is intact and functioning as intended (see Figure 5).



#### 3.1.3 Site Inspection & IC/EC Compliance

On April 14, 2023, Benchmark's Certifying Professional Engineer performed a Site visit and assessment. No observable indication of intrusive activities, cover failure, or use of groundwater were noted during the Site inspection.

Appendix A includes the completed SMP PRR Notice - Institutional and Engineering Controls Certification Form. Appendix B includes photographs taken during the Site inspection.

#### 3.2 Monitoring and Sampling Plan

The Monitoring and Sampling Plan specifies the methods used for:

- LNAPL monitoring and collection.
- Sampling and analysis of groundwater.
- Remedial SVE system monitoring.
- Site-wide inspection.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.

### 3.2.1 LNAPL Monitoring/Recovery System

LNAPL is monitored in wells W5, W9, W10, W26, and W27. Removal of wells W-7A, W31, and W32 from the LNAPL monitoring list was approved by NYSDEC July 9, 2021. Table 1 presents a summary of the monthly LNAPL measurements for the period of July 17, 2014 through April 24, 2023. During this reporting period, 4 of the 5 wells had measurable levels of LNAPL but only well W9 had recoverable LNAPL (0.3 gallons). Since issuance of the COC, estimates of the quantity of LNAPL recovered are less than 1 gallon in well W10; 3 gallons in well W9; 1.5 gallons in well W27; approximately 10 gallons in well W26; and approximately 75 gallons in well W5.

LNAPL is recovered using hydrocarbon absorbent socks in all wells except well W5 where an oil/water skimmer is operated. The adsorbent socks are installed in the well at the LNAPL/water interface. During monthly inspections, socks that have obvious staining/saturation of LNAPL are removed and replaced with new socks. There were sock change outs at wells W9, W-26, and W27 during the reporting period. The LNAPL recovered from well



W5 oil/skimmer operation is stored in a 55-gallon drum, which will be disposed off-site once full.

#### 3.2.2 Groundwater Sampling and Analysis

During the August 1-2, 2022, groundwater sampling event, wells W3, W4, W7A, W30, and W31 were all analyzed for target compound list (TCL) volatile organic compounds (VOCs) and tentatively identified compounds (TICs) using USEPA Method 8260 and semi-volatile organic compounds (SVOCs) and TICs via USEPA Method 8270 and 8270-SIM. Wells W3, W4, and W32 were analyzed for total and dissolved arsenic using USEPA Method 6020. Appendix C includes field notes and the laboratory analytical data package from the 2022 groundwater sampling event.

#### 3.2.2.1 Groundwater Elevations

The groundwater elevations in Table 2 were used to prepare an isopotential map for August 2022 (Figure 6). Overall groundwater flow direction in the uppermost sand and gravel aquifer is toward the southeast and southwest consistent with the prior groundwater contour maps. Well W11 was not located in August 2022 as field staff were unable to establish a satellite connection using the GPS Trimble and could not visually locate the well. A field staff manager completed a Site inspection on November 2, 2022 and was able to locate the well and marked it with paint marker ensuring it will be easily identifiable during the June 2023 groundwater monitoring event.

#### 3.2.2.2 Analytical Data

Table 3 (VOCs and SVOCs) and Table 4 (metals) summarize the analytical data from the 2022 sampling event as well as historic data.

#### **VOCs**

The following minor exceedances of the NYSDEC Class GA groundwater quality standards/guidance values (GWQS/GVs) for VOCs were observed:

- Well W3: 1,2,4-trimethylbenzene at 6.1 ug/L; benzene at 18 ug/L; and total xylenes at 19.2 ug/L
- Well W4: 1,2,4-trimethylbenzene at 8.8 ug/L and chlorobenzene at 5.6 ug/L
- Well 7A: 1,4-dichlorobenzne at 4.4 ug/L; and chlorobenzene at 9.4 ug/L



VOC TICs were generally consistent with historical results.

#### **SVOCs**

The following minor exceedances of the NYSDEC Class GA GWQS/GVs for SVOCs were observed; all results were qualified as estimated:

- Well W4: benzo(a)anthracene at 0.26 ug/L; benzo(a)pyrene at 0.09 ug/L; benzo(b)fluoranthene at 0.17 ug/L; chrysene at 0.19 ug/L; and indeno(1,2,3-cd)pyrene
- Well W7A: benzo(a)anthracene at 0.12 ug/L
- Well W30: benzo(a)anthracene at 0.11 ug/L

SVOC TICs were generally consistent with historical results.

#### **Metals**

None of the three wells sampled exceeded its GWQS for total arsenic (25 ug/L).

#### 3.2.3 SVE System and Monitoring

The SVE-1 system has been operating on the Olean Redevelopment Parcel 1 Site nearly continuously since March 2015 and is comprised of two main components:

- 1. The collection system is constructed of a series of vertical extraction wells and extraction well manifold piping.
- 2. The trailer-mounted mechanical SVE system, which consists of the blower, motors and ancillary equipment that generate the vacuum and move the extracted vapor to the biofilter treatment vessel.

One SVE blower is connected to a series of wells 1-SVE-1 through 1-SVE-7 (refer to Figure 7). The extracted air is conveyed through 6-inch PVC piping installed below grade and treated in a biofilter prior to discharge to the atmosphere. The biofilter treatment medium consists of a mixture of compost and mulch (approx. 50% each by weight). The natural bacteria in the biofilter use the organics in the waste stream as a source of energy. The biofilter medium is maintained in a slightly wet state and periodically mixed (fluffed-up). Biofilter media requires mixing when nuisance odors become an issue or a thick cake layer forms on top preventing proper venting; the top 4-6 inches of the biofilter media is mixed/raked to keep the media broken up and loose. This was last completed in April 2019 and has not been



required due to low effluent PID readings. Biofilter mixing events are recorded on Table D-1 in Appendix D.

On January 25, 2023, Olean Gateway, LLC submitted a Verification Soil Sampling (VSS) Work Plan to the Department. The Department approved the VSS Work Plan on February 21, 2023. Field work has not begun; however, Olean Gateway, LLC will provide the Department with 7 days' advance notice of the start of work.

#### 3.2.3.1 Results

The SVE system has been successful in removing volatile organic vapors from the subsurface soil/fill. Appendix D includes a summary of monitoring data (Table D-1) and a graphic chart depicting cumulative mass of contaminant removed. The estimated mass of organic petroleum hydrocarbons removed by the system through April 2023 is approximately 6,469 pounds. The rate of VOC removal was initially over 20 pounds per day (lb/d) but was on average 0.6 lb/d during the 2022/2023 reporting period, which is consistent with the 2021/2022 reporting period.

Individual SVE well PID readings as well as the SVE system PID and vacuum readings were taken to confirm the system is running within specifications (refer to Table D-2 in Appendix D). During the reporting period, PID readings from the three operating SVE wells as well as the system influent increased in September 2022 but decreased in November and again in December 2022. During each system check, the following wells were running: 1-SVE-2, 1-SVE-3, and 1-SVE-7. Wells 1-SVE-1, 1-SVE-4, 1-SVE-5, and 1-SVE-6 have been turned off since June 13, 2019 to optimize the system. Turning off wells 1-SVE-1, -4, -5, and -6 with low PID readings allows the system to focus the vacuum at locations of higher PID readings.

The system influent air PID readings fluctuated between 8.3 and 44.2 ppm from June to December 2022, which is consistent with 2021/2022 system PID readings.

### 3.2.4 Site-Wide Inspection – Cover System Monitoring

The existing cover system is comprised of a minimum of 12 inches of clean soil (vegetated to prevent erosion), 12 inches of gravel/stone for the access roads, foundations, and hardscape associated with the newly constructed hotel. A demarcation layer, consisting of orange plastic mesh material, provides a visual reference to the top of the remaining contamination zone, which is the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP.



In accordance with the SMP, the cover system must be maintained and replaced in the event it is breached as described in the EWP (SMP Appendix A). The cover will be inspected on an annual basis and following severe storm events. If frequent areas of distress are noted, they will be repaired. A summary of the key maintenance concerns and the respective corrective actions is provided below.

#### Vegetative Soil Cover Monitoring:

- Areas where erosion problems (i.e., rills or gullies) are observed will be repaired by re-grading the localized area, adding the required fill material and/or topsoil, and reseeding/replanting.
- If burrowing animals are observed breaching the soil cover, as evidenced by exposed fill material, they will be eradicated by a licensed exterminator.

#### Gravel/Stone Cover Monitoring:

• Ruts or erosion along the access roads will be repaired by re-grading the localized area and adding additional material.

At the time of the 2023 Site inspection, the cover systems were intact and functioning as intended. Appendix B provides photographic documentation of Site conditions at the time the inspection.

### 3.2.5 Discussion of Monitoring Results

The amount of LNAPL present in well W10 has decreased since the completion of the remediation (October 2016), specifically during the last six reporting periods where no LNAPL has been recovered, except on December 17, 2020 when 0.1 gallon was removed from the well. No measurable product was present in well W5 during the 2022/2023 reporting period. During the 2022/2023 reporting period 0.3 gallons of product were removed from well W9. Wells W26 and W27 had measurable product but no recovered product during the 2022/2023 reporting period. The last date product was recovered from well W26 was December 17, 2020 and from well W27 was December 20, 2018.

The groundwater in wells W30 and W31 meets NYSDEC GWQS/GVs for VOCs and SVOCs except for one SVOC at well W30. Five VOCs were detected at concentrations above GWQSs/GVs; specifically, three VOCs in well W3, two VOCs in well W4, and two VOCs in well 7A exceeded GWQS/GVs. Five SVOCs were detected at concentrations above GWQSs/GVs; specifically, five SVOCs in well W14, one SVOC in well W7A, and one SVOC in well W30. All monitoring wells met the GWQS for arsenic.



The SVE system has been effective in removing organics vapors from the vadose zone; however, the system has reached an asymptotic removal rate. Historic VOC concentrations in the SVE intake air indicate an overall reduction of 99%. At the time of the Site inspection, the cover systems were intact and functioning as intended.

#### 3.3 Operation & Maintenance Plan

The O&M Plan addresses operation and maintenance for the SVE systems.

#### 3.3.1 SVE System

#### 3.3.1.1 Routine System Operation and Maintenance

The SVE system is designed to require little maintenance over the expected duration of use at the Olean Redevelopment Parcel 1 Site. The blower bearing housing is oil-filled and checked once per month. If the level is below the overflow, SAE 40 weight oil is added through the top fill port on the housing. Grease fittings for the blower shaft are topped off periodically (i.e., every 2 months).

#### 3.3.1.2 System Monitoring Devices and Alarms

Monitored system operating conditions that trigger a local (red panel light) and remote (common autodialer channel) alarm condition include low air vacuum, high air pressure, moisture separator tank high level, condensate tank high level, and heater/exhaust fan failure. Except for heater/exhaust fan failure, these alarm conditions automatically shut down the SVE system. A trailer entry (security) relay also triggers local and remote alarms but does not cause system shutdown. Blower and condensate pump failure (e.g., due to thermal overload, power loss, or manual shut down) also triggers the autodialer. If the SVE system alarm is activated, the autodialer will contact Benchmark. Based on the alarm fault, Benchmark will respond and/or contact the appropriate repair vendor (e.g., electrician, mechanical repair service).

There were no operational problems with the SVE systems that required a change in system operation and/or temporary system shutdown for longer than one week during the reporting period.



#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

#### 4.1 Conclusions

- Based on our observations during the April 14, 2023 inspection, the Site covered by this PRR was fully compliant with the IC/EC requirements.
- VOC concentrations in wells W3, W4, and W7A slightly exceeded GWQSs. SVOC concentrations in wells W14, W7A, and W30 slightly exceeded GWQSs (at estimated concentrations). None of the wells exceeded the GWQS for arsenic during the 2022 sampling.
- LNAPL was only recovered from 1 of the 5 monitored wells during the reporting period and the presence of LNAPL has significantly decreased over time.
- The rate of removal with the SVE system has decreased from approximately 22 lb/d during the initial mass removal period to an average of approximately 0.6 lb/d during the 2022/2023 reporting period. During the reporting period, PID readings from the three operating SVE wells as well as the system influent increased in September 2022 but decreased in November and again in December 2022.

#### 4.2 Recommendations

Olean Gateway LLC intends to complete the SVE system verification soil sampling in June or July 2023 and will submit a letter report summarizing the findings and request for SVE system discontinuance in accordance with the SMP.

The next annual groundwater monitoring event will be completed in June 2023.



### 5.0 DECLARATION/LIMITATION

Benchmark Civil/Environmental Engineering & Geology, PLLC personnel conducted the annual Site inspection for BCP Site No. C905031 in Olean, New York, according to generally accepted practices. This PRR complies with the scope of work provided to Olean Gateway LLC by Benchmark Civil/Environmental Engineering & Geology, PLLC.

This PRR has been prepared for the exclusive use of Olean Gateway LLC. The contents of this PRR are limited to information available at the time of the Site inspection. The findings herein may be relied upon only at the discretion of Olean Gateway LLC. Use of or reliance upon this PRR or its findings by any other person or entity is prohibited without written permission of Benchmark Civil/Environmental Engineering & Geology, PLLC.



#### 6.0 REFERENCES

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- 3. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. Site Management Plan, Olean Redevelopment Parcel 1, Olean, New York, BCP Site No. C915031. November 2016
- 4. Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. Final Engineering Report, Olean Redevelopment Parcel 1, Olean, New York, BCP Site No. C915031. November 2016.
- 5. Woodard & Curran. Interim Remedial Measures Work Plan, ExxonMobil, Buffalo Street Properties, Olean, New York. September 30, 2009.
- 6. Woodard & Curran. Interim Remedial Measure Report, Olean Redevelopment Parcels 1, 2, and 3, Olean, New York. March 2011.



## **TABLES**





Table 1 LNAPL System Inspection Log Olean Redevelopment Site 1 (C905031) Olean, New York

					W5						W9						W10					١	W-26					١	W27		
Date	Inspector's Initials	Product Present? (Y / N)	` '	Water Level (fbTOR)	Product Level in Feet	Accumulated Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	` ′	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)
7/17/14	SF JJR	Y	15.19 16.72	17.72 21.14	2.53 4.42	0	N N	Y	18.22 20.79	18.45 21.02	0.23	0	NA NA	Y	18.87 21.35	18.88 21.4	0.01	0	N Removed							Y	19.12 21.57	19.12 21.81	Trace 0.24	0	N N
10/28/14	JJR	Υ	Pre 17.01	Pre 20.75	3.74	2.75	Removed	Υ	20.92	21.13	0.21	0	NA	Υ	21.42	22.31	0.89	0.25	NA							Υ	20.65	20.89	0.24	0	Removed
11/5/14	JJR	Y	Post 18.35 16.98	Post 18.60 21.5	0.25 4.52	4.5	NA	 Y	21.16	21.62	0.46	0.25	Removed	 Y	21.41	22.17	0.76	0.25	NA							 Y	21.86	21.9	0.04	0	NA
11/13/14	JJR	Y	16.75	20.67	3.92	8	NA	Y	20.78	20.92	0.14	0	NA	Y	21.32	21.91	0.59	0.25	NA							Y	21.22	21.41	0.19	0	NA
12/15/14 1/15/15	JJR JJR	Y	15.87 15.56	20.92 17.26	5.05 1.7	12.5 13.75	NA NA	Y	19.92 19.04	21.14	1.22 1.98	0.75 0.75	NA NA	Y	20.66 19.82	20.82 19.98	0.16 0.16	0	NA NA							Y	20.52 19.44	21.12 19.72	0.6 0.28	0	NA NA
2/27/15	BMG	Y	17.17	19.8	2.63	15.75	NA	Υ	20.64	20.95	0.31	0	Υ	Υ	21.2	21.34	0.14	0	Υ							Υ	21.24	21.54	0.3	0	Υ
3/11/14 3/18/15	BMG BMG	Y	17.45 17.57	18.57 18.14	1.12 0.57	16.55 17.35	NA NA	-			-	-	-																-		
4/6/15	BMG	Y	13.87	14.2	0.33	18.85	NA	Υ	18.25	18.9	0.65	1.3	Y	Y	18.92	18.96	0.04	0	Y							Y	18.77	19.03	0.26	1	Y
7/2/15 9/3/15	BMG PWW	Y	15.21 19.57	15.95 21.11	0.74 1.54	19.85 20.85	NA NA	Y	18.7 20.97	18.8 21.2	0.1	0.01 0.25	Y N	Y	17.78 21.6	17.85 21.8	0.07	0	Y N	Y	20.25	20.98	0.73	0	NA	Y	19.07 21.26	19.11 21.36	0.04	0	N N
9/29/15	PWW	Y	17.29	19.41	2.12	22.35	NA	Y	21.24	21.3	0.06	0	N	Y	21.81	22.31	0.5	0	Y	Y	20.65	21	0.35	0.25	N	Y	21.69	21.91	0.22	0	Υ
10/14/15 10/28/15	PWW ML	Y	17.91 17.09	19.01 18.26	1.1 1.17	23.05 23.3	N N	Y	20.84 20.77	20.85	0.01	0	N N	Y	21.41 21.44	21.6 21.45	0.19	0	N N	Y	20.17 19.97	20.61	0.44	0.25	N N	Y	21.19 20.82	21.44 21.13	0.25	0	N N
11/11/15	ML	Υ	20.34	22.5	2.16	25.3	N	Υ	22.89	22.9	0.01	0	N	Y	20.95	21	0.05	0	N	Y	19.68	20.11	0.43	0.25	N	Y	20.91	21.22	0.31	0	N
11/24/15 12/9/15	ML ML	Y	16.47 16.07	18.96 18.13	2.49 2.06	26.55 27.55	N N	Y	20.01 19.81	20.07	0.06	0	N N	Y	20.66 20.45	20.68	0.02	0	N N	Y	19.41 19.16	20.97 19.58	1.56 0.42	0.25 0.25	N N	Y	20.75	21.02 20.62	0.27	0	N N
12/22/15	ML	Υ	16.06	18.16	2.1	28.55	N	Y	19.69	19.77	0.08	0	N	Υ	20.4	20.44	0.04	0	N	Y	19.11	19.32	0.21	0.13	N	Y	20.26	20.34	0.08	0	N
1/5/16 2/2/16	ML ML	Y	18.36 15.4	21.83 19.53	3.47 4.13	30.05 31.95	N N	y Y	18.3 19.01	18.31 19.02	0.01	0	N N	Y	19.69 19.61	19.71 19.62	0.02	0	N N	Y	17.98 18.66	18.09 18.82	0.11	0	Y N	Y	19.28 19.88	19.48 20.03	0.2 0.15	0	N N
3/1/16	ML	Y	14.54	19.47	4.93	33.7	N	N	NA	18.35	NA	0	N	Υ	18.95	18.96	0.01	0	N	Y	17.97	18.41	0.44	0	N	Y	19.16	19.23	0.07	0	N
4/12/16 5/4/16	BG ML	Y	18.63 18.23	23.2 21.38	4.57 3.15	37.2 38.7	N N	Y	18.78 18.56	18.8 18.57	0.02	0	Y N	Y	19.55 19.12	19.56 19.16	0.01	0	Y N	Y	18.18 18.14	19.1 18.73	0.92	0.5 0.25	N N	Y	19.65 19.12	19.68 19.22	0.03	0	Y N
6/2/16	ML	Y	19.41	21.69	2.28	39.7	N	Y	19.74	19.76	0.02	0	N	Υ	20.26	20.29	0.03	0	N	Y	19.24	19.74	0.5	0.25	N	Y	20.37	20.47	0.1	0	N
7/6/16 8/1/16	BMG BMG	Y	20.57 25.59	22.38 25.59	1.81 0	41.2 44.2	NA NA	Y	21.1 21.99	21.21	0.11	0.05 0.05	Y	Y	21.74 22.57	21.8	0.06	0.05 0.05	Y	Y	20.45	20.86 21.55	0.41	0.25 0.05	Y	Y	21.6 22.55	21.91 22.55	0.31	0.25 <0.1	Y
9/14/16	BMG	Υ	26.11	26.19	0.08	46.2	NA	Υ	22.52	22.65	0.13	0.05	Υ	Y	23.33	23.35	0.02	0.05	Y	Y	21.7	21.85	0.15	0.05	Υ	Y	23.17	23.17	0	<0.1	Υ
10/27/16 11/22/16	BMG BMG	Y	23.25 23.9	25.57 24.15	2.32 0.25	48.2 3	NA NA	N Y	NA 20.15	19.81 20.28	0.13	0.05	N Y	N N	NA NA	20.44	0	0	N N	Y	19.22 19.7	19.38 19.73	0.16 0.03	0.05 0.05	Y	N N	NA NA	20.65 21.08	0	0	N N
12/21/16	BMG	Y	23.07	23.75	0.68	5	NA	N	19.5	19.65	0	0.05	Y	N	NA	20.15	0	0	N	N	NA	18.96	0	0	N N	N	NA	20.28	0	0	N
1/5/17 2/14/17	BMG BMG	Y	22.28 20.9	23.15 21.08	0.87 0.18	10 19	NA NA	N N	NA NA	18.42 17.09	0	0	N N	N N	NA NA	19.03 17.64	0	0	N N	N N	NA NA	18.03 16.83	0	0	N N	N N	NA NA	19.29 17.45	0	0	N N
3/28/17	BMG	Y	21.9	21.91	0.01	23	NA	N	NA	18.25	0	0	N	N	NA	18.77	0	0	N	N	NA	18.03	0	0	N	N	NA	18.56	0	0	N
4/11/17 5/30/17	BMG BMG	Y	22.47 21.96	22.52 22.2	0.05 0.24	25 27	NA NA	N N	NA NA	17.5 18.5	0	0	N N	N N	NA NA	18.07 19.01	0	0	N N	N N	NA NA	17.32 18.23	0	0	N N	N N	NA NA	18.11 18.92	0	0	N N
6/28/17	BMG	Y	22.91	22.91	0.24	29	NA NA	Y	19.51	19.55	0.04	0.05	Y	N	NA	19.18	0	0	N	N	NA	19.18	0	0	N	N	NA	19.99	0	0	N
7/24/17 8/9/17	BMG CFD	Y	23.57 24.2	23.59 24.22	0.02	31 33	NA NA	Y	20.3 21.0	20.37	0.05 0.01	0.05 0.05	Y	N N	NA NA	20.86	0	0	N N	N N	NA NA	19.88 20.53	0	0	N N	N N	NA NA	20.7 21.57	0	0	N N
9/26/17	CFD	N	NA	25.1	0.02	35	NA NA	Y	21.66	21.8	0.14	0.05	Y	Y	22.42	22.6	0.18	0.3	Y	N	NA NA	21.35	0	0	N	N	NA NA	22.56	0	0	N
10/26/17 11/20/17	CFD CFD	N N	NA NA	25.64 24.68	0	37 45	NA NA	Y N	22.02 NA	22.07 21.55	0.05	0.1	Y N	Y	23.74 21.89	23.77	0.03	0.2 0.25	Y	N N	NA NA	21.47 20.56	0	0	N N	Y N	22.8 NA	22.82 21.62	0.02	0.05 0	Y
	CFD	N	NA NA	23.74	0	See Note This	NA NA	N		19.87	0	0	N	N N	NA	21.95	0.06	0.23	N	N	NA NA	20.30	0	0	N	IN V	20.55	20.58		0.1	N
12/26/17		Y	NA 21.06			Date			NA NA			0					0	0	N		NA NA		-	0		, , , , , , , , , , , , , , , , , , ,			0.03		V
1/25/18 2/15/18	CFD CFD	Y	21.06 22.55	21.1 22.56	0.04 0.01	53 54.23	NA NA	N N	NA NA	18.28 18.52	0	0	N Y	N N	NA NA	18.93 19.12	0	0	N N	N N	NA NA	18.1 18.3	0	0	N N	N N	19.07 NA	19.12 18.55	0.05	0.5	N N
3/12/18 4/28/18	CFD CFD	Y	21.56	21.58	0.02 0.04	57.2 59.7	NA NA	Y Y	17.62	17.64	0.02	0.1 0.1	Y	N N	NA NA	18.15	0	0	N N	N V	NA 17.4	17.39 17.46	0	0 0.2	N Y	Y	17.8 17.8	17.83	0.03 0.05	0.15 0.2	Y
5/24/18	CFD	N N	21.15 NA	21.19 22.23	0.04	60.3	NA NA	Y	17.69 18.34	17.71 18.4	0.02 0.06	0.1	Y	N N	NA NA	18.21 19.18	0	0	N N	Y N	17.4 NA	17.46	0.06	0.2	N N	Y N	17.8 NA	17.85 18.23	0.05	0.2	N N
6/28/18 7/17/18	CFD CFD	Y N	22.57 NA	22.62 24.36	0.05	60.9 61.4	NA NA	Y	18.12	18.15	0.03	0.1	Y	N N	NA NA	20.62	0	0	N N	Y	18.65 20.12	18.7 20.15	0.05	0.1 0.1	Y	Y	19.37 21.04	19.4 21.1	0.03	0.2 0.2	Y
8/11/18	CFD	N N	NA NA	22.79	0	61.7	NA NA	N T	20.52 NA	20.65	0.13	0.25 0	N N	N N	NA NA	21.17 21.06	0	0	N N	N N	NA	19.89	0.03	0.1	N N	N N	NA NA	20.91	0.06	0.2	N N
9/24/18	CFD	N	NA	23.84	0	62	NA	Y	19.94	19.96	0.02	0.1	Y	N	NA	20.56	0	0	N	Y	19.45	19.46	0.01	0.05	Y	N	NA	20.25	0	0	N
10/15/18 11/29/18	CFD CFD	N N	NA NA	23.05 24.74	0	63.7 64	NA NA	Y	19.09 19.23	19.11 19.27	0.02	0.1 0.1	Y	N N	NA NA	19.72 19.34	0	0	N N	N N	NA NA	18.77 19.14	0	0	N N	N N	NA NA	19.41 19.27	0	0	N N
12/20/18	CFD	N	NA NA	22.34	0	64	NA NA	Y	18.43	18.44	0.01	0.1	Y	N	NA	19.04	0	0	N	Y	18.5	18.53	0.03	0.2	Y	Y	19.14	19.17	0.03	0.1	Y
1/21/19 2/13/19	CFD CFD	N N	NA NA	20.71	0	64 64.5	NA NA	Y N	17.26 NA	17.3 17.14	0.04 NA	0.2	Y	N N	NA NA	17.84 17.67	0	0	N Y	Y	17.72 17.24	17.79 17.55	0.07	0.2 0.5	Y	N N	NA NA	17.52 17.12	0	0	N N
3/21/19	CFD	N	NA 20.07	21.51	0	65.5	NA	N	NA	18.21	NA	0	N	N	NA	18.76	0	0	Y	Y	17.61	17.9	0.29	0.5	Y	N	NA	18.38	0	0	N
4/24/19 5/24/19	CFD CFD	Y N	22.07 NA	22.09 21.59	0.02	66 68	NA NA	N N	NA NA	18.75 18.52	NA NA	0	N N	N N	NA NA	19.3 19.01	0	0	N N	Y	18.4 18.92	19.4 19.14	0.22	2.25	Y	N N	NA NA	19.1 18.94	0	0	N N
6/21/19	CFD	N	NA	21.25	0	70	NA	N	NA	18.27	NA	0	N	N	NA	18.47	0	0	N	Y	18.45	18.82	0.37	1.5	Y	N	NA	18.67	0	0	N
7/30/19 8/23/19	CFD CFD	N N	NA NA	22.07 21.74	0	70.25 70.25	NA NA	Y Y	19.56 19.6	19.6 19.62	0.04	0.1	N N	N N	NA NA	19.6 19.93	0	0	N N	Y	18.7 18.73	18.95 18.9	0.25 0.17	0.5 0.75	Y	N N	NA NA	19.68 19.7	0	0	N N
9/30/19	CWE	N	NA	24.04	0	70.25	NA	Υ	21.15	21.41	0.26	0.1	N	N	NA	21.75	0	0	N	Y	20.61	20.7	0.09	0	N	N	21.9	21.91	0.01	0	N
10/31/19 11/25/19	CWE	N N	NA NA	24.75 23.75	0	70.25 70.25	NA NA	Y	21.25 20.45	21.45 21.91	0.2	0	N N	N N	NA NA	21.76	0	0	N N	Y	20.65 20.85	20.95	0.3 0.14	0	N Y	N N	21.45 20.75	21.48 21.2	0.03 0.45	0	N N
12/30/19	CWE	N	NA NA	23.31	0	70.25	NA NA	Y	19.88	19.95	0.07	0	N	N	NA	20.1	0	0	N	Ϋ́	19.01	19.5	0.49	0	Y	N	19.51	19.7	0.19	0	N



Table 1 LNAPL System Inspection Log Olean Redevelopment Site 1 (C905031) Olean, New York

					W5						W9						W10					,	W-26					1	W27		
Date	Inspector's Initials	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Accumulated Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level in Feet	Volume Recovered in Gallons	Change Absorbent Sock? (Y/N)
1/30/20	CWE	N	NA	21.9	0	70.25	NA	Υ	18.61	18.74	0.13	0	N	N	NA	19.1	0	0	N	Υ	18.12	18.7	0.58	0.1	N	N	NA	18.9	0	0	N
2/27/20	CWE	N	NA	20.5	0	70.25	NA	Y	17.7	17.8	0.1	0	N	N	NA	18.1	0	0	N	Υ	17.3	17.5	0.2	0	N	N	NA	17.65	0	0	N
3/30/20	CWE	N	NA	20.9	0	70.25	NA	Y	17.65	17.68	0.03	0	N	N	NA	18.15	0	0	N	Υ	17.3	17.63	0.33	0	N	N	NA	17.99	0	0	N
4/27/20	CWE	N	NA	21.0	0	70.25	NA	Y	18.1	18.5	0.4	0	N	N	NA	18.2	0	0	N	Υ	17.4	18.8	1.4	0.75	N	Υ	18.3	18.4	0	0	N
5/28/20	CWE	N	NA	21.61	0	71.25	NA	N	18.41	18.49	0.08	0	N	N	NA	18.95	0	0	N	Υ	17.92	18.81	0.89	0	N	N	NA	18.79	0	0	Ν
6/29/20	CWE	N	NA	22.80	0	71.25	NA	N	19.51	19.75	0.24	0	N	N	NA	20.15	0	0	N	Υ	19.01	20.20	1.19	0.25	N	N	NA	19.99	0	0	Ν
7/31/20	CWE	N	NA	23.33	0	71.25	NA	Y	20.60	20.72	0.12	0	N	N	NA	21.00	0	0	N	Υ	19.92	20.41	0.49	0	N	N	NA	20.80	0	0	N
8/31/20	CWE	N	NA	24.80	0	71.25	NA	Y	21.75	21.84	0.09	0	N	N	NA	22.20	0	0	N	Υ	20.95	21.19	0.24	0	N	Υ	22.10	22.19	0.09	0	N
9/28/20	CWE	N	NA	22.50	0	71.25	NA	Y	22.20	22.50	0.3	0	N	N	NA	22.97	0	0	N	Υ	21.55	21.89	0.34	0	N	Υ	22.65	22.78	0.13	0	N
10/29/20	CWE	N	NA	26.06	0	71.25	NA	Υ	22.41	22.51	0.1	0	N	Υ	22.79	23.06	0.27	0	N	Υ	21.72	22.00	0.28	0	N	Υ	23.01	23.20	0.19	0	N
11/25/20	CWE	N	NA	25.50	0	71.25	NA	Y	21.99	22.01	0.02	0	N	N	NA	22.61	0	0	N	Υ	24.10	24.51	0.41	0	N	Υ	22.24	22.30	0.06	0	N
12/17/20	CFD	Υ	24.88	24.90	0.02	71.25	NA	Υ	19.96	20.10	0.14	0.25	N	Υ	22.19	22.20	0.01	0.1	N	Υ	21.41	21.60	0.19	0.25	N	Υ	22.08	22.15	0.07	0	N
1/21/21	CWE	Ν	NA	23.10	0	75.25	NA	Υ	19.95	20.00	0.05	0	N	N	NA	20.55	0	0	N	Υ	19.49	19.69	0.2	0	N	Υ	20.10	20.31	0.21	0	N
2/25/21	CWE	Ν	NA	24.75	0	75.25	NA	Υ	21.03	21.23	0.2	0	N	N	NA	21.51	0	0	N	Υ	20.59	20.80	0.21	0	N	Υ	21.59	21.65	0.06	0	N
3/25/21	CWE	Ν	NA	23.51	0	75.25	NA	Υ	20.14	20.21	0.07	0	N	N	NA	20.73	0	0	N	Υ	19.56	19.70	0.14	0	N	Υ	20.34	20.61	0.27	0	N
4/12/21	CWE	N	NA	23.15	0	75.25	NA	Υ	19.75	19.87	0.12	0	N	N	NA	20.25	0	0	N	Υ	19.21	19.40	0.19	0	N	Υ	20.05	21.00	0.95	0	N
5/20/21	CWE	N	NA	22.45	0	75.25	NA	Y	19.20	19.34	0.14	0	N	N	NA	19.76	0	0	N	Υ	18.71	18.82	0.11	0	N	Y	19.51	19.65	0.14	0	N
6/27/21	CWE	N	NA	23.09	0.02	75.25	NA	Y	19.90	19.99	0.09	0	N	N	NA	20.51	0	0	N	Y	19.45	19.51	0.06	0	N	Y	19.54	19.60	0.06	0	N
7/29/21	CWE	N	NA	21.22	0	75.25	NA	Y	17.99	18.00	0.01	0	N	N	NA	18.40	0	0	N	Υ	17.61	17.82	0.21	0	N	Υ	18.01	18.12	0.11	0	N
8/30/21	CWE	N	NA	22.23	0	75.25	NA	Y	19.00	19.21	0.21	0	N	N	NA	19.55	0	0	N	Υ	18.51	18.69	0.18	0	N	Y	19.22	19.31	0.09	0	N
9/30/21	CWE	N	NA	23.10	0	75.25	NA	Y	19.72	19.80	0.08	0	N	N	NA	20.35	0	0	N	Υ	19.19	19.23	0.04	0	N	Y	20.17	20.20	0.03	0	N
10/28/21	CWE	N	NA	23.34	0	75.25	NA	Y	19.65	19.79	0.14	0	N	N	NA	20.30	0	0	N	Y	19.15	19.24	0.09	0	N	Y	21.06	21.11	0.05	0	N
11/29/21	CWE	N	NA	22.86	0	75.25	NA	Y	19.35	19.49	0.14	0	N	N	NA	19.90	0	0	N	Y	18.89	19.01	0.12	0	N	Y	19.65	19.71	0.06	0	N
12/29/21	CWE	N	NA	22.29	0	75.25	NA	Y	18.90	19.19	0.29	0	N	N	NA	19.45	0	0	N	Y	18.45	18.69	0.24	0	N	Y	19.00	19.19	0.19	0	N
1/24/22	CWE	N	NA	22.10	0	75.25	NA	Y	18.89	19.20	0.31	0	N	N	NA	19.55	0	0	N	Υ	18.51	18.60	0.09	0	N	Y	19.15	19.21	0.06	0	N
2/14/22	CWE	N	NA	23.22	0	75.25	NA	Y	19.67	19.89	0.22	0	N	N	NA	20.22	0	0	N	Υ	19.11	19.32	0.21	0	N	Y	20.00	20.34	0.34	0	N
3/21/22	CWE	N	NA	19.56	0	75.25	NA	Y	16.75	16.92	0.17	0	N	N	NA	17.25	0	0	N	Y	16.58	16.81	0.23	0	N	Y	17.01	17.19	0.18	0	N
4/26/22	CWE	N	NA	21.45	0	75.25	NA	Y	17.75	17.82	0.07	0	N	N	NA	18.25	0	0	N	Υ	17.50	17.65	0.15	0	N	Y	18.12	18.20	0.08	0	N
5/31/22	CWE	N	NA	22.25	0	75.25	NA	Υ	18.85	18.93	0.08	0	N	N	NA	19.42	0	0	N	Υ	18.45	18.59	0.14	0	N	Υ	19.12	19.24	0.12	0	N
6/30/22	CWE	N	NA	23.12	0	75.25	NA	Y	19.97	20.10	0.13	0	N	N	NA	20.51	0	0	N	Y	19.49	19.53	0.04	0	Y	Y	20.35	20.37	0.02	0	Y
7/28/22	CWE	N	NA	24.34	0	75.25	NA	N	NA	21.08	0	0	N	N	NA	21.65	0	0	N	N	NA	20.49	0	0	N	N	NA	21.32	0	0	N
8/29/22	CWE	N	NA	25.35	0	75.25	NA	Y	21.88	21.90	0.02	0	N	N	NA	22.45	0	0	N	N	NA	21.22	0	0	N	N	NA	22.25	0	0	N
9/29/22	CWE	N	NA	24.96	0	75.25	NA NA	Y	21.45	21.47	0.02	0	N	N	NA	21.96	0	0	N	N	NA	20.91	0	0	N	N	NA	21.80	0	0	N
10/31/22	CWE	N	NA	25.05	0	75.25	NA.	Ý	21.72	21.76	0.04	0	N	N	NA	22.33	0	0	N	N	NA	21.09	0	0	N	N	NA	22.00	0	0	N
11/28/22	CWE	N	NA	24.45	0	75.25	NA.	Y	20.85	20.89	0.04	0	N	N	NA	21.32	0	0	N	Y	NA	20.33	0	0	N	Y	NA	21.29	0	0	N
12/29/22	CWE	N	NA	23.11	0	75.25	NA.	Ý	19.79	19.82	0.03	0	N	N	NA	20.52	0	0	N	Y	NA	19.21	0	0	N	Y	NA	20.15	0	0	N
1/23/23	CWE	N	NA	21.85	0	75.25	NA NA	Y	18.49	18.51	0.02	0	N	N	NA	18.98	0	0	N	Y	NA	17.85	0	0	N	Y	NA	18.85	0	0	N
2/9/23	CWE	N	NA	21.79	0	75.25	NA.	Ý	18.65	19.00	0.35	0.05	Y	N	NA	19.19	0	0	N	Y	NA	18.19	0	0	N	Y	NA	18.71	0	0	N
3/21/23	CWE	N	NA	21.35	0	75.25	NA.	Y	18.45	19.00	0.55	0.09	N	N	NA	18.69	0	0	N	Y	NA	17.79	0	0	N	Y	NA	18.45	0	0	N
4/24/23	CWE	N	NA	21.71	0	75.25	NA NA	Ý	18.44	19.31	0.87	0.25	Y	N	NA	19.00	0	0	N	Y	18.01	18.02	0.01	0	N	Ý	NA	18.97	0	r i	N
7/2-7/20	U112	Quantity	of LNAPL R		Since COC	75.25 gal	177		10.77	10.01	0.07	3.0 gal	<del>'</del>		14/1	10.00		0.9 gal			10.01	10.02	0.01	10.3 gal	† ' <b>'</b>	Quantity	f LNAPL R		Since COC	1.5 gal	.,
	Quanti		L Recovere				1				_	0.3 gal	1					0.0 gal						0.0 gal	Quan	tity of LNAP					

Notes:
DTP = Depth to product; DTW = Depth to water; NM = Not measured; NA = Not applicable

Shaded cells are data collected pre-remediation. All other data occurred post-remediation.

Date	
9/3/15	Identified LNAPL in well W26 for first time.
9/29/15	Confirmed LNAPL present. Ordered sock for well W26 to be placed once received.
10/14/15	Existing riser is 3.6 feet above surveyed riser.
1/5/16	Installed sock in well W-26
8/1/16	Automated skimmer installed in well W-5, riser extended 7.32 feet above surveyed riser.
9/14/16	W32 DTP = 22.96'; DTW = 22.97.
10/27/16	W32 DTP = 20.21'; DTW = 20.21'. W31 and W7A HAVE NO PRODUCT.
11/22/16	
to	W32, W31, W7A no LNAPL detected
4/11/17	
12/26/17	55 gallons of LNAPL collected in "old" drum, started new drum.
12/6/19	1 Drum of LNAPL left site for Disposal.



#### TABLE 2

# GROUNDWATER MONITORING WELL WATER LEVELS PERIODIC REVIEW REPORT OLEAN REDEVELOPMENT PARCEL 1 OLEAN, NEW YORK

Well	BCP Site No.	Purpose of Well	Top of Riser (TOR) Elevation (ft)		LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	(ft)	Depth to Water (ft)	(ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Water (ft)	(ft)		(11)		(11)	Depth to Water (ft)	(ft)	Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	iquid vation (ft)	Water (tt)	(ft) (ft)	Depth to Water (ft)	(ft)	Liquid Elevation (ft)		(π)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Lie Thickness Elev (ft) (	quid vation Water (ft)	h to r (ft) LNAP Thickn (ft)	L Liquid ess Elevation (ft)
			Lievation (it)		8/25/2012			7/17 & 18/20	014	12/	15 & 17 & 18/2	014		4/14/2015		9/2/2015 8	& 9/3/2015	8/9	/2016	12/14/	2016	5/16 to 5/18	/17	12/20 to 12	2/22/17	6/13/2018	3	12/19 to	12/20/18		7/9 to 7/10,	/19	6/	16 to 6/18/20	1 /	6	/27/2021		8/1/20	22
WCMW-15	1	GWQM	1429.28	21.95	0	1407.33							17.88	0	1411.40	21.60	1407.68	22.81	1406.47			18.11 14	11.17	20.68	1408.60	19.75 14	109.53	17.28	0 1412.0	0 18.17	0	1411.11	19.72	0	1409.56	20.50	0 140	)8.78 21	.61 0	1407.67
W3	1	GWQM	1424.64	17.81	0	1406.83	15.17	0	1409.47	16.39	0	1408.25	14.15	0	1410.49	17.66	1406.98	18.75	1405.89			14.66 14	109.98	16.95	1407.69	16.00 14	108.64	14.95	0 1409.6	9			16.05	0	1408.59	16.61	0 140	8.03 17	.75 0	1406.89
W4	1	GWQM	1425.06	18.57	0	1406.49										See Note 1		19.40	1405.66			15.37 14	109.69	buric	ed	16.65 14	08.41	15.61	0 1409.4	5			16.71	0	1408.35	17.25	0 140	7.81 18	.40 0	1406.66
W5	1	LNAPL	1432.25	20.41	3.1	1407.23	17.72	2.53	1409.41	20.92	5.05	1408.40				21.11	1405.05			-		-						20.97	0 1411.2	8			22.39	0	1409.86	23.09	0.02 140	9.18 24	.36 0.03	1407.92
W7A	1	LNAPL	1425.25		-	-		-																-				15.75	0	16.08	0		16.96	0	1408.29	17.54	0 140	7.71 18	.63 0	1406.62
W9	1	LNAPL	1428.75	21.50	0.15	1407.38										21.20	1407.75							-				17.83	0 1410.9	2 18.16	0	1410.59	19.10	0.	1409.65	20.14	0.24 140	/8.82 21	.11 0.11	1407.74
W10	1	LNAPL	1429.39	22.70	0.85	1407.43	18.88	0.01	1410.52	20.82	0.16	1408.71				21.80	1407.76					-		-		-		18.24	0 1411.1	5 18.70	0	1410.69	19.70	0	1409.69	20.41	0 140	8.98 21	.61 0	1407.78
W11	1	GWQM	1426.61	20.14	0	1406.47	17.32	0	1409.29	18.57	0	1408.04	16.41	0	1410.20	19.98	1406.63	20.84	1405.77			16.68 14	109.93	18.75	1407.86	17.35 14	109.26	16.98	0 1409.6	3 17.13	0	1409.48	17.40	0	1409.21					
W26	1	LNAPL	1427.57	20.48	0	1407.09										20.98	1407.23							-		19.30 14	108.79	17.53	0.03 1410.0	7 17.62	0	1409.95	19.76	0	1407.81	19.93	0.64 140	8.20 20	.42 0.02	1407.17
W27	1	LNAPL	1429.5	23.52	1.9	1407.60	19.12	Trace	1410.38	21.12	0.6	1408.90		-		21.36	1408.23					-						17.81	0 1411.6	9 18.70	0	1410.8	19.68	0	1409.82	20.70	0.25 140	9.02 21	.40 0.02	1408.12
W30	1	GWQM	1425.72	19.86	0	1405.86	17.20	0	1408.52	18.56	0	1407.16	16.25	0	1409.47	19.70	1406.02	20.65	1405.07			16.45 14	109.27	18.76	1406.96	17.95 14	107.77	16.70	0 1409.0	2 15.91	0	1409.81	18.00	0	1407.72	18.58	0 140	7.14 19	.74 0	1405.98
W31	1	GWQM	1429.1				-											22.56	1406.54			17.80 14	11.30	20.32	1408.78	19.45 14	109.65	18.04	0 1411.0	6 18.50	0	1410.6	19.43	0	1409.67	20.12	0 140	8.98 21	.29 0	1407.81
W32	1	GWQM	1429.31		-																							18.00	0 1411.3	1 17.81	0	1411.5	19.45	0	1409.86	20.19	0 140	J9.12 21	.40 0	1407.91

Notes:
Depth to water from top of well riserr.
1) Wells were inaccessible due to construction activities
2) WS well first was increased by 7.32 feet (based on TOC delta) in August 2016. Revised well top of riser elevation is 1432.25. Historic top of riser elevation was 1424.93.

Acronyms:
N4 = Not available

= not measured

Shaded cells are data collected pre-remediation. All other data occurred post-remediation.



#### OLEAN REDEVELOPMENT SITE 1 OLEAN, NEW YORK

											Sampl	e Location a	nd Data									
Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>										<u> </u>	W3										
		08/12/10	11/10/10	02/17/11	05/19/11	08/18/11	11/17/11	02/23/12	08/30/12	07/17/14	12/17/14	04/13/15	09/03/15	08/09/16	05/18/17	12/20/17	06/13/18	12/19/18	06/25/19	06/16/20	06/27/21	08/01/22
Volatile Organic Compounds	(ug/L)																					
1,2,4-Trimethylbenzene	5	14.1	24.4	17.8	32.1	16.4	2.3 J	9.9	7.6	2.73	5.13	ND	ND	ND	ND	1.77	10.4	ND	ND	ND	19	6.1
1,2-Dichlorobenzene	3	1.5	1.4	1	1.1	1.1	1.7 J	0.8	ND	ND	1.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	ND
1,3,5-Trimethylbenzene	5	2.7	6.5	2.6	7	2.3	0.45 J	2	1.4	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	5.1	1.6 J
1,4-Dichlorobenzene	3	1.8	1.5	1.4	1.3	1.2	1.7 J	0.9	ND	ND	1.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77 J	ND
Acetone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1 J										
Benzene	1	17.9	19.2	15	21.4	13.3	2.1 J	15.1	11	3.65	1.89	ND	ND	ND	ND	47.5	10.1	ND	5.3 J	15	21	18
Chlorobenzene	5	8.6	8	6.6	6.5	5.3	10.8 J	4.6	ND	3.12	15.1	2.87	4.44	3.14	ND	2.46	3.97	ND	ND	ND	2.8	1.6 J
Cyclohexane		NA	ND	14.4	NA	ND	ND	ND	ND	10.4	33.2	ND	2.6 J	9.3 J	41	16						
Ethylbenzene	5	3.4	5	3.6	5.8	3.6	0.26 J	2.9	2	1.48	NA	ND	ND	ND	ND	1.33	3.25	ND	ND	ND	5.6	2.6
m&p-Xylene		12.9	19.6	13	24.8	13.6	13.6 J	ND	7.3	3.42	ND	ND	ND	ND	ND	6.09	9.05	ND	ND	ND	15	7.2
Methylcyclohexane	-	NA	8.34	NA	NA	ND	ND	ND	ND	20.2	ND	ND	4.8 J	30	6.8 J							
n-Butylbenzene	5	ND	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
n-Propylbenzene	5	1.3	2.1	1.7	2.3	1.6	ND	0.81	0.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 J	ND
o-Xylene		17.9	23.9	13.9	30.2	16.4	16.4 J	ND	11	3.43	6.15	ND	ND	ND	ND	3.94	16.1	ND	ND	9.0 J	25	12
sec-Butylbenzene	5	0.35	0.43	0.4	0.53	0.37	ND	ND	0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND										
Toluene	5	1.7	1.9	1.3	2.3	1.4	0.48 J	1.7	1.3	ND	ND	ND	ND	ND	ND	19.9	1.15	ND	ND	ND	1.9 J	1.2 J
Total xylenes	5	30.8	43.5	26.9	55	30.1	7 J	28.3	18	6.85	7.16	ND	ND	ND	ND	10.03	25.15	ND	ND	9 J	40	19.2
Total VOCs		115	157	105	190	107	57	67	61	47	38	2.9	4.4	3.1	ND	103	135	ND	7.9	47	209	65
Total TICs	-	58	235	83	189	78	5.7	44	114	41	NA	ND	ND	8.3	0.47	51	53	41	ND	9.0	45	5.1 J
Semi-Volatile Organic Compo	unds (ug/L)							l			l		l								l	
Acenaphthene	20	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
Anthracene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 J	ND							
Benzo(a)anthracene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
Benzo(a)pyrene	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04 J	ND							
Benzo(b)fluoranthene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06 J	ND							
Benzo(ghi)perylene	-	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06 J	ND							
Chrysene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
Di-n-butyl phthalate	-	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
Fluoranthene	50	NA NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA NA	NA NA	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11 J D							
Indeno(1,2,3-cd)pyrene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06 J	ND							
Naphthalene	10	NA NA	NA NA	NA NA	NA.	NA.	NA.	NA NA	NA NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	0.48 J D
Phenanthrene	50	NA NA	NA.	NA NA	NA NA	NA NA	NA.	NA NA	NA NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2 J F2 B	ND	0.15	ND
Phenol *	1	NA NA	NA.	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50	NA NA	NA NA	NA NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03 J	ND					
Total SVOCs		NA NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	5.2	ND ND	1.6	0.59 J							
Total TICs	<del>-</del>	NA NA	ND	ND	ND	361	159	ND	72	144	52	285	272	174	182 J							

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- 2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- 3. Isopropyl alcohol identified in trip blank as a VOC-TIC during May 2017 sampling event; therefore, detections of this compound as a TIC in samples were ignored.
- 4. Well MCMW15 was "dry" for the September 2015 sampling event. 5. Well W4 was buried for the December 2017 sampling event.
- 5. LNAPL was detected in well W27 for the June 2020 sampling event; therefore, groundwater was not sampled.

#### Definitions:

- The initions.

  \* = Total phenolic compounds (total phenols) GA groundwater quality limit is 1 ug/L.

  ND = Parameter not detected above laboratory detection limit.

  "-" = Sample not analyzed for parameter or no SCO available for the parameter.

- TIC = tentatively identified compound concentration estimated.

  J = Approximate value less than reporting limit but greater than or equal to method detection limit.

  D = Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

  F2 = MS/MSD RPD exceeds control limit

B = Compound was found in the blank and sample.

BOLD = Analytical result exceeds individual GWQS/GV.
= Dates highlighted in blue indicate samples collected pre-remediation; all other sampling events occurred post-remediation.



#### OLEAN REDEVELOPMENT SITE 1 OLEAN, NEW YORK

									OL.	EAN, NEW	ORIC							
									Samp	le Location a	and Date							
Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>									W4		1 5						
Volatile Organic Compounds	(ua/l.)	08/13/10	11/10/10	02/18/11	05/19/11	08/18/11	11/17/11	02/23/12	08/30/12	08/09/16	05/19/17	12/20/2017 5	06/13/18	12/20/18	06/25/19	06/16/20	06/27/21	08/01/22
1,2,4-Trimethylbenzene	5 (ug/L)	1.3 J	11.9	6.3	9.4	0.34 J	0.6 J	3.1	0.62	ND	ND	l NA	1.65	ND	ND	ND	7.1	8.8
1,2-Dichlorobenzene	3	0.96 J	2.2	1.6	2.2	0.83 J	0.9 J	1.3	ND	ND	ND	NA NA	ND	ND	ND	ND	1.8	1.7 J
1,3,5-Trimethylbenzene	5	0.34 J	3.5	1.8	2.4	ND	ND	0.69	ND	ND ND	ND	NA NA	ND	ND	ND	ND ND	1.1	1.6 J
1,4-Dichlorobenzene	3	0.64 J	1.4	1.1	1.4	0.62 J	0.63 J	0.84	ND	ND	ND	NA	ND	ND	ND	ND	1.1	1.1 J
Acetone	50	ND	ND	NA	ND	ND	ND	ND	12	2.7 J								
Benzene	1	ND	ND	NA	ND	ND	ND	ND	ND	ND								
Chlorobenzene	5	3.3 J	4.5	4.8	7.1	3.9 J	3.7 J	7.1	ND	3.81	5.61	NA	5.91	ND	ND	ND	5.2	5.6
Cyclohexane	-	NA	ND	ND	6.5	NA	15	8.4	24	26	29	28						
Ethylbenzene	5	ND	ND	NA	ND	ND	ND	ND	ND	ND								
m&p-Xylene	-	ND	0.33	ND	ND	ND	ND	ND	0.53	ND	ND	NA	ND	ND	ND	ND	ND	ND
Methylcyclohexane	-	NA	ND	ND	ND	NA	24.1	4.7	16	20	32	25						
n-Butylbenzene	5	ND	ND	NA	ND	ND	ND	ND	ND	ND								
n-Propylbenzene	5	ND	ND	NA	ND	ND	ND	ND	ND	ND								
o-Xylene	-	ND	0.6	ND	0.51	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	0.72 J	0.92	0.76	0.96	0.61 J	0.54 J	0.85	0.56	ND	ND	NA	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	0.4 J	0.4	0.4	0.53	0.33 J	0.34 J	0.49	0.33	ND	ND	NA	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	0.43	0.53 J	ND	0.31	0.35	ND	ND	NA	ND	ND	ND	ND	ND	ND
Total xylenes	5	ND	0.92	ND	ND	ND	ND	0.22	0.53	ND	ND	NA	ND	ND	ND	ND	ND	ND
Total VOCs	-	7.7	27	17	25	7.2	6.7	15	2.9	3.8	12	NA	47	13	40	46	89	75
Total TICs	-	25	216	37	157	11	ND	57	79	20	41	NA	80	ND	ND	ND	54	50 J
Semi-Volatile Organic Compo	ounds (ug/L)																	
Acenaphthene	20	NA	ND	ND	NA	ND	ND	ND	ND	0.17	0.11 J D							
Anthracene	50	NA	ND	ND	NA	ND	ND	ND	ND	0.19	0.11 J D							
Benzo(a)anthracene	0.002	NA	ND	ND	NA	ND	ND	ND	ND	0.09 J	0.26 J D							
Benzo(a)pyrene	ND	NA	ND	ND	NA	ND	ND	ND	ND	0.06 J	0.09 J D							
Benzo(b)fluoranthene	0.002	NA	ND	ND	NA	ND	ND	ND	ND	0.05 J	0.17 J D							
Benzo(ghi)perylene		NA	ND	ND	NA	ND	ND	ND	ND	0.05 J	0.12 J D							
Chrysene	0.002	NA	ND	ND	NA	ND	ND	ND	ND	0.33	0.19 J D							
Di-n-butyl phthalate		NA	ND	ND	NA	ND	ND	NA	ND	ND	ND							
Fluoranthene	50	NA	ND	NA	ND	ND	ND	ND	0.09 J	0.39 J D								
Fluorene	50	NA	NA	NA NA	NA NA	NA	NA	NA 	NA	ND	ND	NA 	ND	0.7 J H	NA	ND	0.7	0.46 J D
Indeno(1,2,3-cd)pyrene	0.002	NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	ND	ND	NA NA	ND	ND	ND	ND	ND 0.00	0.11 J D
Naphthalene	10	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	ND	ND	NA NA	ND	ND	NA	ND	0.26	ND
Phenanthrene	50	NA NA	ND	ND	NA NA	ND	ND	4.4 J B	ND	0.22	0.2 J D							
Phenol *	1 50	NA NA	ND	ND	NA NA	ND	ND ND	NA	ND	ND 0.35	ND 0.37 LD							
Pyrene Total SVOCs	50	NA NA	ND ND	ND ND	NA NA	ND <b>ND</b>	0.70	ND	ND ND	0.35 <b>1.6</b>	0.37 J D							
Total TICs		NA NA	ND 279	6,128	NA NA	309	211	<b>4.4</b> 324	ND 277	113	<b>1.1</b> 89 J							
i otai i iCs		NA	2/9	0,128	NA	309	217	324	2//	113	69 J							

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#### Definitions:

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  BOLD



#### OLEAN REDEVELOPMENT SITE 1 OLEAN, NEW YORK

Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>		W7A		l		•	Sample Loca	tion and Dat	e W11					
Parameter	GWQ5/GV	06/18/20	06/28/21	08/01/22	07/17/14	12/17/14	04/13/15	09/03/15	08/09/16	05/19/17	12/20/17	06/13/18	12/20/18	06/25/19	06/18/20
Volatile Organic Compounds	(ug/L)	00/10/20	00,20,21	00/01/22	•		0 11 101 10	00/00/10	00.00.10	00/10/11		00.10.10	12.20.10	00.20.10	00.10.20
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	0.96 J	1.2 J	1.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	3.3	5	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	9.3	11	9.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		7.4	1.1 J	1.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		3.1	6.7 J	6.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	1.1	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		25	27	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs		56	82	67 J	29	NA	ND	52	0.53	0.92	ND	1.6	ND	9.4	ND
Semi-Volatile Organic Compo	ounds (ug/L)														
Acenaphthene	20	ND	0.29	0.11 J D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	ND	ND	0.12 J D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	ND	0.08 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J H	ND	ND
Fluoranthene	50	ND	0.03 J	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
Fluorene	50	ND	0.26	0.13 J D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50	0.93 J B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 J B	0.88 J B
Phenol *	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50	ND	0.14	0.11 J D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total SVOCs		0.93	0.0	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	0.38	3.5	0.88
Total TICs		193	106	31 J	ND	ND	ND	ND	15	74	25	24	94	362	213

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#### OLEAN REDEVELOPMENT SITE 1 OLEAN, NEW YORK

								Sample Loca	tion and Dat	Δ					
Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>								30	-					
. a.a.iiiotoi	01140/01	08/30/12	07/17/14	12/17/14	04/13/15	09/03/15	08/09/16	05/18/17	12/20/17	06/13/18	12/20/18	06/26/19	06/16/20	06/28/21	08/01/22
Volatile Organic Compounds	(ug/L)														
1,2,4-Trimethylbenzene	5	0.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	1.07	1.14	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND						
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND						
Acetone	50	ND	ND	ND	ND	ND	ND	ND	ND						
Benzene	1	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	1.20	2.63	1.88	1.28	1.62	ND	2.53	1.69	ND	ND	ND	1.5 J	2.5
Cyclohexane	-	ND	5.93	NA	6.72	ND	ND	ND	5.25	ND	ND	7.2 J	ND	ND	1.3 J
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND						
m&p-Xylene	-	0.79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	1.1 J
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND						
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND						
o-Xylene	-	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND						
tert-Butylbenzene	5	0.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total xylenes	5	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	-	4.7	8.2	3.8	10	1.3	1.6	ND	7.8	1.7	ND	7.2	ND	2	5
Total TICs	-	128	60	NA	64	ND	23	2.2	48	92	ND	ND	ND	4.8	10 J
Semi-Volatile Organic Compo	ounds (ug/L)														
Acenaphthene	20	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J D
Anthracene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11 J D
Benzo(a)pyrene	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	-	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	ND	0.1	0.2 J D
Indeno(1,2,3-cd)pyrene	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.46 J D
Phenanthrene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4 J B	0.73 J F1 B	ND	ND
Phenol *	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	4.9 J	ND	ND	ND	ND
Pyrene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total SVOCs	-	NA	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.4	0.73	0	0.66 J
Total TICs	-	NA	ND	ND	ND	15	142	9.4	21	145	2,818	322	148	9.2	67 J

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#### OLEAN REDEVELOPMENT SITE 1 OLEAN, NEW YORK

												Sample Loca	tion and Dat	e e									
Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>					W31						WCMW15 W10									W27	W	/32
		08/11/16	05/18/17	12/20/17	06/13/18	12/19/18	06/26/19	06/16/20	06/28/21	08/01/22	9/3/2015 4	08/09/16	05/18/17	12/20/17	06/13/18	12/19/18	06/26/19	06/16/20	06/26/19	06/17/20	06/26/19	06/26/19	06/16/20
Volatile Organic Compounds	(ug/L)																		-				
1,2,4-Trimethylbenzene	5	7.23	4.13	2.14	2.23	ND	ND	ND	1.3 J	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Acetone	50	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Cyclohexane		24.8	15.6	10.1	12.8	ND	11	11	2.7 J	8.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
m&p-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Methylcyclohexane		38.4	47.5	29.7	39.8	9.7	34	37	21	68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
o-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
sec-Butylbenzene	5	3.54	2.14	ND	1.37	ND	ND	ND	0.87 J	1.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	2.16	1.61	1.67	1.41	ND	ND	ND	1.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Total xylenes	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Total VOCs		76	71	44	58	10	45	48	27	84	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs		234	175	94	210	82	28	42	51	110 J	ND	ND	1.2	ND	12	ND	ND	ND	ND	35	ND	96	879
Semi-Volatile Organic Compo	unds (ug/L)																						
Acenaphthene	20	ND	0.2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Anthracene	50	ND	0.05 J	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Benzo(a)anthracene	0.002	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Benzo(ghi)perylene	-	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Chrysene	0.002	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Di-n-butyl phthalate	-	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND
Fluoranthene	50	NA	ND	NA	NA	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND							
Fluorene	50	ND	0.54	0.12 J D	NA	ND	ND	ND	ND	ND	0.42 J B	ND	ND	ND	ND	ND	ND						
Indeno(1,2,3-cd)pyrene	0.002	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Naphthalene	10	ND	0.07 J	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Phenanthrene	50	ND	ND	ND	ND	ND	2.7 J B	0.62 J B	0.2	ND	NA	ND	ND	ND	ND	ND	2.7 J B	ND	3.4 J B	ND	3.2 J B	3.1 J B	ND
Phenol *	1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Pyrene	50	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Total SVOCs		ND	ND	ND	ND	ND	2.7	0.62	0.81	ND	ND	ND	ND	ND	ND	ND	3.9	ND	3.4	ND	3.2	3.1	ND
Total TICs		197	76	5.7	336	115	317	199	45	45 J	13	16	4.6	ND	28	65	271	295	309	200	256	565	732

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## TABLE 4 2008-2022 GROUNDWATER ANALTICAL SUMMARY - METALS

# PERIODIC REVIEW REPORT OLEAN REDEVELOPMENT PARCEL 1 OLEAN, NEW YORK

		Sample Location and Date														
Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>	W3														
		09/04/08	05/18/17	12/20/17	06/13/18	12/19/18	06/25/19	06/16/20	06/27/21	08/01/22						
Metals (ug/L)	Metals (ug/L)															
Arsenic (total)	25	7	ND	ND	ND	ND	ND	17	8.06	11						
Arsenic (dissolved)	25	NA	NA	NA	NA	NA	NA	NA	3.49	3 J						
Lead	25	<3.0	ND	ND	10.6	ND	ND	ND	NA	NA						

#### Notes:

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- 2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- 3. Well W-4 was buried for the December 2017 sampling event.
- 4. First sampling event where LNAPL was not detected; therefore, groundwater was sampled.
- 5. LNAPL was detected in well W27 for the June 2020 sampling event; therefore, groundwater was not sampled.

#### **Definitions:**

- ND = Parameter not detected above laboratory detection limit.
- NA = Not analyzed
- J = Approximate value less than reporting limit but greater than or equal to method detection limit.
- **BOLD** = Analytical result exceeds individual GWQS/GV.
  - = Dates highlighted in blue indicate samples collected pre-remediation; all other sampling events occurred post-remediation.



## TABLE 4 2008-2022 GROUNDWATER ANALYTICAL SUMMARY - METALS

# PERIODIC REVIEW REPORT OLEAN REDEVELOPMENT PARCEL 1 OLEAN, NEW YORK

Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>								Sample	Location a	nd Date							
			W4															
		09/08/08	11/04/09	08/13/10	11/10/10	02/18/11	05/19/11	08/18/11	11/17/11	02/23/12	05/19/17	2/20/2017	06/13/18	12/20/18	06/25/19	06/16/20	06/27/21	08/01/22
Metals (ug/L)																		
Arsenic (total)	25	27.4	20.4	22.1 J	23.5	26	20.4	21.1 J	17.9 J	36.7	37.9	NA	39.7	30	27	30	45.76	25
Arsenic (dissolved)	25	NA	NA	NA	NA	NA	NA	NA	4.81	4 J								
Lead	25	27.1	7.1	10.4 J	7.2	44.7	<3.0	<3.0	<3.0	<3.0	14.1	NA	72.2	ND	5.7 J	3 J	NA	NA

#### Notes:

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
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- 3. Well W-4 was buried for the December 2017 sampling event.
- 4. First sampling event where LNAPL was not detected; therefore, groundwater was sampled.
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## TABLE 4 2008-2022 GROUNDWATER ANALYTICAL SUMMARY - METALS

# PERIODIC REVIEW REPORT OLEAN REDEVELOPMENT PARCEL 1 OLEAN, NEW YORK

Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>								Sample	Location a	nd Date							
		W7A <sup>4</sup>	V7A <sup>4</sup> W10					W11			W27	W30						
		06/16/20	06/26/19	06/16/20	09/04/08	05/19/17	12/20/17	06/13/18	12/20/18	06/26/19	06/18/20	06/26/19	05/18/17	12/20/17	06/13/18	12/20/18	06/26/19	06/16/20
Metals (ug/L)	etals (ug/L)																	
Arsenic (total)	25	ND	ND	ND	6.8	ND	ND	10.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic (dissolved)	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25	ND	ND	ND	11.8	ND	ND	12	ND	ND	ND	ND	ND	ND	6	ND	3 J	ND

#### Notes:

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- 2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
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- 5. LNAPL was detected in well W27 for the June 2020 sampling event; therefore, groundwater was not sampled.

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## TABLE 4 2008-2022 GROUNDWATER ANALYTICAL SUMMARY - METALS

# PERIODIC REVIEW REPORT OLEAN REDEVELOPMENT PARCEL 1 OLEAN, NEW YORK

Parameter <sup>1</sup>	GWQS/GV <sup>2</sup>								Sa	mple Loca	tion and D	ate									
					W31					W32				WCMW15							
		08/11/16	05/18/17	12/20/17	06/13/18	12/19/18	06/26/19	06/16/20	06/26/19	06/16/20	06/27/21	08/01/22	09/03/08	05/18/17	12/20/17	06/13/18	12/19/18	06/26/19	06/16/20		
Metals (ug/L)																					
Arsenic (total)	25	ND	35	15	16.9	22	<3.0	ND	ND	15.8	ND	13 J	ND								
Arsenic (dissolved)	25	NA	4.71	8	NA																
Lead	25	NA	ND	ND	ND	ND	3.3 J	ND	ND	3.2 J	NA	NA	<3.0	5.3	ND	199	ND	3.9 J	3.7 J		

#### Notes:

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- 2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- 3. Well W-4 was buried for the December 2017 sampling event.
- 4. First sampling event where LNAPL was not detected; therefore, groundwater was sampled.
- 5. LNAPL was detected in well W27 for the June 2020 sampling event; therefore, groundwater was not sampled.

#### **Definitions:**

ND = Parameter not detected above laboratory detection limit.

NA = Not analyzed

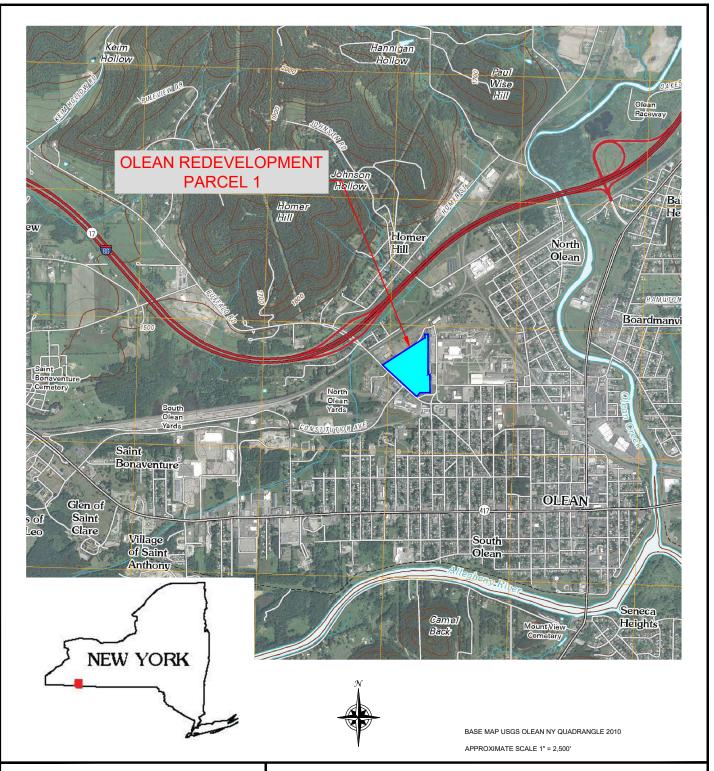
J = Approximate value less than reporting limit but greater than or equal to method detection limit.

**BOLD** = Analytical result exceeds individual GWQS/GV.

= Dates highlighted in blue indicate samples collected pre-remediation; all other samplng events occurred post-remediation.

## **FIGURES**







2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0283-017-001

DATE: MARCH 2023

DRAFTED BY: RFL

### SITE LOCATION AND VICINITY MAP

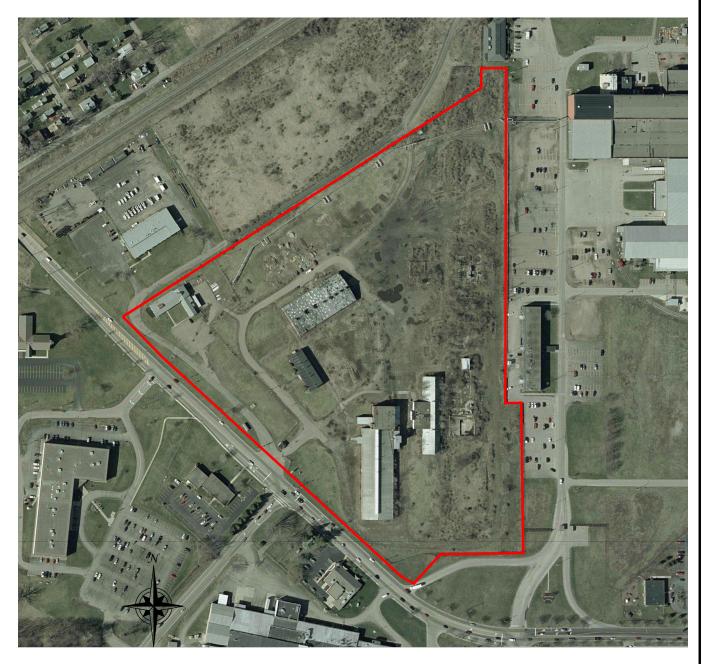
PERIODIC REVIEW REPORT

**OLEAN REDEVELOPMENT SITE 1** NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC

DISCLAIMER:
PROPERTY OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT
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SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.



APPROXIMATE SCALE 1" = 300'

Property Boundary (Approximate)

Base Image NYS GIS Clearinghouse 2002



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0283-017-001

DATE: MARCH 2023

DRAFTED BY: RFL

### SITE PLAN PRE-REMEDIATION

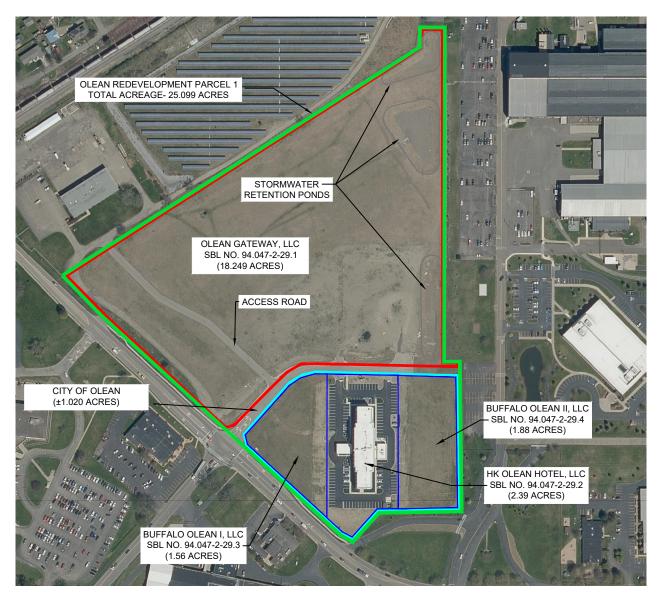
PERIODIC REVIEW REPORT

**OLEAN REDEVELOPMENT PARCEL 1** NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL, LLC

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OLEAN REDEVELOPMENT PARCEL 1

OLEAN GATEWAY, LLC BOUNDARY

HK OLEAN HOTEL, LLC BOUNDARY

BUFFALO OLEAN I, LLC & BUFFALO OLEAN II, LLC SUB-PARCELS

APPROXIMATE SCALE 1" = 300'



#### SITE PLAN POST-REMEDIATION & POST-REDEVELOPMENT

PERIODIC REVIEW REPORT

Base Image NYS Clearinghouse 2021

OLEAN REDEVELOPMENT PARCEL 1 NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

PREPARED FOR

**OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC** 

TURNKEY

ASSOCIATION

ASSOCIATION
WITH

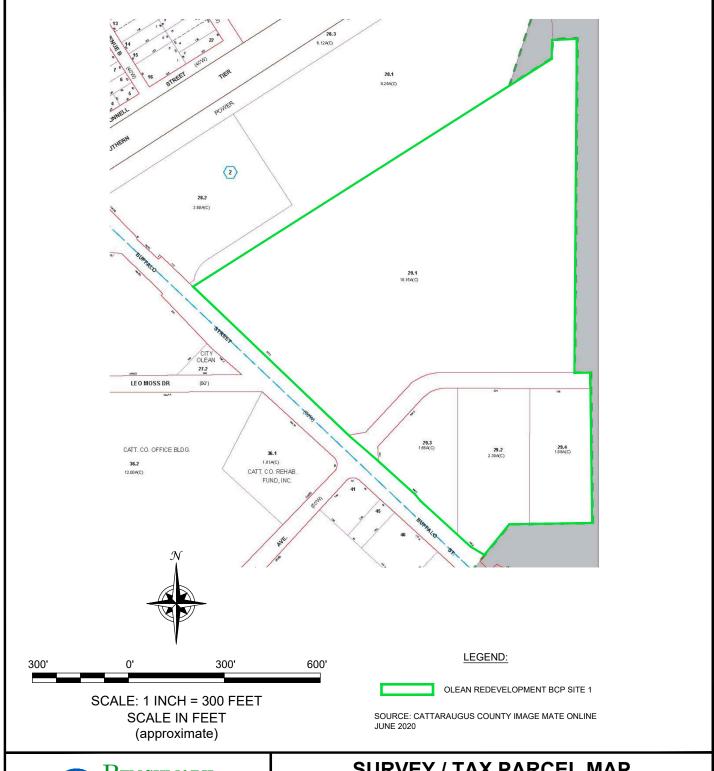
STATEMENT OF THE STATEMENT OF THE

PROJECT NO.: 0283-017-001

DATE: MARCH 2023

DRAFTED BY: CMC/RFL

DISCLAIMER: PROPERTY OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.





2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0283-017-001

DATE: MARCH 2023 DRAFTED BY: RFL

#### **SURVEY / TAX PARCEL MAP**

PERIODIC REVIEW REPORT

**OLEAN REDEVELOPMENT SITE 1** NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC

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SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

LEGEND:

### BCP SITE 1 PARCEL BOUNDARY ASPHALT COVER CRUSHED CONCRETE/AGGREGATE COVER VEGETATED SOIL COVER EXISTING SOIL COVER 400' SCALE: 1 INCH = 200 FEET SCALE IN FEET (approximate)

FIGURE 5

OLEAN REDEVELOPMENT SITE 1 NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

PERIODIC REVIEW REPORT

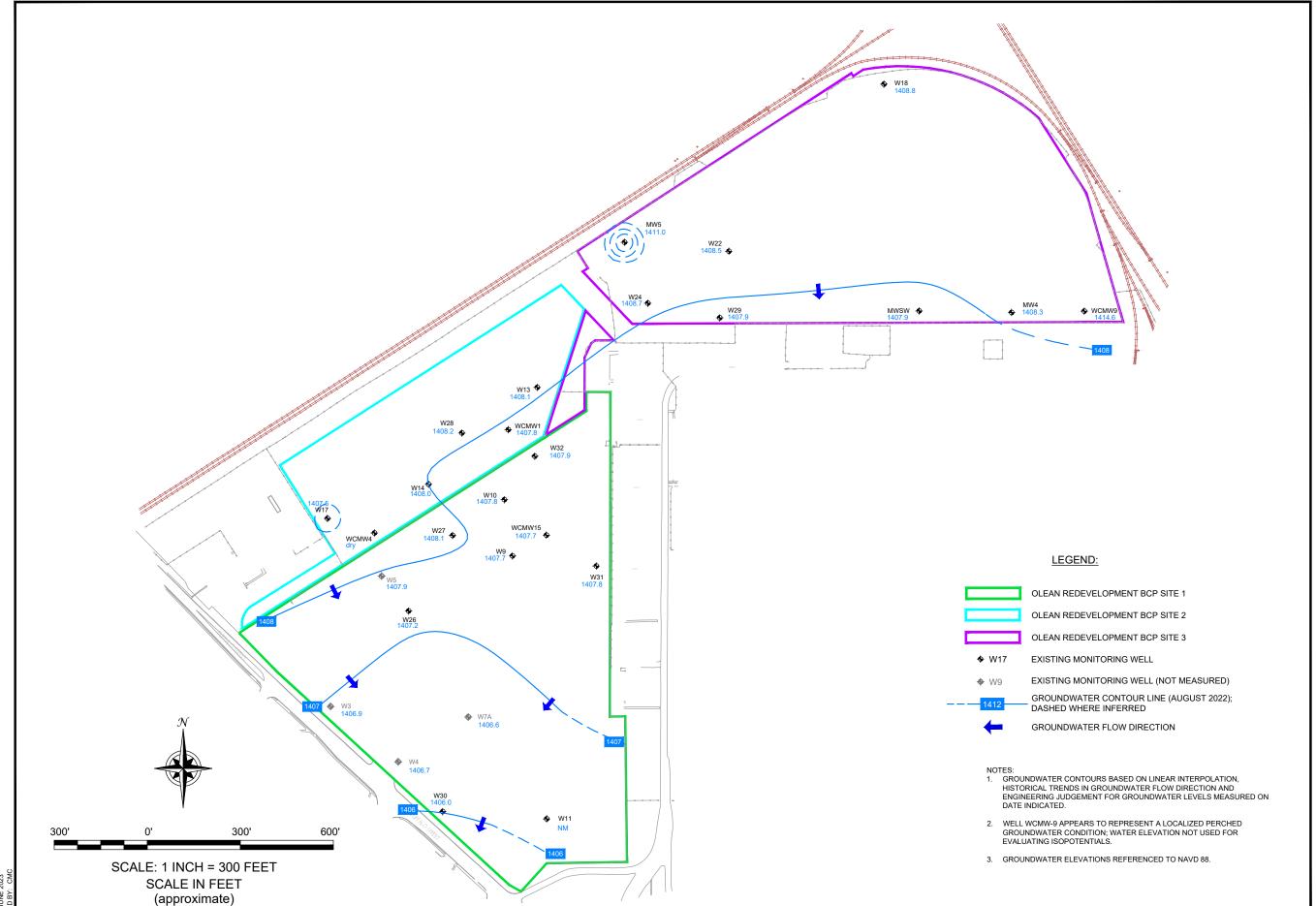
BENCHMARK

SITE COVER SYSTEM

2658 HAMBURG TURNPIKE, SUITE 300, (716) 856-0599 JOB NO.: 0283-017-001

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OLEAN GATEWAY LLC & HK OLEAN HOTEL, LLC



# GROUNDWATER ISOPOTENTIAL MAP (AUGUST 2022)

BENCHMARK

PERIODIC REVIEW REPORT

FIGURE 6

AP TE

**OLEAN HOTEL LLC** 

LLC & HK

OLEAN GATEWAY

JOB NO.: 0283-017-00

## SYSTEM LAYOUT

SVE

BENCHMARK

PERIODIC REVIEW REPORT OLEAN REDEVELOPMENT PARCEL NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC

2558 HAMBURG TURNPIKE, SUITE 300, (716) 856-0599 JOB NO.: 0283-017-001

FIGURE 7

#### APPENDIX A

IC/EC FORM





#### Enclosure 2



#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form

Sit	e No.	C905031	Site De	ails		Box 1		
Sit	e Name Ol	ean Redevelopment Parc	el 1					
Cit Co	e Address: y/Town: Ole ounty: Cattara e Acreage:	augus	Street	Zip Code: 14760				
Re	porting Perio	od: May 09, 2022 to May 0	09, 2023					
						YES NO		
1.	Is the infor	mation above correct?						
	If NO, inclu	ude handwritten above or c	on a separa	ate sheet.				
2.		or all of the site property b nendment during this Repo			r undergone a			
3.		been any change of use at CRR 375-1.11(d))?	the site d	uring this Reporting Pe	eriod			
4.	•	ederal, state, and/or local e property during this Repo			) been issued			
		wered YES to questions mentation has been prev						
5.	Is the site	currently undergoing devel	opment?					
						Box 2		
						YES NO		
6.		ent site use consistent with al and Industrial	the use(s	) listed below?				
7.	Are all ICs	in place and functioning as	s designed	<b>!</b> ?	$\checkmark$			
	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.							
Α (	Corrective M	leasures Work Plan must l	be submit	ed along with this for	m to address t	hese issues.		
Sig	nature of Ov	vner, Remedial Party or Des	signated Re	epresentative	Date			

			Box 2A
	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? (The Qualitative Exposure Assessment must be certified every five years)	<b>✓</b>
		If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.	
Ī	SITI	E NO. C905031	Box 3
		Description of Institutional Controls	

Parcel	<u>Owner</u> City of Olean	<u>Institutional Control</u>
	Oity of Olean	O&M Plan
		Ground Water Use Restriction
		Soil Management Plan
		Landuse Restriction
		Monitoring Plan
		Site Management Plan
		IC/FC Plan

- -All engineering controls (ECs) must be operated and maintained as specified in the Site Management Plan (SMP):
- -All ECs must be inspected at a frequency and in a manner defined in the SMP.
- -The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Cattaraugus 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.
- -Groundwater and other environmental or public health monitoring must be performed as defined in the SMP:
- -Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP:
- -All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP:
- -Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- -Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP; and
- -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.

94.047-2-29.1

Olean Gateway, LLC

Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

- -All engineering controls (ECs) must be operated and maintained as specified in the Site Management Plan (SMP);
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- -The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Cattaraugus 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.

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94.047-2-29.2

HK Olean Hotel, LLC

Landuse Restriction Ground Water Use Restriction Soil Management Plan Monitoring Plan Site Management Plan O&M Plan

IC/EC Plan

- -All engineering controls (ECs) must be operated and maintained as specified in the Site Management Plan (SMP):
- -All ECs must be inspected at a frequency and in a manner defined in the SMP.
- -The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Cattaraugus 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.
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- -Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- -Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP; and
- -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.

94.047-2-29.3

Buffalo Olean I, LLC

Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

Ground Water Use Restriction Soil Management Plan

-All engineering controls (ECs) must be operated and maintained as specified in the Site Management Plan (SMP);

- -All ECs must be inspected at a frequency and in a manner defined in the SMP.
- -The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Cattaraugus 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.
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- -Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP; and
- -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.

94.047-2-29.4

Buffalo Olean II LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

- -All engineering controls (ECs) must be operated and maintained as specified in the Site Management Plan (SMP);
- -All ECs must be inspected at a frequency and in a manner defined in the SMP.
- -The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Cattaraugus 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.
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Box 4

#### **Description of Engineering Controls**

Parcel <u>Engineering Control</u>

Cover System
Groundwater Treatment System
Vapor Mitigation
Air Sparging/Soil Vapor Extraction

-a site cover that will allow for commercial use, that will consist either of structures such as buildings,

Parcel

#### Engineering Control

pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs;

- -removal of LNAPL from monitoring wells using the methods outlined in the SMP and RAWP;
- -a soil vapor extraction (SVE) system to mitigate residual contamination in subsurface soil; and
- -a vapor mitigation system for any future building(s) developed on-site.

94.047-2-29.1

Groundwater Treatment System Vapor Mitigation Cover System Air Sparging/Soil Vapor Extraction Groundwater Treatment System Vapor Mitigation

Cover System

Air Sparging/Soil Vapor Extraction

- -a site cover that will allow for commercial use, that will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs;
- -removal of LNAPL from monitoring wells using the methods outlined in the SMP and RAWP;
- -a soil vapor extraction (SVE) system to mitigate residual contamination in subsurface soil; and
- -a vapor mitigation system for any future building(s) developed on-site.

94.047-2-29.2

Groundwater Treatment System Vapor Mitigation Cover System Air Sparging/Soil Vapor Extraction Monitoring Wells

- -a site cover that will allow for commercial use, that will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs;
- -removal of LNAPL from monitoring wells using the methods outlined in the SMP and RAWP;
- -a soil vapor extraction (SVE) system to mitigate residual contamination in subsurface soil; and
- -a vapor mitigation system for any future building(s) developed on-site.

94.047-2-29.3

Groundwater Treatment System Vapor Mitigation Cover System Air Sparging/Soil Vapor Extraction Monitoring Wells

- -a site cover that will allow for commercial use, that will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs;
- -removal of LNAPL from monitoring wells using the methods outlined in the SMP and RAWP;
- -a soil vapor extraction (SVE) system to mitigate residual contamination in subsurface soil; and
- -a vapor mitigation system for any future building(s) developed on-site.

94.047-2-29.4

Groundwater Treatment System Vapor Mitigation Cover System Air Sparging/Soil Vapor Extraction Monitoring Wells

- -a site cover that will allow for commercial use, that will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs;
- -removal of LNAPL from monitoring wells using the methods outlined in the SMP and RAWP;
- -a soil vapor extraction (SVE) system to mitigate residual contamination in subsurface soil; and
- -a vapor mitigation system for any future building(s) developed on-site.

	Box 5
	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 compete.  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.

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

YES

Date

NO

#### IC CERTIFICATIONS SITE NO. C905031

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.

Olean Gateway LLC

Peter L. Krog at 4 Centre Drive, Orchard Park, NY 14127

print name print business address

am certifying as Owner (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

#### EC CERTIFICATIONS SITE NO. C905031

Box 7

#### **Professional Engineer 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.

Benchmark Civil/Environmental Engineering & Geology, PLLC

at 2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218

print name print business address

am certifying as a Professional Engineer for the Owner

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp

(Required for PE)

#### **APPENDIX B**

SITE PHOTOGRAPHIC LOG



#### **SITE PHOTOGRAPHS**

#### Photo 1:



Photo 2:



Photo 3:



Photo 4:



#### CONDITIONS DURING APRIL 14, 2023 SITE INSPECTION

Photo 1: Vegetative growth and retention pond in northeastern corner of Olean Gateway LLC (looking south)

Photo 2: View of Olean Gateway LLC parcel vegetative growth along northern boundary (looking south)

Photo 3: View of vegetative cover with SVE trailer, biofilter, and belt skimmer shed in the distance (looking east)

Photo 4: View of northern Olean Gateway LLC parcel vegetative cover system (looking west)



#### **SITE PHOTOGRAPHS**

Photo 5:



Photo 7:



Photo 6:



Photo 8:



Photo 5: Vegetative cover along Olean Gateway LLC parcel western boundary (looking southeast)

Photo 6: Vegetative cover along Olean Gateway LLC parcel western boundary (looking northwest)

Photo 7: View of asphalt cover and stone cover beyond on the southwest portion of Olean Gateway LLC parcel

(looking north)

Photo 8: View of vegetive cover on western portion of Buffalo Olean II, LLC parcel (looking south)



#### **SITE PHOTOGRAPHS**

Photo 9:



Photo 11:



Photo 10:



Photo 12:



Photo 9: View of entrance road, northern hotel parking lot island, and HK Olean Hotel (looking east)

Photo 10: Vegetative cover area south of HK Olean Hotel (looking northeast)

Photo 11: View of vegetative cover on parcel Buffalo Olean I, LLC (looking northwest)

Photo 12: View of entrance roadway and vegetative cover on parcel Buffalo Olean I, LLC (looking southeast)



#### **APPENDIX C**

GROUNDWATER SAMPLING FIELD FORMS AND ANALYTICAL DATA





#### ANALYTICAL REPORT

Lab Number: L2241763

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Lori Riker

Phone: (716) 856-0599

Project Name: ORP #1

Project Number: 0283-017-001

Report Date: 08/19/22

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-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: ORP #1

**Project Number:** 0283-017-001

**Lab Number:** L2241763 **Report Date:** 08/19/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2241763-01	W3	WATER	OLEAN, NY	08/01/22 17:35	08/03/22
L2241763-02	W4	WATER	OLEAN, NY	08/01/22 16:40	08/03/22
L2241763-03	W7A	WATER	OLEAN, NY	08/01/22 15:50	08/03/22
L2241763-04	W30	WATER	OLEAN, NY	08/01/22 15:10	08/03/22
L2241763-05	W31	WATER	OLEAN, NY	08/01/22 14:25	08/03/22
L2241763-06	W32	WATER	OLEAN, NY	08/02/22 10:00	08/03/22
L2241763-07	BLIND DUP	WATER	OLEAN, NY	08/01/22 08:00	08/03/22
L2241763-08	TRIP BLANK	WATER	OLEAN, NY	08/01/22 00:00	08/03/22



 Project Name:
 ORP #1
 Lab Number:
 L2241763

 Project Number:
 0283-017-001
 Report Date:
 08/19/22

#### **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.	



 Project Name:
 ORP #1
 Lab Number:
 L2241763

 Project Number:
 0283-017-001
 Report Date:
 08/19/22

#### **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

L2241763-02: One container for Volatile Organics was received broken; however, there was adequate sample remaining to perform the requested analysis.

L2241763-08: A sample identified as "TRIP BLANK" was listed on the Chain of Custody, but not initally received. This was later received at the laboratory on August 6, 2022

L2241763-08: Headspace was noted in the sample containers submitted for Volatile Organics. The analysis was performed at the client's request.

Semivolatile Organics

The WG1671829-4/-5 MS/MSD recoveries, performed on L2241763-02, is below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%) and caprolactam (0%/0%) due to the concentrations of these compounds in the MS/MSD falling below the reported detection limits.

Semivolatile Organics by SIM

L2241763-01D, -02D, -03D, -04D, -05D, and -07D: The sample has elevated detection limits due to the dilution required by the sample matrix.

**Dissolved Metals** 

The WG1672953-3 MS recovery, performed on L2241763-07, is outside the acceptance criteria for arsenic (56%). A post digestion spike was performed and yielded an unacceptable recovery for arsenic (51%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

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:

Title: Technical Director/Representative Date: 08/19/22

Melissa Sturgis Melissa Sturgis

ALPHA

#### **ORGANICS**



#### **VOLATILES**



**Project Name:** ORP #1

**Project Number:** 0283-017-001

**SAMPLE RESULTS** 

Lab Number: L2241763

Report Date: 08/19/22

Lab ID: L2241763-01

Client ID: W3

Sample Location: OLEAN, NY

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 08/09/22 13:04

Analyst: MV

Date Collected:	08/01/22 17:35
Date Received:	08/03/22
Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Volatile Organics by GC/MS - Westborough Lab								
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	1.6	J	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		
Bromoform	ND		ug/l	2.0	0.65	1		
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1		
Benzene	18		ug/l	0.50	0.16	1		
Toluene	1.2	J	ug/l	2.5	0.70	1		
Ethylbenzene	2.6		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		
Trichloroethene	ND		ug/l	0.50	0.18	1		
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1		

**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 Date Collected: 08/01/22 17:35

Date Received: Client ID: W3

08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Volatile Organics by GC/MS - Westborough Lab								
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	7.2		ug/l	2.5	0.70	1		
o-Xylene	12		ug/l	2.5	0.70	1		
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1		
Styrene	ND		ug/l	2.5	0.70	1		
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1		
Acetone	2.1	J	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		
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		
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1		
n-Butylbenzene	ND		ug/l	2.5	0.70	1		
sec-Butylbenzene	ND		ug/l	2.5	0.70	1		
1,2-Dibromo-3-chloropropane	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		
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	1.6	J	ug/l	2.5	0.70	1		
1,2,4-Trimethylbenzene	6.1		ug/l	2.5	0.70	1		
Methyl Acetate	ND		ug/l	2.0	0.23	1		
Cyclohexane	16		ug/l	10	0.27	1		
1,4-Dioxane	ND		ug/l	250	61.	1		
Freon-113	ND		ug/l	2.5	0.70	1		
Methyl cyclohexane	6.8	J	ug/l	10	0.40	1		

Tentatively Identified Compounds				
Total TIC Compounds	5.14	J	ug/l	1
Unknown	4.11	J	ug/l	1
Unknown	1.03	J	ug/l	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 Date Collected: 08/01/22 17:35

Client ID: W3 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	106		70-130	
Toluene-d8	105		70-130	
4-Bromofluorobenzene	93		70-130	
Dibromofluoromethane	97		70-130	



L2241763

08/19/22

**Project Name:** ORP #1

**Project Number:** 0283-017-001

L2241763-02

OLEAN, NY

W4

**SAMPLE RESULTS** 

Lab Number:

Report Date:

Date Collected: 08/01/22 16:40

Date Received: 08/03/22 Field Prep: Not Specified

Sample Location: Sample Depth:

Lab ID:

Client ID:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 08/10/22 17:06

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough	Lab					
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	5.6		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
Bromoform	ND		ug/l	2.0	0.65	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
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	1.7	J	ug/l	2.5	0.70	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 Date Collected: 08/01/22 16:40

Client ID: W4 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	oorough Lab					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	1.1	J	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.7	J	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
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
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	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
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	1.6	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	8.8		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	28		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	25		ug/l	10	0.40	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 Date Collected: 08/01/22 16:40

Client ID: W4 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	49.8	J	ug/l	1
Butane, 2-Methyl-	6.79	NJ	ug/l	1
Unknown	3.07	J	ug/l	1
Unknown	3.57	J	ug/l	1
Benzene, 1-propenyl-	3.80	NJ	ug/l	1
Unknown Benzene	4.77	J	ug/l	1
Unknown Cyclohexane	7.94	J	ug/l	1
Cyclopentane, Methyl-	8.70	NJ	ug/l	1
Unknown Cycloalkane	3.78	J	ug/l	1
Cyclohexane, 1,1-dimethyl-	3.59	NJ	ug/l	1
Unknown Benzene	3.77	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	95	70-130	
Toluene-d8	102	70-130	
4-Bromofluorobenzene	102	70-130	
Dibromofluoromethane	98	70-130	



L2241763

08/19/22

**Project Name:** ORP #1

0283-017-001

**Project Number:** 

**SAMPLE RESULTS** 

Date Collected: 08/01/22 15:50

Lab Number:

Report Date:

Date Received: 08/03/22 Field Prep: Not Specified

Sample Location:

OLEAN, NY

W7A

L2241763-03

Sample Depth:

Lab ID:

Client ID:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 08/09/22 13:31

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
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	9.4		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
Bromoform	ND		ug/l	2.0	0.65	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
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	1.0	J	ug/l	2.5	0.70	1

Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-03 Date Collected: 08/01/22 15:50

Client ID: W7A Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

No control of the c	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
1.4-Dichlorobenzene	Volatile Organics by GC/MS - Westborough Lab								
1,4-Dichlorobenzene         4.4         ugfl         2.5         0.70         1           Methyl tert butyl ether         ND         ugfl         2.5         0.70         1           p/m-Xylene         ND         ugfl         2.5         0.70         1           o-Xylene         ND         ugfl         2.5         0.70         1           cis-1,2-Dichlorothene         ND         ugfl         2.5         0.70         1           Styrene         ND         ugfl         2.5         0.70         1           Dichlorodifluoromethane         ND         ugfl         5.0         1.0         1           Acetone         ND         ugfl         5.0         1.0         1           Carbon disulfide         ND         ugfl         5.0         1.0         1           Carbon disulfide         ND         ugfl         5.0         1.0         1           2-Butanone         ND         ugfl         5.0         1.0         1           4-Methyl-2-pentanone         ND         ugfl         2.5         0.70         1           2-Butanone         ND         ugfl         2.5         0.70         1           1-2-	1,3-Dichlorobenzene	0.79	J	ua/l	2.5	0.70	1		
Methyl terb buyl efter         ND         ug/l         2.5         0.70         1           p/m-Xylene         ND         ug/l         2.5         0.70         1           c-Xylene         ND         ug/l         2.5         0.70         1           cis-1,2-Dichloroethene         ND         ug/l         2.5         0.70         1           Styrene         ND         ug/l         5.0         1.0         1           Dichlorodifluoromethane         ND         ug/l         5.0         1.0         1           Acetone         ND         ug/l         5.0         1.0         1           Carbon disulfide         ND         ug/l         5.0         1.0         1           2-Butanone         ND         ug/l         5.0         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           1-2-bitromothane         ND         ug/l         2.5         0.70         1           1,2-Dibromothane         ND         ug/l         2.5         0.70         1           1-2-Dibromothane         ND         ug/l         2.5         0.70         1           1-2	1,4-Dichlorobenzene	4.4			2.5	0.70	1		
p/m-Xylene         ND         ug/l         2.5         0.70         1           c-Xylene         ND         ug/l         2.5         0.70         1           cis-1,2-Dichloroethene         ND         ug/l         2.5         0.70         1           Styrene         ND         ug/l         2.5         0.70         1           Styrene         ND         ug/l         5.0         0.70         1           Acetone         ND         ug/l         5.0         1.5         1           Acetone         ND         ug/l         5.0         1.0         1           2-Butanone         ND         ug/l         5.0         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           2-Hoxanone         ND         ug/l         2.0         1.0         1           1-2-Dibromorbane         ND         ug/l         2.5         0.70         1           n-Butylbenzene         ND         ug/l         2.5         0.70         1           1-2-Dibromorbane         ND </td <td>Methyl tert butyl ether</td> <td>ND</td> <td></td> <td></td> <td>2.5</td> <td>0.70</td> <td>1</td>	Methyl tert butyl ether	ND			2.5	0.70	1		
o-Xylene         ND         ug/l         2.5         0.70         1           cis-1,2-Dichloroethene         ND         ug/l         2.5         0.70         1           Styrene         ND         ug/l         2.5         0.70         1           Dichlorodiflucromethane         ND         ug/l         5.0         1.0         1           Acetone         ND         ug/l         5.0         1.5         1           Carbon disulfide         ND         ug/l         5.0         1.5         1           2-Butanone         ND         ug/l         5.0         1.9         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           2-Butanone         ND         ug/l         5.0         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           2-Butanone         ND         ug/l         2.5         0.70         1           1-exanone         ND         ug/l         2.5         0.70         1           1-exanone         ND         ug/l         2.5         0.70         1           1-exanone <td< td=""><td>p/m-Xylene</td><td>ND</td><td></td><td></td><td>2.5</td><td>0.70</td><td>1</td></td<>	p/m-Xylene	ND			2.5	0.70	1		
cis-1,2-Dichloroethene         ND         ug/l         2.5         0.70         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         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           8-Methyl-2-pentanone         ND         ug/l         2.5         0.70         1           1-2-Distromothane         ND         ug/l         2.5         0.70         1           1-2-Distromothane         ND         ug/l         2.5         0.70         1           1-2-Distromothane         ND         ug/l         2.5         0.70         1	o-Xylene	ND			2.5	0.70	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         1.0         1           4-Methyl-2-pentanone         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         2.5         0.70         1           2-Hexanone         ND         ug/l         2.5         0.70         1           1,2-Dibromodhane         ND         ug/l         2.5         0.70         1           1,2-Dibromodhane         ND         ug/l         2.5         0.70         1           1,2-Dibromo-3-chloropropane         ND         ug/l         2.5         0.70         1           1,2-Dibromo-3-chloropropane         ND         ug/l         2.5         0.70         1	cis-1,2-Dichloroethene	ND			2.5	0.70	1		
Dichlorodiffluoromethane         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           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           2-Hexanone         ND         ug/l         5.0         1.0         1           2-Hexanone         ND         ug/l         5.0         1.0         1           1-2-Disromorethane         ND         ug/l         2.5         0.70         1           1-2-Disromoethane         ND         ug/l         2.5         0.70         1           <	Styrene	ND			2.5	0.70	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           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           1,2-Dibromoethane         ND         ug/l         2.5         0.70         1	Dichlorodifluoromethane	ND			5.0	1.0	1		
Carbon disulfide         ND         ug/l         5.0         1.0         1           2-Butanone         ND         ug/l         5.0         1.9         1           4-Methyl-2-pentanone         ND         ug/l         5.0         1.0         1           2-Hexanone         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           1,2-Dibromothane         ND         ug/l         2.5         0.70         1           1,2-Dibromo-3-chloropropane         ND         ug/l         2.5         0.70         1           1-sopropylloulene         ND         ug/l         2.5         0.70         1           n-Propylbenzene         ND         ug/l         2.5         0.70	Acetone	ND			5.0	1.5	1		
A-Methyl-2-pentanone   ND   Ug/l   5.0   1.0   1	Carbon disulfide	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         1,2-Dibromoethane       ND       ug/l       2.0       0.65       1         n-Butylbenzene       ND       ug/l       2.5       0.70       1         sec-Butylbenzene       ND       ug/l       2.5       0.70       1         1,2-Dibromo-3-chloropropane       ND       ug/l       2.5       0.70       1         1 sopropylbenzene       ND       ug/l       2.5       0.70       1         1 sopropylbenzene       ND       ug/l       2.5       0.70       1         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-Trimethylbenzene       ND       ug/l       2.5       0.70       1         Methyl Acetate       ND       ug/l       2.5       0.70       1         Cyclohexane       1.0       J       ug/l       2.5       0.70       1         1,4-Dioxane       ND       ug/l       2.5       0.70       <	2-Butanone	ND		ug/l	5.0	1.9	1		
Bromochloromethane   ND	4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1		
1,2-Dibromoethane         ND         ug/l         2.0         0.65         1           n-Butylbenzene         ND         ug/l         2.5         0.70         1           sec-Butylbenzene         ND         ug/l         2.5         0.70         1           1,2-Dibromo-3-chloropropane         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           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           1,2,4-Trimethylbenzene         ND         ug/l         2.5         0.70         1           1,2,4-Trimethylbenzene         ND         ug/l         2.5         0.70         1           Methyl Acetate         ND         ug/l         2.5         0.70         1           Cyclohexane         1.0         J         ug/l         2.5	2-Hexanone	ND		ug/l	5.0	1.0	1		
n-Butylbenzene         ND         ug/l         2.5         0.70         1           sec-Butylbenzene         ND         ug/l         2.5         0.70         1           1,2-Dibromo-3-chloropropane         ND         ug/l         2.5         0.70         1           Isopropylbenzene         ND         ug/l         2.5         0.70         1           p-Isopropylbenzene         ND         ug/l         2.5         0.70         1           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           Methyl Acetate         ND         ug/l         2.5         0.70         1           Cyclohexane         1.0         J         ug/l         2.0         0.23         1           Teon-113         ND         ug/l         250         61<	Bromochloromethane	ND		ug/l	2.5	0.70	1		
sec-Butylbenzene         ND         ug/l         2.5         0.70         1           1,2-Dibromo-3-chloropropane         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           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           Methyl Acetate         ND         ug/l         2.5         0.70         1           Cyclohexane         1.0         J         ug/l         2.0         0.23         1           1,4-Dioxane         ND         ug/l         250         61         1         1           Freon-113         ND         ug/l         2.5	1,2-Dibromoethane	ND		ug/l	2.0	0.65	1		
1,2-Dibromo-3-chloropropane         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           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           Methyl Acetate         ND         ug/l         2.5         0.70         1           Cyclohexane         1.0         J         ug/l         2.0         0.23         1           1,4-Dioxane         ND         ug/l         250         61.         1           Freon-113         ND         ug/l         2.5         0.70         1	n-Butylbenzene	ND		ug/l	2.5	0.70	1		
Sopropylbenzene   ND   ug/l   2.5   0.70   1	sec-Butylbenzene	ND		ug/l	2.5	0.70	1		
p-Isopropyltoluene ND ug/l 2.5 0.70 1 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 2.0 0.23 1 1,4-Dioxane ND ug/l 250 61. 1 1,4-Dioxane ND ug/l 250 61. 1	1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1		
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           Methyl Acetate         ND         ug/l         2.0         0.23         1           Cyclohexane         1.0         J         ug/l         10         0.27         1           1,4-Dioxane         ND         ug/l         250         61         1         1           Freon-113         ND         ug/l         2.5         0.70         1         1	Isopropylbenzene	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         Methyl Acetate       ND       ug/l       2.0       0.23       1         Cyclohexane       1.0       J       ug/l       10       0.27       1         1,4-Dioxane       ND       ug/l       250       61       1         Freon-113       ND       ug/l       2.5       0.70       1	p-Isopropyltoluene	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       Methyl Acetate     ND     ug/l     2.0     0.23     1       Cyclohexane     1.0     J     ug/l     10     0.27     1       1,4-Dioxane     ND     ug/l     250     61     1       Freon-113     ND     ug/l     2.5     0.70     1	n-Propylbenzene	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         Methyl Acetate       ND       ug/l       2.0       0.23       1         Cyclohexane       1.0       J       ug/l       10       0.27       1         1,4-Dioxane       ND       ug/l       250       61       1         Freon-113       ND       ug/l       2.5       0.70       1	1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1		
1,2,4-Trimethylbenzene       ND       ug/l       2.5       0.70       1         Methyl Acetate       ND       ug/l       2.0       0.23       1         Cyclohexane       1.0       J       ug/l       10       0.27       1         1,4-Dioxane       ND       ug/l       250       61.       1         Freon-113       ND       ug/l       2.5       0.70       1	1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1		
Methyl Acetate         ND         ug/l         2.0         0.23         1           Cyclohexane         1.0         J         ug/l         10         0.27         1           1,4-Dioxane         ND         ug/l         250         61.         1           Freon-113         ND         ug/l         2.5         0.70         1	1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1		
Cyclohexane         1.0         J         ug/l         10         0.27         1           1,4-Dioxane         ND         ug/l         250         61.         1           Freon-113         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           Freon-113         ND         ug/l         2.5         0.70         1	Methyl Acetate	ND		ug/l	2.0	0.23	1		
Freon-113 ND ug/l 2.5 0.70 1	Cyclohexane	1.0	J	ug/l	10	0.27	1		
	1,4-Dioxane	ND		ug/l	250	61.	1		
Methyl cyclohexane 6.8 J ug/l 10 0.40 1	Freon-113	ND		ug/l	2.5	0.70	1		
	Methyl cyclohexane	6.8	J	ug/l	10	0.40	1		



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-03 Date Collected: 08/01/22 15:50

Client ID: W7A Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	66.6	J	ug/l	1
Unknown Cycloalkane	6.40	J	ug/l	1
Cyclopentane, 1,2,4-trimethyl-	10.9	NJ	ug/l	1
Unknown	8.41	J	ug/l	1
Cyclohexane, 1,1-dimethyl-	9.40	NJ	ug/l	1
Unknown Cyclohexane	5.86	J	ug/l	1
Pentane, 2,3-dimethyl-	8.59	NJ	ug/l	1
Unknown Cyclohexane	4.11	J	ug/l	1
Unknown	3.51	J	ug/l	1
Unknown Alkene	5.90	J	ug/l	1
Unknown	3.51	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	107	70-130	
4-Bromofluorobenzene	101	70-130	
Dibromofluoromethane	95	70-130	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/09/22 13:58

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	borough Lab					
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	2.5		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
Bromoform	ND		ug/l	2.0	0.65	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
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	tborough Lab					
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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	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
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
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	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
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
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.3	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.1	J	ug/l	10	0.40	1

Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	10.2	J	ug/l	1
Unknown Cycloalkane	1.09	J	ug/l	1
Unknown	1.81	J	ug/l	1
Unknown Cycloalkane	1.04	J	ug/l	1
Cyclopentane, 1,1,2-trimethyl-	1.04	NJ	ug/l	1
Unknown	1.26	J	ug/l	1
Unknown	1.16	J	ug/l	1
Cyclohexane, 1,1-dimethyl-	2.83	NJ	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	106	70-130	
4-Bromofluorobenzene	95	70-130	
Dibromofluoromethane	96	70-130	



L2241763

08/19/22

**Project Name:** ORP #1

L2241763-05

OLEAN, NY

W31

**Project Number:** 0283-017-001

**SAMPLE RESULTS** 

Lab Number:

Report Date:

Date Collected: 08/01/22 14:25

> Date Received: 08/03/22 Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 08/09/22 14:25

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	tborough Lab					
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
Bromoform	ND		ug/l	2.0	0.65	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
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-05 Date Collected: 08/01/22 14:25

Client ID: W31

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westbo	rough Lab						
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	
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1	
Styrene	ND		ug/l	2.5	0.70	1	
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1	
Acetone	2.0	J	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	
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	
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1	
n-Butylbenzene	ND		ug/l	2.5	0.70	1	
sec-Butylbenzene	1.9	J	ug/l	2.5	0.70	1	
1,2-Dibromo-3-chloropropane	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	
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	3.4		ug/l	2.5	0.70	1	
Methyl Acetate	ND		ug/l	2.0	0.23	1	
Cyclohexane	8.8	J	ug/l	10	0.27	1	
1,4-Dioxane	ND		ug/l	250	61.	1	
Freon-113	ND		ug/l	2.5	0.70	1	
Methyl cyclohexane	68		ug/l	10	0.40	1	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-05 Date Collected: 08/01/22 14:25

Client ID: W31 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	110	J	ug/l	1
Cyclohexane, 1,1-dimethyl-	10.7	NJ	ug/l	1
Unknown Benzene	9.02	J	ug/l	1
Pentane, 2,3-dimethyl-	6.33	NJ	ug/l	1
Unknown Cyclohexane	8.56	J	ug/l	1
Cyclohexane, ethyl-	7.11	NJ	ug/l	1
Unknown Cyclopentane	12.8	J	ug/l	1
Unknown Cyclopentane	13.9	J	ug/l	1
Unknown Aromatic	5.43	J	ug/l	1
Unknown Cycloalkane	14.7	J	ug/l	1
Unknown Cyclohexane	21.8	J	ug/l	1

% Recovery	Acceptance Qualifier Criteria	
104	70-130	
111	70-130	
96	70-130	
95	70-130	
	104 111 96	% Recovery         Qualifier         Criteria           104         70-130           111         70-130           96         70-130



08/01/22 08:00

**Project Name:** ORP #1

**Project Number:** 0283-017-001

**SAMPLE RESULTS** 

Lab Number: L2241763

Report Date: 08/19/22

Lab ID: L2241763-07 Date Collected:

Client ID: Date Received: 08/03/22 **BLIND DUP** Sample Location: Field Prep: Not Specified OLEAN, NY

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 08/09/22 14:52

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
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	1.7	J	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
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	18		ug/l	0.50	0.16	1
Toluene	1.3	J	ug/l	2.5	0.70	1
Ethylbenzene	2.8		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
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

SAMPLE RESULTS

Lab ID: L2241763-07 Date Collected: 08/01/22 08:00

Client ID: BLIND DUP Date Received: 08/03/22
Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westbo	orough Lab						
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	7.8		ug/l	2.5	0.70	1	
o-Xylene	13		ug/l	2.5	0.70	1	
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1	
Styrene	ND		ug/l	2.5	0.70	1	
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1	
Acetone	3.5	J	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	
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	
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1	
n-Butylbenzene	ND		ug/l	2.5	0.70	1	
sec-Butylbenzene	ND		ug/l	2.5	0.70	1	
1,2-Dibromo-3-chloropropane	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	
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	1.8	J	ug/l	2.5	0.70	1	
1,2,4-Trimethylbenzene	6.6		ug/l	2.5	0.70	1	
Methyl Acetate	ND		ug/l	2.0	0.23	1	
Cyclohexane	17		ug/l	10	0.27	1	
1,4-Dioxane	ND		ug/l	250	61.	1	
Freon-113	ND		ug/l	2.5	0.70	1	
Methyl cyclohexane	7.5	J	ug/l	10	0.40	1	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

SAMPLE RESULTS

Lab ID: L2241763-07 Date Collected: 08/01/22 08:00

Client ID: BLIND DUP Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	6.77	J	ug/l	1
Cyclopentane, Methyl-	4.34	NJ	ug/l	1
Propane, 2-(ethylthio)-	1.03	NJ	ug/l	1
Unknown	1.40	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	93	70-130	
Dibromofluoromethane	95	70-130	

08/01/22 00:00

Project Name: ORP #1

**Project Number:** 0283-017-001

SAMPLE RESULTS

Lab Number: L2241763

**Report Date:** 08/19/22

Date Collected:

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Lab ID: L2241763-08
Client ID: TRIP BLANK

Client ID: TRIP BLANK Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/09/22 15:19

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - We	stborough Lab					
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
Bromoform	ND		ug/l	2.0	0.65	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
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-08 Date Collected: 08/01/22 00:00

Client ID: TRIP BLANK Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	borough Lab					
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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	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
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
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	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
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
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds				
Total TIC Compounds	1.26	J	ug/l	1
Unknown	1.26	J	ug/l	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

SAMPLE RESULTS

Lab ID: L2241763-08 Date Collected: 08/01/22 00:00

Client ID: TRIP BLANK Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	109	70-130	
Toluene-d8	105	70-130	
4-Bromofluorobenzene	95	70-130	
Dibromofluoromethane	98	70-130	



**Project Number:** 0283-017-001 **Report Date:** 08/19/22

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/09/22 09:04

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL	
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	01,03-05,07-08	Batch: V	VG1673038-5
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	
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	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	



**Project Number:** 0283-017-001 **Report Date:** 08/19/22

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/09/22 09:04

Analyst: PD

arameter	Result	Qualifier Uni	s RL	MDL	
olatile Organics by GC/MS - V	Vestborough Lab	o for sample(s):	01,03-05,07-08	Batch: W	G1673038-5
1,4-Dichlorobenzene	ND	ug	/I 2.5	0.70	
Methyl tert butyl ether	ND	ug	/I 2.5	0.70	
p/m-Xylene	ND	ug	/I 2.5	0.70	
o-Xylene	ND	ug	/I 2.5	0.70	
cis-1,2-Dichloroethene	ND	ug	/I 2.5	0.70	
Styrene	ND	ug	/I 2.5	0.70	
Dichlorodifluoromethane	ND	ug	/I 5.0	1.0	
Acetone	ND	ug	/I 5.0	1.5	
Carbon disulfide	ND	ug	/I 5.0	1.0	
2-Butanone	ND	ug	/I 5.0	1.9	
4-Methyl-2-pentanone	ND	ug	/I 5.0	1.0	
2-Hexanone	ND	ug	/I 5.0	1.0	
Bromochloromethane	ND	ug	/I 2.5	0.70	
1,2-Dibromoethane	ND	ug	/I 2.0	0.65	
n-Butylbenzene	ND	ug	/I 2.5	0.70	
sec-Butylbenzene	ND	ug	/I 2.5	0.70	
1,2-Dibromo-3-chloropropane	ND	ug	/I 2.5	0.70	
Isopropylbenzene	ND	ug	/I 2.5	0.70	
p-Isopropyltoluene	ND	ug	/I 2.5	0.70	
n-Propylbenzene	ND	ug	/I 2.5	0.70	
1,2,3-Trichlorobenzene	ND	ug	/I 2.5	0.70	
1,2,4-Trichlorobenzene	ND	ug	/I 2.5	0.70	
1,3,5-Trimethylbenzene	ND	ug	/I 2.5	0.70	
1,2,4-Trimethylbenzene	ND	ug	/I 2.5	0.70	
Methyl Acetate	ND	ug	/I 2.0	0.23	
Cyclohexane	ND	ug	/I 10	0.27	
1,4-Dioxane	ND	ug	/I 250	61.	
Freon-113	ND	ug	/I 2.5	0.70	
Methyl cyclohexane	ND	ug	/I 10	0.40	



**Project Number:** 0283-017-001 **Report Date:** 08/19/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/09/22 09:04

Analyst: PD

Parameter	Result	Qualifier	Units	RL RL	MDL	-
Volatile Organics by GC/MS	- Westborough La	b for sample	e(s):	01,03-05,07-08	Batch:	WG1673038-5
Tentatively Identified Compounds						

 Total TIC Compounds
 1.24
 J
 ug/l

 Unknown
 1.24
 J
 ug/l

		Acceptance
Surrogate	%Recovery Qu	ualifier Criteria
		_
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	94	70-130
Dibromofluoromethane	98	70-130



**Project Number:** 0283-017-001 **Report Date:** 08/19/22

#### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/10/22 08:40

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS -	· Westborough Lab	for sample(s):	02 Batch:	WG1673876-5
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
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
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



L2241763

**Project Name:** ORP #1

**Project Number:** Report Date: 0283-017-001 08/19/22

Lab Number:

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/10/22 08:40

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL	
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	02 Batch:	WG1673876-5	
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	
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
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	
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	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
n-Butylbenzene	ND	ug/l	2.5	0.70	
sec-Butylbenzene	ND	ug/l	2.5	0.70	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	
Isopropylbenzene	ND	ug/l	2.5	0.70	
p-Isopropyltoluene	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	
Methyl Acetate	ND	ug/l	2.0	0.23	
Cyclohexane	ND	ug/l	10	0.27	
1,4-Dioxane	ND	ug/l	250	61.	
Freon-113	ND	ug/l	2.5	0.70	
Methyl cyclohexane	ND	ug/l	10	0.40	



**Project Number:** 0283-017-001 **Report Date:** 08/19/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/10/22 08:40

Analyst: PD

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1673876-5

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Acceptance** Criteria Surrogate %Recovery Qualifier 70-130 1,2-Dichloroethane-d4 93 Toluene-d8 100 70-130 4-Bromofluorobenzene 97 70-130 Dibromofluoromethane 70-130 103



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qua	%Recove I Limits		Qual	RPD Limits
olatile Organics by GC/MS - Westboroug	h Lab Associated	sample(s):	01,03-05,07-08	Batch:	WG1673038-3	WG1673038-4		
Methylene chloride	95		100		70-130	5		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	99		99		70-130	0		20
Carbon tetrachloride	99		110		63-132	11		20
1,2-Dichloropropane	94		100		70-130	6		20
Dibromochloromethane	90		99		63-130	10		20
1,1,2-Trichloroethane	98		100		70-130	2		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	98		100		75-130	2		20
Trichlorofluoromethane	110		120		62-150	9		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	97		100		67-130	3		20
Bromodichloromethane	110		120		67-130	9		20
trans-1,3-Dichloropropene	94		100		70-130	6		20
cis-1,3-Dichloropropene	92		98		70-130	6		20
Bromoform	90		100		54-136	11		20
1,1,2,2-Tetrachloroethane	99		110		67-130	11		20
Benzene	100		110		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	150	Q	160	Q	64-130	6		20
Bromomethane	110		110		39-139	0		20
Vinyl chloride	140		150	Q	55-140	7		20
				_				



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

arameter		CS covery	Qual	LCSD %Recovery	Qua	%Recove I Limits	•	Qual	RPD Limits	
olatile Organics by GC/MS -	Westborough Lab Ass	sociated	sample(s):	01,03-05,07-08	Batch:	WG1673038-3	WG1673038-4			
Chloroethane		230	Q	240	C	55-138	4		20	
1,1-Dichloroethene		100		110		61-145	10		20	
trans-1,2-Dichloroethene		100		100		70-130	0		20	
Trichloroethene		95		98		70-130	3		20	
1,2-Dichlorobenzene		94		100		70-130	6		20	
1,3-Dichlorobenzene		98		100		70-130	2		20	
1,4-Dichlorobenzene		97		100		70-130	3		20	
Methyl tert butyl ether		86		98		63-130	13		20	
p/m-Xylene		100		100		70-130	0		20	
o-Xylene		100		100		70-130	0		20	
cis-1,2-Dichloroethene		93		98		70-130	5		20	
Styrene		95		100		70-130	5		20	
Dichlorodifluoromethane	1	150	Q	160	C	36-147	6		20	
Acetone		110		110		58-148	0		20	
Carbon disulfide		120		120		51-130	0		20	
2-Butanone		94		100		63-138	6		20	
4-Methyl-2-pentanone		98		110		59-130	12		20	
2-Hexanone		91		110		57-130	19		20	
Bromochloromethane		91		94		70-130	3		20	
1,2-Dibromoethane		91		98		70-130	7		20	
n-Butylbenzene		110		110		53-136	0		20	
sec-Butylbenzene		100		100		70-130	0		20	
1,2-Dibromo-3-chloropropane		80		92		41-144	14		20	



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qua	%Recove al Limits	ry RPD	Qual	RPD Limits	
olatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	01,03-05,07-08	Batch:	WG1673038-3	WG1673038-4			
Isopropylbenzene	96		99		70-130	3		20	
p-Isopropyltoluene	99		98		70-130	1		20	
n-Propylbenzene	100		100		69-130	0		20	
1,2,3-Trichlorobenzene	88		100		70-130	13		20	
1,2,4-Trichlorobenzene	88		99		70-130	12		20	
1,3,5-Trimethylbenzene	97		99		64-130	2		20	
1,2,4-Trimethylbenzene	95		98		70-130	3		20	
Methyl Acetate	100		120		70-130	18		20	
Cyclohexane	130		130		70-130	0		20	
1,4-Dioxane	76		88		56-162	15		20	
Freon-113	120		130		70-130	8		20	
Methyl cyclohexane	110		110		70-130	0		20	

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qual	%Recovery Qual	Criteria	_
1,2-Dichloroethane-d4	108	110	70-130	
Toluene-d8	105	104	70-130	
4-Bromofluorobenzene	91	91	70-130	
Dibromofluoromethane	97	100	70-130	



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
/olatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 02	2 Batch: WG	1673876-3	WG1673876-4			
Methylene chloride	98		100		70-130	2	20	
1,1-Dichloroethane	100		100		70-130	0	20	
Chloroform	100		100		70-130	0	20	
Carbon tetrachloride	110		110		63-132	0	20	
1,2-Dichloropropane	98		98		70-130	0	20	
Dibromochloromethane	95		93		63-130	2	20	
1,1,2-Trichloroethane	91		91		70-130	0	20	
Tetrachloroethene	99		97		70-130	2	20	
Chlorobenzene	100		100		75-130	0	20	
Trichlorofluoromethane	110		110		62-150	0	20	
1,2-Dichloroethane	92		96		70-130	4	20	
1,1,1-Trichloroethane	100		110		67-130	10	20	
Bromodichloromethane	94		97		67-130	3	20	
trans-1,3-Dichloropropene	90		88		70-130	2	20	
cis-1,3-Dichloropropene	93		94		70-130	1	20	
Bromoform	82		81		54-136	1	20	
1,1,2,2-Tetrachloroethane	90		90		67-130	0	20	
Benzene	100		100		70-130	0	20	
Toluene	99		98		70-130	1	20	
Ethylbenzene	100		99		70-130	1	20	
Chloromethane	88		89		64-130	1	20	
Bromomethane	83		90		39-139	8	20	
Vinyl chloride	110		110		55-140	0	20	



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
/olatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 0	2 Batch: W	G1673876-3	WG1673876-4			
Chloroethane	130		130		55-138	0	20	
1,1-Dichloroethene	110		110		61-145	0	20	
trans-1,2-Dichloroethene	110		110		70-130	0	20	
Trichloroethene	98		100		70-130	2	20	
1,2-Dichlorobenzene	97		96		70-130	1	20	
1,3-Dichlorobenzene	98		99		70-130	1	20	
1,4-Dichlorobenzene	99		98		70-130	1	20	
Methyl tert butyl ether	85		87		63-130	2	20	
p/m-Xylene	100		100		70-130	0	20	
o-Xylene	95		100		70-130	5	20	
cis-1,2-Dichloroethene	100		110		70-130	10	20	
Styrene	95		95		70-130	0	20	
Dichlorodifluoromethane	93		94		36-147	1	20	
Acetone	36	Q	38	Q	58-148	5	20	
Carbon disulfide	110		110		51-130	0	20	
2-Butanone	70		70		63-138	0	20	
4-Methyl-2-pentanone	65		66		59-130	2	20	
2-Hexanone	55	Q	57		57-130	4	20	
Bromochloromethane	100		110		70-130	10	20	
1,2-Dibromoethane	93		91		70-130	2	20	
n-Butylbenzene	100		100		53-136	0	20	
sec-Butylbenzene	100		100		70-130	0	20	
1,2-Dibromo-3-chloropropane	77		76		41-144	1	20	



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2

L2241763

Report Date:

arameter	LCS %Recovery	Qual	LCSI %Recov		%Recovery Limits	RPD	Qual	RPD Limits	
olatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	02 Batch:	WG1673876-3	WG1673876-4				
Isopropylbenzene	100		100		70-130	0		20	
p-Isopropyltoluene	100		100		70-130	0		20	
n-Propylbenzene	100		100		69-130	0		20	
1,2,3-Trichlorobenzene	84		87		70-130	4		20	
1,2,4-Trichlorobenzene	89		91		70-130	2		20	
1,3,5-Trimethylbenzene	99		99		64-130	0		20	
1,2,4-Trimethylbenzene	98		97		70-130	1		20	
Methyl Acetate	77		78		70-130	1		20	
Cyclohexane	100		100		70-130	0		20	
1,4-Dioxane	70		78		56-162	11		20	
Freon-113	110		110		70-130	0		20	
Methyl cyclohexane	100		100		70-130	0		20	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	89	91	70-130
Toluene-d8	101	99	70-130
4-Bromofluorobenzene	97	97	70-130
Dibromofluoromethane	99	102	70-130



# Matrix Spike Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

Parameter	Native Sample A	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS	- Westborough La	b Asso	ciated sample	(s): 02 QC Ba	tch ID: W	G1673876	-6 WG167387	'6-7 Q	C Sample: L	224176	3-02	Client ID: W	/4
Methylene chloride	ND	10	11	110		9.6	96		70-130	14		20	
1,1-Dichloroethane	ND	10	12	120		10	100		70-130	18		20	
Chloroform	ND	10	12	120		9.8	98		70-130	20		20	
Carbon tetrachloride	ND	10	12	120		10	100		63-132	18		20	
1,2-Dichloropropane	ND	10	12	120		9.8	98		70-130	20		20	
Dibromochloromethane	ND	10	11	110		9.4	94		63-130	16		20	
1,1,2-Trichloroethane	ND	10	22	220	Q	19	190	Q	70-130	15		20	
Tetrachloroethene	ND	10	9.8	98		9.5	95		70-130	3		20	
Chlorobenzene	5.6	10	16	104		15	94		75-130	6		20	
Trichlorofluoromethane	ND	10	12	120		10	100		62-150	18		20	
1,2-Dichloroethane	ND	10	11	110		9.3	93		70-130	17		20	
1,1,1-Trichloroethane	ND	10	12	120		10	100		67-130	18		20	
Bromodichloromethane	ND	10	11	110		9.2	92		67-130	18		20	
trans-1,3-Dichloropropene	ND	10	10	100		8.8	88		70-130	13		20	
cis-1,3-Dichloropropene	ND	10	10	100		9.0	90		70-130	11		20	
Bromoform	ND	10	9.4	94		8.1	81		54-136	15		20	
1,1,2,2-Tetrachloroethane	ND	10	12	120		9.7	97		67-130	21	Q	20	
Benzene	ND	10	12	120		10	100		70-130	18		20	
Toluene	ND	10	11	110		10	100		70-130	10		20	
Ethylbenzene	ND	10	11	110		9.7	97		70-130	13		20	
Chloromethane	ND	10	10	100		9.0	90		64-130	11		20	
Bromomethane	ND	10	7.5	75		7.5	75		39-139	0		20	
Vinyl chloride	ND	10	13	130		11	110		55-140	17		20	
Chloroethane	ND	10	17	170	Q	14	140	Q	55-138	19		20	

# Matrix Spike Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

Parameter		MS Added	MS Found	MS %Recovery		/ISD ound	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS -	· Westborough La	b Asso	ciated sample	(s): 02 QC Ba	tch ID: WG16	73876-	6 WG167387	6-7 Q	C Sample: L	2241763	3-02	Client ID: W4
1,1-Dichloroethene	ND	10	13	130		11	110		61-145	17		20
trans-1,2-Dichloroethene	ND	10	12	120		10	100		70-130	18		20
Trichloroethene	ND	10	12	120		9.9	99		70-130	19		20
1,2-Dichlorobenzene	1.7J	10	11	110		10	100		70-130	10		20
1,3-Dichlorobenzene	ND	10	9.4	94		9.2	92		70-130	2		20
1,4-Dichlorobenzene	1.1J	10	10	100		10	100		70-130	0		20
Methyl tert butyl ether	ND	10	11	110		8.8	88		63-130	22	Q	20
p/m-Xylene	ND	20	21	105		19	95		70-130	10		20
o-Xylene	ND	20	21	105		19	95		70-130	10		20
cis-1,2-Dichloroethene	ND	10	12	120		10	100		70-130	18		20
Styrene	ND	20	20	100		18	90		70-130	11		20
Dichlorodifluoromethane	ND	10	10	100		8.8	88		36-147	13		20
Acetone	2.7J	10	18	180	Q	16	160	Q	58-148	12		20
Carbon disulfide	ND	10	12	120		11	110		51-130	9		20
2-Butanone	ND	10	17	170	Q	16	160	Q	63-138	6		20
4-Methyl-2-pentanone	ND	10	10	100		7.7	77		59-130	26	Q	20
2-Hexanone	ND	10	9.1	91		6.8	68		57-130	29	Q	20
Bromochloromethane	ND	10	12	120		9.9	99		70-130	19		20
1,2-Dibromoethane	ND	10	11	110		9.5	95		70-130	15		20
n-Butylbenzene	ND	10	7.6	76		8.8	88		53-136	15		20
sec-Butylbenzene	ND	10	8.5	85		9.3	93		70-130	9		20
1,2-Dibromo-3-chloropropane	ND	10	10	100		8.0	80		41-144	22	Q	20
Isopropylbenzene	ND	10	9.6	96		9.4	94		70-130	2		20
p-Isopropyltoluene	ND	10	7.8	78		8.7	87		70-130	11		20

# Matrix Spike Analysis Batch Quality Control

Project Name: ORP #1

Project Number: 0283-017-001 Lab Number:

L2241763

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD ound	MSD %Recovery		Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS -	Westborough	Lab Assoc	ciated sample(	s): 02 QC Ba	tch ID: WG16	673876	-6 WG167387	6-7 Q	C Sample: L	224176	3-02 C	Client ID: W4
n-Propylbenzene	ND	10	9.0	90		9.2	92		69-130	2		20
1,2,3-Trichlorobenzene	ND	10	8.0	80		7.8	78		70-130	3		20
1,2,4-Trichlorobenzene	ND	10	7.8	78		8.0	80		70-130	3		20
1,3,5-Trimethylbenzene	1.6J	10	10	100		10	100		64-130	0		20
1,2,4-Trimethylbenzene	8.8	10	17	82		16	72		70-130	6		20
Methyl Acetate	ND	10	9.0	90		7.4	74		70-130	20		20
Cyclohexane	28	10	35	70		32	40	Q	70-130	9		20
1,4-Dioxane	ND	500	530	106		480	96		56-162	10		20
Freon-113	ND	10	11	110		10	100		70-130	10		20
Methyl cyclohexane	25	10	31	60	Q	30	50	Q	70-130	3		20

	MS	MSD	Acceptance
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria
1,2-Dichloroethane-d4	96	93	70-130
4-Bromofluorobenzene	98	98	70-130
Dibromofluoromethane	101	99	70-130
Toluene-d8	100	102	70-130



#### **SEMIVOLATILES**



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 Date Collected: 08/01/22 17:35

Client ID: W3 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1.8270D Extraction Date: 08/05/22 14:09

Analytical Method: 1,8270D Extraction Date: 08/05/22 14:0

Analytical Date: 08/12/22 17:11

Analyst: SZ

3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chiorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Bromophenyl phenyl ether         ND         ug/l         2.0         0.53         1           8 Bis (2-chloriospropyl) ether         ND         ug/l         2.0         0.53         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.69         1           NDPALDA         ND	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chiorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Bromophenyl phenyl ether         ND         ug/l         2.0         0.53         1           8 Bis (2-chloriospropyl) ether         ND         ug/l         2.0         0.53         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.50         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.69         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.69         1           Bis (2-chlorios	Semivolatile Organics by GC/MS - W	estborough Lab					
2,4-Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorosporpyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chlorosthoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         2.0         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         5.0         0.42         1           NITrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         5.0         0.64         1           Bis(2-chlorethoxy)lphthalate         ND         ug/l         5.0         0.64         1           Bis(2-chlorethoxylphthalate         ND         ug/l         5.0	Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorospropylether         ND         ug/l         2.0         0.53         1           Bis(2-chlorospropylether         ND         ug/l         5.0         0.50         1           Bis(2-chlorospropylether)         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.69         1           Isophorone         ND         ug/l         5.0         0.62         1           ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.64         1           Bis(2-chlorestowyl)phthalate         ND         ug/l         5.0         0.64         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.39         1	3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Biphenyl ND ug/l 5.0 0.66 1 4-Chloroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.80 1 4-Nitroaniline ND ug/l 5.0 0.80 1 1,2.4,5-Tetrachlorobenzene ND ug/l 5.0 0.63 1	2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 2.0 0.77 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.42 1 Bis(2-chlylbexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylbexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylbexyl)phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Biphenyl ND ug/l 5.0 0.46 1 Biphenyl ND ug/l 5.0 0.50 1.1 1 Chloroiniline ND ug/l 5.0 0.50 1 Chloroiniline ND ug/l 5.0 0.81 1 Chloroiniline ND ug/l 5.0 0.80 1	2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
Bis(2-chloroisopropyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodin-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0	4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0	4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Hexachlorocyclopentadiene   ND   ug/l   20   0.69   1     Isophorone   ND   ug/l   5.0   1.2   1     Nitrobenzene   ND   ug/l   2.0   0.77   1     NDPA/DPA   ND   ug/l   2.0   0.42   1     n-Nitrosodi-n-propylamine   ND   ug/l   5.0   0.64   1     Bis(2-ethylhexyl)phthalate   ND   ug/l   5.0   0.64   1     Butyl benzyl phthalate   ND   ug/l   5.0   1.2   1     Di-n-butylphthalate   ND   ug/l   5.0   0.39   1     Di-n-butylphthalate   ND   ug/l   5.0   0.39   1     Di-n-octylphthalate   ND   ug/l   5.0   0.39   1     Di-n-octylphthalate   ND   ug/l   5.0   0.38   1     Diethyl phthalate   ND   ug/l   5.0   0.38   1     Dimethyl phthalate   ND   ug/l   5.0   0.46   1     Dimethyl phthalate   ND   ug/l   5.0   0.46   1     4-Chloroaniline   ND   ug/l   5.0   0.50   1     3-Nitroaniline   ND   ug/l   5.0   0.81   1     4-Nitroaniline   ND   ug/l   5.0   0.81   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1	Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Sophorone   ND   ug/l   5.0   1.2   1	Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50	Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         1.2         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Biphenyl         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50         1           4-Nitroaniline         ND         ug/l         5.0         0.80	Isophorone	ND		ug/l	5.0	1.2	1
ND   Ug/l   5.0   0.64   1	Nitrobenzene	ND		ug/l	2.0	0.77	1
Bis(2-ethylhexyl)phthalate   ND   ug/l   3.0   1.5   1	NDPA/DPA	ND		ug/l	2.0	0.42	1
Butyl benzyl phthalate   ND   ug/l   5.0   1.2   1	n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         5.0         0.53         1           Acetophenone         ND         ug/l         5.0         0.53         1	Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.80         1           4-Nitroaniline         ND         ug/l         5.0         0.50         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Diethyl phthalate	ND		ug/l	5.0	0.38	1
4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Dimethyl phthalate	ND		ug/l	5.0	1.8	1
2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Biphenyl	ND		ug/l	2.0	0.46	1
3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 2.0 0.50 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	4-Chloroaniline	ND		ug/l	5.0	1.1	1
4-Nitroaniline ND ug/l 5.0 0.80 1  Dibenzofuran ND ug/l 2.0 0.50 1  1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1  Acetophenone ND ug/l 5.0 0.53 1	2-Nitroaniline	ND		ug/l	5.0	0.50	1
Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	3-Nitroaniline	ND		ug/l	5.0	0.81	1
1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	4-Nitroaniline	ND		ug/l	5.0	0.80	1
Acetophenone ND ug/l 5.0 0.53 1	Dibenzofuran	ND		ug/l	2.0	0.50	1
	1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
2,4,6-Trichlorophenol ND ug/l 5.0 0.61 1	Acetophenone	ND		ug/l	5.0	0.53	1
	2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 Date Collected: 08/01/22 17:35

Client ID: W3 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbo	rough Lab					
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 Date Collected: 08/01/22 17:35

Client ID: W3 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	182	J	ug/l	1
Unknown Organic Acid	9.78	J	ug/l	1
Unknown	10.8	J	ug/l	1
Unknown	25.0	J	ug/l	1
Unknown Organic Acid	8.00	J	ug/l	1
Unknown	7.93	J	ug/l	1
Unknown	11.2	J	ug/l	1
Unknown	8.51	J	ug/l	1
Unknown	12.4	J	ug/l	1
Unknown	15.5	J	ug/l	1
Unknown Alkane	11.6	J	ug/l	1
Unknown Organic Acid	22.7	J	ug/l	1
Unknown	10.7	J	ug/l	1
Unknown Organic Acid	7.56	J	ug/l	1
Unknown Organic Acid	12.0	J	ug/l	1
Unknown	7.85	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	56	21-120
Phenol-d6	49	10-120
Nitrobenzene-d5	81	23-120
2-Fluorobiphenyl	69	15-120
2,4,6-Tribromophenol	96	10-120
4-Terphenyl-d14	77	41-149



**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 D Date Collected: 08/01/22 17:35

Client ID: W3

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3510C Matrix: Water

**Extraction Date:** 08/05/22 14:09 Analytical Method: 1,8270D-SIM Analytical Date: 08/18/22 14:01

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS-SIM - Westborough Lab							
Acenaphthene	ND		ug/l	0.50	0.07	5	
2-Chloronaphthalene	ND		ug/l	1.0	0.09	5	
Fluoranthene	ND		ug/l	0.50	0.10	5	
Hexachlorobutadiene	ND		ug/l	2.5	0.23	5	
Naphthalene	0.48	J	ug/l	0.50	0.24	5	
Benzo(a)anthracene	ND		ug/l	0.50	0.10	5	
Benzo(a)pyrene	ND		ug/l	0.50	0.08	5	
Benzo(b)fluoranthene	ND		ug/l	0.50	0.06	5	
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5	
Chrysene	ND		ug/l	0.50	0.06	5	
Acenaphthylene	ND		ug/l	0.50	0.06	5	
Anthracene	ND		ug/l	0.50	0.07	5	
Benzo(ghi)perylene	ND		ug/l	0.50	0.07	5	
Fluorene	0.11	J	ug/l	0.50	0.07	5	
Phenanthrene	ND		ug/l	0.50	0.12	5	
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.06	5	
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.06	5	
Pyrene	ND		ug/l	0.50	0.10	5	
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5	
Pentachlorophenol	ND		ug/l	4.0	0.07	5	
Hexachlorobenzene	ND		ug/l	4.0	0.05	5	
Hexachloroethane	ND		ug/l	4.0	0.32	5	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01 D Date Collected: 08/01/22 17:35

Client ID: W3 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

2-Fluorophenol       60       21-120         Phenol-d6       52       10-120         Nitrobenzene-d5       80       23-120         2-Fluorobiphenyl       75       15-120         2,4,6-Tribromophenol       122       Q       10-120         4-Terphenyl-d14       75       41-149	Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5       80       23-120         2-Fluorobiphenyl       75       15-120         2,4,6-Tribromophenol       122       Q       10-120	2-Fluorophenol	60		21-120	
2-Fluorobiphenyl       75       15-120         2,4,6-Tribromophenol       122       Q       10-120	Phenol-d6	52		10-120	
2,4,6-Tribromophenol <b>122</b> Q 10-120	Nitrobenzene-d5	80		23-120	
	2-Fluorobiphenyl	75		15-120	
4-Terphenyl-d14 75 41-149	2,4,6-Tribromophenol	122	Q	10-120	
· · · · · · · · · · · · · · · · · · ·	4-Terphenyl-d14	75		41-149	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 Date Collected: 08/01/22 16:40

Client ID: W4 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1.8270D Extraction Date: 08/05/22 14:09

Analytical Method: 1,8270D Extraction Date: 08/05/22 14:09
Analytical Date: 08/12/22 17:37

Analyst: SZ

3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Chlorophenyl phenyl ether         ND         ug/l         2.0         0.53         1           Bis(2c-chlorosthosy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.69         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.69         1           Horrocyclopentadiene         ND         ug/l         5.0         0.69         1           Nitrobenzene         ND         ug/l         5.0         0.69         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NIDPA/DPA         ND         ug/l         5.0         0.64         1           n-Nitrobenzene         ND         ug/l         5.0	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Chlorophenyl phenyl ether         ND         ug/l         2.0         0.53         1           Bis(2-chlorosthosy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.69         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.69         1           Nitrobenzene         ND         ug/l         5.0         0.69         1           Nitrobenzene         ND         ug/l         5.0         0.42         1           n-Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrobenzene         ND         ug/l         3.0	Semivolatile Organics by GC/MS - W	estborough Lab					
2,4-Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorosporpyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chlorosthoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.59         1           NITrobenzene         ND         ug/l         5.0         0.42         1           NDPA/DPA         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Di-n-butylphthalate         ND         ug/l         5.0         0	Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2.6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorospropylether         ND         ug/l         2.0         0.53         1           Bis(2-chlorosthoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.50         1           Isophorone         ND         ug/l         5.0         0.50         1           Isophorone         ND         ug/l         5.0         0.69         1           Isophorone         ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.84         1           Bis(2-chlorosthoxy)methalate         ND         ug/l         5.0         0.84         1           <	3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.42 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-ctylphthalate ND ug/l 5.0 0.38 1 Dimetryl phthalate ND ug/l 5.0 0.64 1 4-Chloroaniline ND ug/l 5.0 0.50 1.1 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1	2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
A-Bromophenyl phenyl ether   ND   Ug/l   2.0   0.38   1	2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
Bis(2-chloroispropyl)ether   ND	4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.64         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.46 </td <td>4-Bromophenyl phenyl ether</td> <td>ND</td> <td></td> <td>ug/l</td> <td>2.0</td> <td>0.38</td> <td>1</td>	4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Hexachlorocyclopentadiene   ND	Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Sophorone   ND   Ug/l   5.0   1.2   1	Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Nitrobenzene ND ug/l 2.0 0.77 1 NDPA/DPA ND ug/l 2.0 0.42 1 n-Nitrosodi-n-propylamine ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 3.0 1.5 1 Butyl benzyl phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 1.3 1 Di-n-octylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 1.8 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Siphenyl ND ug/l 5.0 1.8 1 Siphenyl ND ug/l 5.0 0.66 1 Siphenyl ND ug/l 5.0 0.50 1 Silticonilline ND ug/l 5.0 0.50 1 Silticonilline ND ug/l 5.0 0.81 1 Silticonilline ND ug/l 5.0 0.80 1	Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
NDPA/DPA	Isophorone	ND		ug/l	5.0	1.2	1
ND	Nitrobenzene	ND		ug/l	2.0	0.77	1
Bis(2-ethylhexyl)phthalate   ND   ug/l   3.0   1.5   1	NDPA/DPA	ND		ug/l	2.0	0.42	1
Butyl benzyl phthalate   ND   ug/l   5.0   1.2   1	n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-cotylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         0.38         1           Biphenyl         ND         ug/l         5.0         1.8         1           4-Chloroaniline         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         5.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         5.0         0.53         1           Acetophenone         ND         ug/l         5.0         0.53         1	Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate   ND   ug/l   5.0   1.3   1	Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate   ND   ug/l   5.0   1.8   1	Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Signature   Sign	Diethyl phthalate	ND		ug/l	5.0	0.38	1
4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Dimethyl phthalate	ND		ug/l	5.0	1.8	1
2-Nitroaniline	Biphenyl	ND		ug/l	2.0	0.46	1
3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 2.0 0.50 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	4-Chloroaniline	ND		ug/l	5.0	1.1	1
4-Nitroaniline ND ug/l 5.0 0.80 1  Dibenzofuran ND ug/l 2.0 0.50 1  1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1  Acetophenone ND ug/l 5.0 0.53 1	2-Nitroaniline	ND		ug/l	5.0	0.50	1
Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	3-Nitroaniline	ND		ug/l	5.0	0.81	1
1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	4-Nitroaniline	ND		ug/l	5.0	0.80	1
Acetophenone ND ug/l 5.0 0.53 1	Dibenzofuran	ND		ug/l	2.0	0.50	1
-9-	1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
2,4,6-Trichlorophenol ND ug/l 5.0 0.61 1	Acetophenone	ND		ug/l	5.0	0.53	1
	2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 Date Collected: 08/01/22 16:40

Client ID: W4 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Result	Qualifier	Units	RL	MDL	Dilution Factor			
Semivolatile Organics by GC/MS - Westborough Lab								
ND		ug/l	2.0	0.35	1			
ND			2.0	0.48	1			
ND		ug/l	5.0	0.41	1			
ND		ug/l	5.0	1.8	1			
ND		ug/l	10	0.85	1			
ND		ug/l	10	0.67	1			
ND		ug/l	20	6.6	1			
ND		ug/l	10	1.8	1			
ND		ug/l	5.0	0.57	1			
ND		ug/l	5.0	0.49	1			
ND		ug/l	5.0	0.48	1			
ND		ug/l	5.0	0.77	1			
ND		ug/l	2.0	0.49	1			
ND		ug/l	10	0.76	1			
ND		ug/l	5.0	0.53	1			
ND		ug/l	10	3.3	1			
ND		ug/l	5.0	0.84	1			
	ND N	ND N	ND	ND ug/l 2.0  ND ug/l 2.0  ND ug/l 5.0  ND ug/l 5.0  ND ug/l 10  ND ug/l 10  ND ug/l 10  ND ug/l 10  ND ug/l 20  ND ug/l 5.0  ND ug/l 5.0	ND         ug/l         2.0         0.35           ND         ug/l         2.0         0.48           ND         ug/l         5.0         0.41           ND         ug/l         5.0         1.8           ND         ug/l         10         0.85           ND         ug/l         10         0.67           ND         ug/l         20         6.6           ND         ug/l         10         1.8           ND         ug/l         5.0         0.57           ND         ug/l         5.0         0.49           ND         ug/l         5.0         0.77           ND         ug/l         5.0         0.49           ND         ug/l         5.0         0.49           ND         ug/l         5.0         0.49           ND         ug/l         5.0         0.53           ND         ug/l         5.0         0.53           ND         ug/l         5.0         0.53           ND         ug/l         10         3.3			



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 Date Collected: 08/01/22 16:40

Client ID: W4 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	89.0	J	ug/l	1
Unknown Organic Acid	4.14	J	ug/l	1
Unknown Alkane	5.13	J	ug/l	1
Unknown	4.44	J	ug/l	1
Unknown	4.51	J	ug/l	1
Unknown Benzene	4.18	J	ug/l	1
Unknown Phenol	15.3	J	ug/l	1
Unknown	7.85	J	ug/l	1
Unknown	8.40	J	ug/l	1
Unknown	2.98	J	ug/l	1
Unknown	5.49	J	ug/l	1
Unknown Alcohol	3.60	J	ug/l	1
Unknown Organic Acid	8.62	J	ug/l	1
Unknown	5.56	J	ug/l	1
Unknown Benzene	5.16	J	ug/l	1
Unknown	3.60	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	56	21-120
Phenol-d6	46	10-120
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	62	15-120
2,4,6-Tribromophenol	86	10-120
4-Terphenyl-d14	71	41-149



**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 D Date Collected: 08/01/22 16:40

Client ID: W4

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3510C Matrix: Water

**Extraction Date:** 08/05/22 14:09 Analytical Method: 1,8270D-SIM Analytical Date: 08/18/22 14:17

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS-SIM - Westborough Lab								
Acenaphthene	0.11	J	ug/l	0.50	0.07	5		
2-Chloronaphthalene	ND		ug/l	1.0	0.09	5		
Fluoranthene	0.39	J	ug/l	0.50	0.10	5		
Hexachlorobutadiene	ND		ug/l	2.5	0.23	5		
Naphthalene	ND		ug/l	0.50	0.24	5		
Benzo(a)anthracene	0.26	J	ug/l	0.50	0.10	5		
Benzo(a)pyrene	0.09	J	ug/l	0.50	0.08	5		
Benzo(b)fluoranthene	0.17	J	ug/l	0.50	0.06	5		
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5		
Chrysene	0.19	J	ug/l	0.50	0.06	5		
Acenaphthylene	ND		ug/l	0.50	0.06	5		
Anthracene	0.11	J	ug/l	0.50	0.07	5		
Benzo(ghi)perylene	0.12	J	ug/l	0.50	0.07	5		
Fluorene	0.46	J	ug/l	0.50	0.07	5		
Phenanthrene	0.20	J	ug/l	0.50	0.12	5		
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.06	5		
Indeno(1,2,3-cd)pyrene	0.11	J	ug/l	0.50	0.06	5		
Pyrene	0.37	J	ug/l	0.50	0.10	5		
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5		
Pentachlorophenol	ND		ug/l	4.0	0.07	5		
Hexachlorobenzene	ND		ug/l	4.0	0.05	5		
Hexachloroethane	ND		ug/l	4.0	0.32	5		



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02 D Date Collected: 08/01/22 16:40

Client ID: W4 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	60	21-120
Phenol-d6	52	10-120
Nitrobenzene-d5	79	23-120
2-Fluorobiphenyl	74	15-120
2,4,6-Tribromophenol	118	10-120
4-Terphenyl-d14	70	41-149



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-03 Date Collected: 08/01/22 15:50

Client ID: W7A Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1.8270D Extraction Date: 08/05/22 14:09

Analytical Method: 1,8270D Extraction Date: 08/05/22 14:09
Analytical Date: 08/12/22 18:03

Analyst: SZ

3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chiorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Bromophenyl phenyl ether         ND         ug/l         2.0         0.53         1           8 Bis (2-chloriospropyl) ether         ND         ug/l         2.0         0.53         1           Bis (2-chloroethoxy) methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.59         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NIP Orachylophthalate         ND         ug/l         2.0         0.77         1           Din-butylphthalate         ND         ug/l         5.0         0.64         1           Di-n-otylphthalate         ND         ug/l	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chiorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Bromophenyl phenyl ether         ND         ug/l         2.0         0.53         1           8 Bis (2-chloriospropyl) ether         ND         ug/l         2.0         0.53         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.50         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.69         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.69         1           Bis (2-chlorios	Semivolatile Organics by GC/MS - W	estborough Lab					
2,4-Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorosporpyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chlorosthoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         2.0         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         5.0         0.42         1           NITrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         5.0         0.64         1           Bis(2-chlorethoxy)lphthalate         ND         ug/l         5.0         0.64         1           Bis(2-chlorethoxylphthalate         ND         ug/l         5.0	Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorospropylether         ND         ug/l         2.0         0.53         1           Bis(2-chlorospropylether)         ND         ug/l         5.0         0.50         1           Bis(2-chlorospropylether)         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.69         1           Isophorone         ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.64         1           Bis(2-chlorestowylphthalate         ND         ug/l         5.0         0.64         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.38         1	3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Biphenyl ND ug/l 5.0 0.66 1 4-Chloroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.80 1 4-Nitroaniline ND ug/l 5.0 0.80 1 1,2.4,5-Tetrachlorobenzene ND ug/l 5.0 0.63 1	2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 2.0 0.77 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.42 1 Bis(2-chlyloisopropyl)ethalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-cytylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Biphenyl ND ug/l 5.0 0.46 1 Biphenyl ND ug/l 5.0 0.50 1.8 1 Biphenyl ND ug/l 5.0 0.50 1.1 1 C-Nitroiniline ND ug/l 5.0 0.50 1	2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
Bis(2-chloroisopropyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodin-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0	4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0	4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Hexachlorocyclopentadiene   ND   ug/l   20   0.69   1     Isophorone   ND   ug/l   5.0   1.2   1     Nitrobenzene   ND   ug/l   2.0   0.77   1     NDPA/DPA   ND   ug/l   2.0   0.42   1     n-Nitrosodi-n-propylamine   ND   ug/l   5.0   0.64   1     Bis(2-ethylhexyl)phthalate   ND   ug/l   5.0   0.64   1     Bis(2-ethylhexyl)phthalate   ND   ug/l   5.0   1.5   1     Butyl benzyl phthalate   ND   ug/l   5.0   0.39   1     Di-n-butylphthalate   ND   ug/l   5.0   0.39   1     Di-n-butylphthalate   ND   ug/l   5.0   0.39   1     Di-n-octylphthalate   ND   ug/l   5.0   0.38   1     Diethyl phthalate   ND   ug/l   5.0   0.38   1     Diethyl phthalate   ND   ug/l   5.0   0.46   1     Eliphenyl   ND   ug/l   5.0   0.46   1     4-Chloroaniline   ND   ug/l   5.0   0.50   1     3-Nitroaniline   ND   ug/l   5.0   0.81   1     4-Nitroaniline   ND   ug/l   5.0   0.81   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1	Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Sophorone   ND   ug/l   5.0   1.2   1	Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         0.38         1           Di-n-octylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         0.46         1           Biphenyl         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50         1<	Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         1.2         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Biphenyl         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50         1           4-Nitroaniline         ND         ug/l         5.0         0.80	Isophorone	ND		ug/l	5.0	1.2	1
ND   Ug/l   5.0   0.64   1	Nitrobenzene	ND		ug/l	2.0	0.77	1
Bis(2-ethylhexyl)phthalate   ND   ug/l   3.0   1.5   1	NDPA/DPA	ND		ug/l	2.0	0.42	1
Butyl benzyl phthalate   ND   ug/l   5.0   1.2   1	n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         5.0         0.53         1           Acetophenone         ND         ug/l         5.0         0.53         1	Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.80         1           4-Nitroaniline         ND         ug/l         5.0         0.50         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Diethyl phthalate	ND		ug/l	5.0	0.38	1
4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Dimethyl phthalate	ND		ug/l	5.0	1.8	1
2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Biphenyl	ND		ug/l	2.0	0.46	1
3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 2.0 0.50 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	4-Chloroaniline	ND		ug/l	5.0	1.1	1
4-Nitroaniline ND ug/l 5.0 0.80 1  Dibenzofuran ND ug/l 2.0 0.50 1  1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1  Acetophenone ND ug/l 5.0 0.53 1	2-Nitroaniline	ND		ug/l	5.0	0.50	1
Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	3-Nitroaniline	ND		ug/l	5.0	0.81	1
1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	4-Nitroaniline	ND		ug/l	5.0	0.80	1
Acetophenone ND ug/l 5.0 0.53 1	Dibenzofuran	ND		ug/l	2.0	0.50	1
	1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
2,4,6-Trichlorophenol ND ug/l 5.0 0.61 1	Acetophenone	ND		ug/l	5.0	0.53	1
	2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



**Project Name:** Lab Number: L2241763 ORP #1

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-03 Date Collected: 08/01/22 15:50

Client ID: Date Received: 08/03/22 W7A Not Specified

Sample Location: Field Prep: OLEAN, NY

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-03 Date Collected: 08/01/22 15:50

Client ID: W7A Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	31.4	J	ug/l	1
Unknown	1.60	J	ug/l	1
Unknown Organic Acid	2.14	J	ug/l	1
Unknown	1.67	J	ug/l	1
Unknown Organic Acid	2.47	J	ug/l	1
Benzene, chloro-	2.22	NJ	ug/l	1
Unknown	2.44	J	ug/l	1
Unknown	3.24	J	ug/l	1
Unknown Benzene	3.05	J	ug/l	1
Unknown	1.67	J	ug/l	1
Unknown	1.60	J	ug/l	1
Cyclic Octaatomic Sulfur	4.65	NJ	ug/l	1
Unknown Benzene	2.51	J	ug/l	1
Unknown Cycloalkane	2.14	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	38	21-120
Phenol-d6	35	10-120
Nitrobenzene-d5	60	23-120
2-Fluorobiphenyl	56	15-120
2,4,6-Tribromophenol	58	10-120
4-Terphenyl-d14	72	41-149



**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: D Date Collected: 08/01/22 15:50 L2241763-03

Client ID: Date Received: W7A

08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3510C Matrix: Water

**Extraction Date:** 08/05/22 14:09 Analytical Method: 1,8270D-SIM Analytical Date: 08/18/22 14:32

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS-SIM - Westborough Lab								
Acenaphthene	0.11	J	ug/l	0.50	0.07	5		
2-Chloronaphthalene	ND		ug/l	1.0	0.09	5		
Fluoranthene	ND		ug/l	0.50	0.10	5		
Hexachlorobutadiene	ND		ug/l	2.5	0.23	5		
Naphthalene	ND		ug/l	0.50	0.24	5		
Benzo(a)anthracene	0.12	J	ug/l	0.50	0.10	5		
Benzo(a)pyrene	ND		ug/l	0.50	0.08	5		
Benzo(b)fluoranthene	ND		ug/l	0.50	0.06	5		
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5		
Chrysene	ND		ug/l	0.50	0.06	5		
Acenaphthylene	ND		ug/l	0.50	0.06	5		
Anthracene	ND		ug/l	0.50	0.07	5		
Benzo(ghi)perylene	ND		ug/l	0.50	0.07	5		
Fluorene	0.13	J	ug/l	0.50	0.07	5		
Phenanthrene	ND		ug/l	0.50	0.12	5		
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.06	5		
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.06	5		
Pyrene	0.11	J	ug/l	0.50	0.10	5		
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5		
Pentachlorophenol	ND		ug/l	4.0	0.07	5		
Hexachlorobenzene	ND		ug/l	4.0	0.05	5		
Hexachloroethane	ND		ug/l	4.0	0.32	5		



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-03 D Date Collected: 08/01/22 15:50

Client ID: W7A Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	51	21-120
Phenol-d6	45	10-120
Nitrobenzene-d5	68	23-120
2-Fluorobiphenyl	65	15-120
2,4,6-Tribromophenol	106	10-120
4-Terphenyl-d14	66	41-149



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1.8270D Extraction Date: 08/05/22 14:09

Analytical Method: 1,8270D Extraction Date: 08/05/22 14:09
Analytical Date: 08/12/22 18:29

Analyst: SZ

3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chiorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Bromophenyl phenyl ether         ND         ug/l         2.0         0.53         1           8 Bis (2-chloriospropyl) ether         ND         ug/l         2.0         0.53         1           Bis (2-chloroethoxy) methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.59         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NIP Orachylophthalate         ND         ug/l         2.0         0.77         1           Din-butylphthalate         ND         ug/l         5.0         0.64         1           Di-n-otylphthalate         ND         ug/l	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
3,3 - Dichlorobenzidine         ND         ug/l         5.0         1.6         1           2,4 - Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6 - Dinitrotoluene         ND         ug/l         5.0         0.93         1           4 - Chiorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4 - Bromophenyl phenyl ether         ND         ug/l         2.0         0.53         1           8 Bis (2-chloriospropyl) ether         ND         ug/l         2.0         0.53         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.50         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.69         1           Bis (2-chloriospropyl) ether         ND         ug/l         5.0         0.69         1           Bis (2-chlorios	Semivolatile Organics by GC/MS - W	estborough Lab					
2,4-Dinitrotoluene         ND         ug/l         5.0         1.2         1           2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorosporpyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chlorosthoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         2.0         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         5.0         0.42         1           NITrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         5.0         0.64         1           Bis(2-chlorethoxy)lphthalate         ND         ug/l         5.0         0.64         1           Bis(2-chlorethoxylphthalate         ND         ug/l         5.0	Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2,6-Dinitrotoluene         ND         ug/l         5.0         0.93         1           4-Chlorophenyl phenyl ether         ND         ug/l         2.0         0.49         1           4-Bromophenyl phenyl ether         ND         ug/l         2.0         0.38         1           Bis(2-chlorospropylether         ND         ug/l         2.0         0.53         1           Bis(2-chlorospropylether)         ND         ug/l         5.0         0.50         1           Bis(2-chlorospropylether)         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         5.0         0.59         1           Isophorone         ND         ug/l         5.0         0.69         1           Isophorone         ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.42         1           ND         ug/l         5.0         0.64         1           Bis(2-chlorestowylphthalate         ND         ug/l         5.0         0.64         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.38         1	3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.60 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Biphenyl ND ug/l 5.0 0.66 1 4-Chloroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.60 1 3-Nitroaniline ND ug/l 5.0 0.80 1 4-Nitroaniline ND ug/l 5.0 0.80 1 1,2.4,5-Tetrachlorobenzene ND ug/l 5.0 0.63 1	2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroisopropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.50 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.69 1 Bis(2-chloroisopropyl)ethane ND ug/l 2.0 0.77 1 Bis(2-chloroisopropyl)ethane ND ug/l 5.0 0.42 1 Bis(2-chlyloisopropyl)ethalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-chlylhexyl)phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-cytylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.38 1 Biphenyl ND ug/l 5.0 0.46 1 Biphenyl ND ug/l 5.0 0.50 1.8 1 Biphenyl ND ug/l 5.0 0.50 1.1 1 C-Nitroiniline ND ug/l 5.0 0.50 1	2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
Bis(2-chloroisopropyl)ether         ND         ug/l         2.0         0.53         1           Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodin-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0	4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
Bis(2-chloroethoxy)methane         ND         ug/l         5.0         0.50         1           Hexachlorocyclopentadiene         ND         ug/l         20         0.69         1           Isophorone         ND         ug/l         5.0         1.2         1           Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0	4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Hexachlorocyclopentadiene   ND   ug/l   20   0.69   1     Isophorone   ND   ug/l   5.0   1.2   1     Nitrobenzene   ND   ug/l   2.0   0.77   1     NDPA/DPA   ND   ug/l   2.0   0.42   1     n-Nitrosodi-n-propylamine   ND   ug/l   5.0   0.64   1     Bis(2-ethylhexyl)phthalate   ND   ug/l   5.0   0.64   1     Bis(2-ethylhexyl)phthalate   ND   ug/l   5.0   1.5   1     Butyl benzyl phthalate   ND   ug/l   5.0   0.39   1     Di-n-butylphthalate   ND   ug/l   5.0   0.39   1     Di-n-butylphthalate   ND   ug/l   5.0   0.39   1     Di-n-octylphthalate   ND   ug/l   5.0   0.38   1     Diethyl phthalate   ND   ug/l   5.0   0.38   1     Diethyl phthalate   ND   ug/l   5.0   0.46   1     Eliphenyl   ND   ug/l   5.0   0.46   1     4-Chloroaniline   ND   ug/l   5.0   0.50   1     3-Nitroaniline   ND   ug/l   5.0   0.81   1     4-Nitroaniline   ND   ug/l   5.0   0.81   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1     4-Nitroaniline   ND   ug/l   5.0   0.80   1     4-Nitroaniline   ND   ug/l   5.0   0.50   1	Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Sophorone   ND   ug/l   5.0   1.2   1	Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Nitrobenzene         ND         ug/l         2.0         0.77         1           NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         0.38         1           Di-n-octylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         0.46         1           Biphenyl         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50         1<	Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
NDPA/DPA         ND         ug/l         2.0         0.42         1           n-Nitrosodi-n-propylamine         ND         ug/l         5.0         0.64         1           Bis(2-ethylhexyl)phthalate         ND         ug/l         3.0         1.5         1           Butyl benzyl phthalate         ND         ug/l         5.0         1.2         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Di-n-butylphthalate         ND         ug/l         5.0         0.38         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Biphenyl         ND         ug/l         5.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         0.50         1           4-Nitroaniline         ND         ug/l         5.0         0.80	Isophorone	ND		ug/l	5.0	1.2	1
ND   Ug/l   5.0   0.64   1	Nitrobenzene	ND		ug/l	2.0	0.77	1
Bis(2-ethylhexyl)phthalate   ND   ug/l   3.0   1.5   1	NDPA/DPA	ND		ug/l	2.0	0.42	1
Butyl benzyl phthalate   ND   ug/l   5.0   1.2   1	n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Di-n-butylphthalate         ND         ug/l         5.0         0.39         1           Di-n-octylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         5.0         0.53         1           Acetophenone         ND         ug/l         5.0         0.53         1	Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate         ND         ug/l         5.0         1.3         1           Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate         ND         ug/l         5.0         0.38         1           Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.80         1           4-Nitroaniline         ND         ug/l         5.0         0.50         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate         ND         ug/l         5.0         1.8         1           Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Biphenyl         ND         ug/l         2.0         0.46         1           4-Chloroaniline         ND         ug/l         5.0         1.1         1           2-Nitroaniline         ND         ug/l         5.0         0.50         1           3-Nitroaniline         ND         ug/l         5.0         0.81         1           4-Nitroaniline         ND         ug/l         5.0         0.80         1           Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	Diethyl phthalate	ND		ug/l	5.0	0.38	1
4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Dimethyl phthalate	ND		ug/l	5.0	1.8	1
2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 5.0 0.80 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	Biphenyl	ND		ug/l	2.0	0.46	1
3-Nitroaniline ND ug/l 5.0 0.81 1 4-Nitroaniline ND ug/l 5.0 0.80 1 Dibenzofuran ND ug/l 2.0 0.50 1 1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1 Acetophenone ND ug/l 5.0 0.53 1	4-Chloroaniline	ND		ug/l	5.0	1.1	1
4-Nitroaniline ND ug/l 5.0 0.80 1  Dibenzofuran ND ug/l 2.0 0.50 1  1,2,4,5-Tetrachlorobenzene ND ug/l 10 0.44 1  Acetophenone ND ug/l 5.0 0.53 1	2-Nitroaniline	ND		ug/l	5.0	0.50	1
Dibenzofuran         ND         ug/l         2.0         0.50         1           1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	3-Nitroaniline	ND		ug/l	5.0	0.81	1
1,2,4,5-Tetrachlorobenzene         ND         ug/l         10         0.44         1           Acetophenone         ND         ug/l         5.0         0.53         1	4-Nitroaniline	ND		ug/l	5.0	0.80	1
Acetophenone ND ug/l 5.0 0.53 1	Dibenzofuran	ND		ug/l	2.0	0.50	1
	1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
2,4,6-Trichlorophenol ND ug/l 5.0 0.61 1	Acetophenone	ND		ug/l	5.0	0.53	1
	2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	67.0	J	ug/l	1
Unknown Organic Acid	7.53	J	ug/l	1
Unknown Organic Acid	5.82	J	ug/l	1
Unknown	2.33	J	ug/l	1
Sulfur	2.40	NJ	ug/l	1
Unknown	3.67	J	ug/l	1
Unknown	3.24	J	ug/l	1
Unknown Phenol	6.94	J	ug/l	1
Unknown	3.67	J	ug/l	1
Unknown Organic Acid	5.49	J	ug/l	1
Unknown	2.22	J	ug/l	1
Unknown	2.36	J	ug/l	1
Unknown	2.62	J	ug/l	1
Unknown	12.6	J	ug/l	1
Unknown	4.04	J	ug/l	1
Unknown Organic Acid	2.04	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	43	21-120	
Phenol-d6	36	10-120	
Nitrobenzene-d5	60	23-120	
2-Fluorobiphenyl	59	15-120	
2,4,6-Tribromophenol	80	10-120	
4-Terphenyl-d14	70	41-149	



**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 D Date Collected: 08/01/22 15:10

Client ID: W30

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3510C Matrix: Water

**Extraction Date:** 08/05/22 14:09 Analytical Method: 1,8270D-SIM Analytical Date: 08/18/22 14:48

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS-SIM - Westborough Lab								
Acenaphthene	0.12	J	ug/l	0.50	0.07	5		
2-Chloronaphthalene	ND		ug/l	1.0	0.09	5		
Fluoranthene	ND		ug/l	0.50	0.10	5		
Hexachlorobutadiene	ND		ug/l	2.5	0.23	5		
Naphthalene	0.46	J	ug/l	0.50	0.24	5		
Benzo(a)anthracene	0.11	J	ug/l	0.50	0.10	5		
Benzo(a)pyrene	ND		ug/l	0.50	0.08	5		
Benzo(b)fluoranthene	ND		ug/l	0.50	0.06	5		
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5		
Chrysene	ND		ug/l	0.50	0.06	5		
Acenaphthylene	ND		ug/l	0.50	0.06	5		
Anthracene	ND		ug/l	0.50	0.07	5		
Benzo(ghi)perylene	ND		ug/l	0.50	0.07	5		
Fluorene	0.20	J	ug/l	0.50	0.07	5		
Phenanthrene	ND		ug/l	0.50	0.12	5		
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.06	5		
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.06	5		
Pyrene	ND		ug/l	0.50	0.10	5		
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5		
Pentachlorophenol	ND		ug/l	4.0	0.07	5		
Hexachlorobenzene	ND		ug/l	4.0	0.05	5		
Hexachloroethane	ND		ug/l	4.0	0.32	5		



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-04 D Date Collected: 08/01/22 15:10

Client ID: W30 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	45	21-120
Phenol-d6	39	10-120
Nitrobenzene-d5	60	23-120
2-Fluorobiphenyl	62	15-120
2,4,6-Tribromophenol	106	10-120
4-Terphenyl-d14	60	41-149



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-05 Date Collected: 08/01/22 14:25

Client ID: W31 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1 8270D Extraction Date: 08/05/22 14:09

Analytical Method: 1,8270D Extraction Date: 08/05/22 14:09
Analytical Date: 08/12/22 18:55

Analyst: SZ

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbe	orough Lab					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-05 Date Collected: 08/01/22 14:25

Client ID: W31 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS - Wes	Semivolatile Organics by GC/MS - Westborough Lab							
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1		
2-Chlorophenol	ND		ug/l	2.0	0.48	1		
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1		
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1		
2-Nitrophenol	ND		ug/l	10	0.85	1		
4-Nitrophenol	ND		ug/l	10	0.67	1		
2,4-Dinitrophenol	ND		ug/l	20	6.6	1		
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1		
Phenol	ND		ug/l	5.0	0.57	1		
2-Methylphenol	ND		ug/l	5.0	0.49	1		
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1		
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1		
Carbazole	ND		ug/l	2.0	0.49	1		
Atrazine	ND		ug/l	10	0.76	1		
Benzaldehyde	ND		ug/l	5.0	0.53	1		
Caprolactam	ND		ug/l	10	3.3	1		
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1		



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

SAMPLE RESULTS

Lab ID: L2241763-05 Date Collected: 08/01/22 14:25

Client ID: W31 Date Received: 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	45.0	J	ug/l	1
Unknown Organic Acid	4.69	J	ug/l	1
Unknown	2.87	J	ug/l	1
Unknown Benzene	2.25	J	ug/l	1
Unknown Benzene	2.40	J	ug/l	1
Unknown Cycloalkane	2.07	J	ug/l	1
Unknown Organic Acid	2.47	J	ug/l	1
Unknown Organic Acid	4.11	J	ug/l	1
Unknown Benzene	2.11	J	ug/l	1
Unknown	3.09	J	ug/l	1
Unknown	2.69	J	ug/l	1
Unknown	3.42	J	ug/l	1
Unknown Organic Acid	3.53	J	ug/l	1
Unknown Indene	2.80	J	ug/l	1
Unknown Benzene	3.24	J	ug/l	1
Unknown	3.24	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	46	21-120	
Phenol-d6	39	10-120	
Nitrobenzene-d5	64	23-120	
2-Fluorobiphenyl	56	15-120	
2,4,6-Tribromophenol	76	10-120	
4-Terphenyl-d14	65	41-149	



**Project Name:** Lab Number: ORP #1 L2241763

**Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-05 D Date Collected: 08/01/22 14:25

Client ID: W31

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3510C Matrix: Water

**Extraction Date:** 08/05/22 14:09 Analytical Method: 1,8270D-SIM Analytical Date: 08/18/22 15:04

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM -	Westborough La	ıb				
Acenaphthene	ND		ug/l	0.50	0.07	5
2-Chloronaphthalene	ND		ug/l	1.0	0.09	5
Fluoranthene	ND		ug/l	0.50	0.10	5
Hexachlorobutadiene	ND		ug/l	2.5	0.23	5
Naphthalene	ND		ug/l	0.50	0.24	5
Benzo(a)anthracene	ND		ug/l	0.50	0.10	5
Benzo(a)pyrene	ND		ug/l	0.50	0.08	5
Benzo(b)fluoranthene	ND		ug/l	0.50	0.06	5
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5
Chrysene	ND		ug/l	0.50	0.06	5
Acenaphthylene	ND		ug/l	0.50	0.06	5
Anthracene	ND		ug/l	0.50	0.07	5
Benzo(ghi)perylene	ND		ug/l	0.50	0.07	5
Fluorene	0.12	J	ug/l	0.50	0.07	5
Phenanthrene	ND		ug/l	0.50	0.12	5
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.06	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.06	5
Pyrene	ND		ug/l	0.50	0.10	5
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5
Pentachlorophenol	ND		ug/l	4.0	0.07	5
Hexachlorobenzene	ND		ug/l	4.0	0.05	5
Hexachloroethane	ND		ug/l	4.0	0.32	5



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-05 D Date Collected: 08/01/22 14:25

Client ID: W31 Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	48	21-120
Phenol-d6	42	10-120
Nitrobenzene-d5	64	23-120
2-Fluorobiphenyl	62	15-120
2,4,6-Tribromophenol	100	10-120
4-Terphenyl-d14	57	41-149



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

 Lab ID:
 L2241763-07
 Date Collected:
 08/01/22 08:00

 Client ID:
 BLIND DUP
 Date Received:
 08/03/22

Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1.8270D Extraction Date: 08/05/22 14:09

Analytical Method: 1,8270D Extraction Date: 08/05/22 14:09
Analytical Date: 08/12/22 19:21

Analyst: SZ

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - V	Vestborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1	
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1	
Isophorone	ND		ug/l	5.0	1.2	1	
Nitrobenzene	ND		ug/l	2.0	0.77	1	
NDPA/DPA	ND		ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1	
Diethyl phthalate	ND		ug/l	5.0	0.38	1	
Dimethyl phthalate	ND		ug/l	5.0	1.8	1	
Biphenyl	ND		ug/l	2.0	0.46	1	
4-Chloroaniline	ND		ug/l	5.0	1.1	1	
2-Nitroaniline	ND		ug/l	5.0	0.50	1	
3-Nitroaniline	ND		ug/l	5.0	0.81	1	
4-Nitroaniline	ND		ug/l	5.0	0.80	1	
Dibenzofuran	ND		ug/l	2.0	0.50	1	
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1	
Acetophenone	ND		ug/l	5.0	0.53	1	
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-07 Date Collected: 08/01/22 08:00

Client ID: BLIND DUP Date Received: 08/03/22
Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Semivolatile Organics by GC/MS - West	orough Lab					
p-Chloro-m-cresol	ND	ug/l	2.0	0.35	1	
2-Chlorophenol	ND	ug/l	2.0	0.48	1	
2,4-Dichlorophenol	ND	ug/l	5.0	0.41	1	
2,4-Dimethylphenol	ND	ug/l	5.0	1.8	1	
2-Nitrophenol	ND	ug/l	10	0.85	1	
4-Nitrophenol	ND	ug/l	10	0.67	1	
2,4-Dinitrophenol	ND	ug/l	20	6.6	1	
4,6-Dinitro-o-cresol	ND	ug/l	10	1.8	1	
Phenol	ND	ug/l	5.0	0.57	1	
2-Methylphenol	ND	ug/l	5.0	0.49	1	
3-Methylphenol/4-Methylphenol	ND	ug/l	5.0	0.48	1	
2,4,5-Trichlorophenol	ND	ug/l	5.0	0.77	1	
Carbazole	ND	ug/l	2.0	0.49	1	
Atrazine	ND	ug/l	10	0.76	1	
Benzaldehyde	ND	ug/l	5.0	0.53	1	
Caprolactam	ND	ug/l	10	3.3	1	
2,3,4,6-Tetrachlorophenol	ND	ug/l	5.0	0.84	1	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-07 Date Collected: 08/01/22 08:00

Client ID: BLIND DUP Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds				
Total TIC Compounds	112	J	ug/l	1
Unknown	5.74	J	ug/l	1
Unknown	5.89	J	ug/l	1
Unknown Alkane	7.31	J	ug/l	1
Unknown Organic Acid	5.38	J	ug/l	1
Unknown Organic Acid	14.7	J	ug/l	1
Unknown	6.07	J	ug/l	1
Unknown	6.18	J	ug/l	1
Unknown	8.44	J	ug/l	1
Unknown Alkane	18.0	J	ug/l	1
Unknown	4.76	J	ug/l	1
Unknown Organic Acid	5.78	J	ug/l	1
Unknown	6.80	J	ug/l	1
Unknown Benzene	6.00	J	ug/l	1
Unknown Organic Acid	6.51	J	ug/l	1
Unknown	4.62	J	ug/l	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	39	21-120	
Phenol-d6	32	10-120	
Nitrobenzene-d5	57	23-120	
2-Fluorobiphenyl	45	15-120	
2,4,6-Tribromophenol	68	10-120	
4-Terphenyl-d14	58	41-149	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-07 D Date Collected: 08/01/22 08:00

Client ID: BLIND DUP Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM Extraction Date: 08/05/22 14:09
Analytical Date: 08/18/22 15:20

Analyst: JJW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS-SIM - \	Westborough La	ab					
Acenaphthene	ND		ug/l	0.50	0.07	5	
2-Chloronaphthalene	ND		ug/l	1.0	0.09	5	
Fluoranthene	ND		ug/l	0.50	0.10	5	
Hexachlorobutadiene	ND		ug/l	2.5	0.23	5	
Naphthalene	0.40	J	ug/l	0.50	0.24	5	
Benzo(a)anthracene	ND		ug/l	0.50	0.10	5	
Benzo(a)pyrene	ND		ug/l	0.50	0.08	5	
Benzo(b)fluoranthene	ND		ug/l	0.50	0.06	5	
Benzo(k)fluoranthene	ND		ug/l	0.50	0.04	5	
Chrysene	ND		ug/l	0.50	0.06	5	
Acenaphthylene	ND		ug/l	0.50	0.06	5	
Anthracene	ND		ug/l	0.50	0.07	5	
Benzo(ghi)perylene	ND		ug/l	0.50	0.07	5	
Fluorene	ND		ug/l	0.50	0.07	5	
Phenanthrene	ND		ug/l	0.50	0.12	5	
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.06	5	
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.06	5	
Pyrene	ND		ug/l	0.50	0.10	5	
2-Methylnaphthalene	ND		ug/l	0.50	0.11	5	
Pentachlorophenol	ND		ug/l	4.0	0.07	5	
Hexachlorobenzene	ND		ug/l	4.0	0.05	5	
Hexachloroethane	ND		ug/l	4.0	0.32	5	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-07 D Date Collected: 08/01/22 08:00

Client ID: BLIND DUP Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	42	21-120
Phenol-d6	37	10-120
Nitrobenzene-d5	58	23-120
2-Fluorobiphenyl	54	15-120
2,4,6-Tribromophenol	83	10-120
4-Terphenyl-d14	52	41-149



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 08/12/22 15:01

Analyst: SZ

Extraction Method: EPA 3510C Extraction Date: 08/05/22 14:09

	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS -	Westborough	n Lab for s	ample(s):	01-05,07	Batch: WG1671829-1	
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	-
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	
Isophorone	ND		ug/l	5.0	1.2	
Nitrobenzene	ND		ug/l	2.0	0.77	
NDPA/DPA	ND		ug/l	2.0	0.42	
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	
Bis(2-ethylhexyl)phthalate	1.6	J	ug/l	3.0	1.5	
Butyl benzyl phthalate	2.1	J	ug/l	5.0	1.2	
Di-n-butylphthalate	ND		ug/l	5.0	0.39	
Di-n-octylphthalate	ND		ug/l	5.0	1.3	
Diethyl phthalate	ND		ug/l	5.0	0.38	
Dimethyl phthalate	ND		ug/l	5.0	1.8	
Biphenyl	ND		ug/l	2.0	0.46	
4-Chloroaniline	ND		ug/l	5.0	1.1	
2-Nitroaniline	ND		ug/l	5.0	0.50	
3-Nitroaniline	ND		ug/l	5.0	0.81	
4-Nitroaniline	ND		ug/l	5.0	0.80	
Dibenzofuran	ND		ug/l	2.0	0.50	
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	
Acetophenone	ND		ug/l	5.0	0.53	
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 08/12/22 15:01

Analyst: SZ

Extraction Method: EPA 3510C Extraction Date: 08/05/22 14:09

arameter	Result	Qualifier	Units	RL	ME	)L
emivolatile Organics by GC/MS	S - Westborough	Lab for sa	ımple(s):	01-05,07	Batch:	WG1671829-1
2-Chlorophenol	ND		ug/l	2.0	0.	48
2,4-Dichlorophenol	ND		ug/l	5.0	0.	41
2,4-Dimethylphenol	ND		ug/l	5.0	1	.8
2-Nitrophenol	ND		ug/l	10	0.	85
4-Nitrophenol	ND		ug/l	10	0.	67
2,4-Dinitrophenol	ND		ug/l	20	6	.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1	.8
Phenol	ND		ug/l	5.0	0.	57
2-Methylphenol	ND		ug/l	5.0	0.	49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.	48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.	77
Carbazole	ND		ug/l	2.0	0.	49
Atrazine	ND		ug/l	10	0.	76
Benzaldehyde	ND		ug/l	5.0	0.	53
Caprolactam	ND		ug/l	10	3	.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.	84

Tentatively Identified Compounds			
Total TIC Compounds	3.34	J	ug/l
Unknown	1.49	J	ug/l
Unknown	1.85	J	ug/l



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3510C
Analytical Date: 08/12/22 15:01 Extraction Date: 08/05/22 14:09

Analyst: SZ

Parameter Result Qualifier Units RL MDL

Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,07 Batch: WG1671829-1

Surrogate	%Recovery Q	Acceptance ualifier Criteria
2-Fluorophenol	47	21-120
Phenol-d6	47	10-120
Nitrobenzene-d5	81	23-120
2-Fluorobiphenyl	72	15-120
2,4,6-Tribromophenol	61	10-120
4-Terphenyl-d14	92	41-149



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 08/06/22 17:59

Analyst: JJW

Extraction Method: EPA 3510C Extraction Date: 08/05/22 14:09

arameter	Result	Qualifier	Units	RL	MDL	
emivolatile Organics by GC/M	IS-SIM - Westbo	rough Lab	for sample(s	5): 01-05,07	Batch:	WG1671830-1
Acenaphthene	ND		ug/l	0.10	0.01	
2-Chloronaphthalene	ND		ug/l	0.20	0.02	
Fluoranthene	0.02	J	ug/l	0.10	0.02	
Hexachlorobutadiene	ND		ug/l	0.50	0.05	
Naphthalene	ND		ug/l	0.10	0.05	
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	
Benzo(a)pyrene	ND		ug/l	0.10	0.02	
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	
Chrysene	0.01	J	ug/l	0.10	0.01	
Acenaphthylene	ND		ug/l	0.10	0.01	
Anthracene	ND		ug/l	0.10	0.01	
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	
Fluorene	ND		ug/l	0.10	0.01	
Phenanthrene	0.03	J	ug/l	0.10	0.02	
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	
Pyrene	ND		ug/l	0.10	0.02	
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	
Pentachlorophenol	ND		ug/l	0.80	0.01	
Hexachlorobenzene	ND		ug/l	0.80	0.01	
Hexachloroethane	ND		ug/l	0.80	0.06	



Project Name: ORP #1 Lab Number: L2241763

**Project Number:** 0283-017-001 **Report Date:** 08/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM Extraction Method: EPA 3510C
Analytical Date: 08/06/22 17:59 Extraction Date: 08/05/22 14:09

Analyst: JJW

Parameter Result Qualifier Units RL MDL

Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05,07 Batch: WG1671830-1

Surrogate	%Recovery Qu	Acceptance ualifier Criteria
2-Fluorophenol	67	21-120
Phenol-d6	54	10-120
Nitrobenzene-d5	79	23-120
2-Fluorobiphenyl	72	15-120
2,4,6-Tribromophenol	108	10-120
4-Terphenyl-d14	79	41-149



# Lab Control Sample Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery		covery imits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westb	orough Lab Associ	ated sample(s):	01-05,07 E	Batch: WG167182	9-2 WG167	71829-3		
Bis(2-chloroethyl)ether	78		75	4	)-140	4		30
3,3'-Dichlorobenzidine	69		85	4	)-140	21		30
2,4-Dinitrotoluene	105		109	4	3-143	4		30
2,6-Dinitrotoluene	99		103	4	)-140	4		30
4-Chlorophenyl phenyl ether	84		90	4	)-140	7		30
4-Bromophenyl phenyl ether	96		100	4	)-140	4		30
Bis(2-chloroisopropyl)ether	62		61	4	)-140	2		30
Bis(2-chloroethoxy)methane	81		80	4	)-140	1		30
Hexachlorocyclopentadiene	62		64	4	)-140	3		30
Isophorone	79		78	4	)-140	1		30
Nitrobenzene	88		88	4	)-140	0		30
NDPA/DPA	85		91	4	)-140	7		30
n-Nitrosodi-n-propylamine	80		80	2	9-132	0		30
Bis(2-ethylhexyl)phthalate	90		96	4	)-140	6		30
Butyl benzyl phthalate	102		109	4	)-140	7		30
Di-n-butylphthalate	86		90	4	)-140	5		30
Di-n-octylphthalate	91		99	4	)-140	8		30
Diethyl phthalate	90		94	4	)-140	4		30
Dimethyl phthalate	87		89	4	)-140	2		30
Biphenyl	81		84	4	)-140	4		30
4-Chloroaniline	61		67	4	)-140	9		30
2-Nitroaniline	106		107	5.	2-143	1		30
3-Nitroaniline	84		94	2	5-145	11		30



# Lab Control Sample Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westbo	orough Lab Associ	ated sample(s):	: 01-05,07 E	Batch: WG1	671829-2 WG1	671829-3	
4-Nitroaniline	89		101		51-143	13	30
Dibenzofuran	78		84		40-140	7	30
1,2,4,5-Tetrachlorobenzene	77		77		2-134	0	30
Acetophenone	83		84		39-129	1	30
2,4,6-Trichlorophenol	91		92		30-130	1	30
p-Chloro-m-cresol	87		92		23-97	6	30
2-Chlorophenol	80		82		27-123	2	30
2,4-Dichlorophenol	89		88		30-130	1	30
2,4-Dimethylphenol	68		58		30-130	16	30
2-Nitrophenol	116		116		30-130	0	30
4-Nitrophenol	79		86	Q	10-80	8	30
2,4-Dinitrophenol	106		118		20-130	11	30
4,6-Dinitro-o-cresol	120		134		20-164	11	30
Phenol	63		64		12-110	2	30
2-Methylphenol	78		79		30-130	1	30
3-Methylphenol/4-Methylphenol	86		88		30-130	2	30
2,4,5-Trichlorophenol	92		95		30-130	3	30
Carbazole	82		93		55-144	13	30
Atrazine	119		121		40-140	2	30
Benzaldehyde	100		99		40-140	1	30
Caprolactam	43		45		10-130	5	30
2,3,4,6-Tetrachlorophenol	93		97		40-140	4	30



### **Lab Control Sample Analysis**

**Project Name:** ORP #1

**Batch Quality Control** 

**Project Number:** 0283-017-001 Lab Number:

L2241763

Report Date:

08/19/22

LCS **LCSD** %Recovery RPD %Recovery %Recovery Limits **Parameter** Qual Qual Limits RPD Qual

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1671829-2 WG1671829-3

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	72	71	21-120
Phenol-d6	63	65	10-120
Nitrobenzene-d5	93	93	23-120
2-Fluorobiphenyl	81	83	15-120
2,4,6-Tribromophenol	105	109	10-120
4-Terphenyl-d14	91	95	41-149

# Lab Control Sample Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

ırameter	LCS %Recovery		CSD ecovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS-SIM -	· Westborough Lab A	ssociated sample(s):	01-05,07	Batch:	WG1671830-2	WG1671830-3		
Acenaphthene	75		77		40-140	3		40
2-Chloronaphthalene	60		64		40-140	6		40
Fluoranthene	75		79		40-140	5		40
Hexachlorobutadiene	66		70		40-140	6		40
Naphthalene	73		68		40-140	7		40
Benzo(a)anthracene	85		86		40-140	1		40
Benzo(a)pyrene	75		77		40-140	3		40
Benzo(b)fluoranthene	83		89		40-140	7		40
Benzo(k)fluoranthene	88		85		40-140	3		40
Chrysene	86		91		40-140	6		40
Acenaphthylene	56		59		40-140	5		40
Anthracene	75		77		40-140	3		40
Benzo(ghi)perylene	92		97		40-140	5		40
Fluorene	75		76		40-140	1		40
Phenanthrene	78		79		40-140	1		40
Dibenzo(a,h)anthracene	95		100		40-140	5		40
Indeno(1,2,3-cd)pyrene	96		101		40-140	5		40
Pyrene	76		80		40-140	5		40
2-Methylnaphthalene	62		64		40-140	3		40
Pentachlorophenol	90		94		40-140	4		40
Hexachlorobenzene	86		90		40-140	5		40
Hexachloroethane	59		63		40-140	7		40



# Lab Control Sample Analysis Batch Quality Control

Project Name: ORP #1

Lab Number:

L2241763

**Project Number:** 

0283-017-001

Report Date:

08/19/22

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05,07 Batch: WG1671830-2 WG1671830-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	55	59	21-120
Phenol-d6	47	50	10-120
Nitrobenzene-d5	64	69	23-120
2-Fluorobiphenyl	61	64	15-120
2,4,6-Tribromophenol	98	99	10-120
4-Terphenyl-d14	68	72	41-149



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

08/19/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery		Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by G Client ID: W4	C/MS - Westbor	ough Lab	Associated sa	mple(s): 01-05,0	7 QCE	atch ID: W	/G1671829-4 `	WG167	1829-5 QC	Sample	e: L2241	763-02
Bis(2-chloroethyl)ether	ND	18.2	10	55		10	55		40-140	0		30
3,3'-Dichlorobenzidine	ND	18.2	ND	0	Q	ND	0	Q	40-140	NC		30
2,4-Dinitrotoluene	ND	18.2	12	66		13	72		48-143	8		30
2,6-Dinitrotoluene	ND	18.2	13	72		13	72		40-140	0		30
4-Chlorophenyl phenyl ether	ND	18.2	12	66		13	72		40-140	8		30
4-Bromophenyl phenyl ether	ND	18.2	14	77		14	77		40-140	0		30
Bis(2-chloroisopropyl)ether	ND	18.2	9.8	54		11	61		40-140	12		30
Bis(2-chloroethoxy)methane	ND	18.2	11	61		12	66		40-140	9		30
Hexachlorocyclopentadiene	ND	18.2	11.J	61		11.J	61		40-140	0		30
sophorone	ND	18.2	12	66		13	72		40-140	8		30
Nitrobenzene	ND	18.2	12	66		13	72		40-140	8		30
NDPA/DPA	ND	18.2	12	66		14	77		40-140	15		30
n-Nitrosodi-n-propylamine	ND	18.2	12	66		13	72		29-132	8		30
Bis(2-ethylhexyl)phthalate	ND	18.2	17	94		18	99		40-140	6		30
Butyl benzyl phthalate	ND	18.2	15	83		16	88		40-140	6		30
Di-n-butylphthalate	ND	18.2	15	83		16	88		40-140	6		30
Di-n-octylphthalate	ND	18.2	17	94		18	99		40-140	6		30
Diethyl phthalate	ND	18.2	13	72		15	83		40-140	14		30
Dimethyl phthalate	ND	18.2	12	66		12	66		40-140	0		30
Biphenyl	ND	18.2	12	66		12	66		40-140	0		30
4-Chloroaniline	ND	18.2	8.4	46		11	61		40-140	27		30
2-Nitroaniline	ND	18.2	14	77		14	77		52-143	0		30
3-Nitroaniline	ND	18.2	9.2	51		12	66		25-145	26		30



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number: L2241763

**Report Date:** 08/19/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Recovery Qual Limits	/ RPD	RPD Qual Limits
Semivolatile Organics by GC Client ID: W4	C/MS - Westbor	ough Lab	Associated sa	mple(s): 01-05,0	7 QC Batch ID: V	/G1671829-4	WG1671829-5 Q	C Samp	le: L2241763-02
4-Nitroaniline	ND	18.2	11	61	12	66	51-143	9	30
Dibenzofuran	ND	18.2	12	66	13	72	40-140	8	30
1,2,4,5-Tetrachlorobenzene	ND	18.2	13	72	13	72	2-134	0	30
Acetophenone	ND	18.2	12	66	13	72	39-129	8	30
2,4,6-Trichlorophenol	ND	18.2	14	77	15	83	30-130	7	30
o-Chloro-m-cresol	ND	18.2	15	83	15	83	23-97	0	30
2-Chlorophenol	ND	18.2	12	66	12	66	27-123	0	30
2,4-Dichlorophenol	ND	18.2	13	72	14	77	30-130	7	30
2,4-Dimethylphenol	ND	18.2	12	66	12	66	30-130	0	30
2-Nitrophenol	ND	18.2	11	61	13	72	30-130	17	30
4-Nitrophenol	ND	18.2	12	66	15	83	Q 10-80	22	30
2,4-Dinitrophenol	ND	18.2	14.J	77	15.J	83	20-130	7	30
4,6-Dinitro-o-cresol	ND	18.2	11	61	13	72	20-164	17	30
Phenol	ND	18.2	8.8	48	9.4	52	12-110	7	30
2-Methylphenol	ND	18.2	12	66	12	66	30-130	0	30
3-Methylphenol/4-Methylphenol	ND	18.2	12	66	12	66	30-130	0	30
2,4,5-Trichlorophenol	ND	18.2	14	77	15	83	30-130	7	30
Carbazole	ND	18.2	14	77	15	83	55-144	7	30
Atrazine	ND	18.2	13	72	14	77	40-140	7	30
Benzaldehyde	ND	18.2	13	72	14	77	40-140	7	30
Caprolactam	ND	18.2	ND	0	Q ND	0	Q 10-130	NC	30
2,3,4,6-Tetrachlorophenol	ND	18.2	14	77	15	83	40-140	7	30



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

08/19/22

	Native	MS	MS	MS		MSD	MSD	Recovery		RPD
Parameter	Sample	Added	Found	%Recovery	Qual	Found	%Recovery	/ Qual Limits	RPD	Qual Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,07 QC Batch ID: WG1671829-4 WG1671829-5 QC Sample: L2241763-02 Client ID: W4

	MS	3	MS	SD	Acceptance	
Surrogate	% Recovery	Qualifier	% Recovery	Qualifier	Criteria	
2,4,6-Tribromophenol	92		99		10-120	
2-Fluorobiphenyl	65		67		15-120	
2-Fluorophenol	55		57		21-120	
4-Terphenyl-d14	70		73		41-149	
Nitrobenzene-d5	60		69		23-120	
Phenol-d6	53		53		10-120	



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

08/19/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by Client ID: W4	GC/MS-SIM - We	stborough Lab	Associate	ed sample(s): 01	-05,07	QC Batch I	D: WG167183	0-4 WG1671830-5	QC S	ample: L	.2241763-02
Acenaphthene	0.11J	18.2	14	77		10	55	40-140	33		40
2-Chloronaphthalene	ND	18.2	13	72		9.2	51	40-140	34		40
Fluoranthene	0.39J	18.2	15	83		10	55	40-140	40		40
Hexachlorobutadiene	ND	18.2	14	77		10	55	40-140	33		40
Naphthalene	ND	18.2	13	72		9.6	53	40-140	30		40
Benzo(a)anthracene	0.26J	18.2	14	77		11	61	40-140	24		40
Benzo(a)pyrene	0.09J	18.2	14	77		10	55	40-140	33		40
Benzo(b)fluoranthene	0.17J	18.2	15	83		11	61	40-140	31		40
Benzo(k)fluoranthene	ND	18.2	14	77		11	61	40-140	24		40
Chrysene	0.19J	18.2	14	77		11	61	40-140	24		40
Acenaphthylene	ND	18.2	13	72		8.8	48	40-140	39		40
Anthracene	0.11J	18.2	13	72		9.9	54	40-140	27		40
Benzo(ghi)perylene	0.12J	18.2	19	100		12	66	40-140	45	Q	40
Fluorene	0.46J	18.2	14	77		12	66	40-140	15		40
Phenanthrene	0.20J	18.2	13	72		10	55	40-140	26		40
Dibenzo(a,h)anthracene	ND	18.2	19	100		12	66	40-140	45	Q	40
Indeno(1,2,3-cd)pyrene	0.11J	18.2	19	100		12	66	40-140	45	Q	40
Pyrene	0.37J	18.2	15	83		10	55	40-140	40		40
2-Methylnaphthalene	ND	18.2	12	66		9.0	50	40-140	29		40
Pentachlorophenol	ND	18.2	20	110		14	77	40-140	35		40
Hexachlorobenzene	ND	18.2	16	88		12	66	40-140	29		40
Hexachloroethane	ND	18.2	14	77		10	55	40-140	33		40



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

08/19/22

	Native	MS	MS	MS		MSD	MSD		Recovery			RPD
Parameter	Sample	Added	Found	%Recovery	Qual	Found	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05,07 QC Batch ID: WG1671830-4 WG1671830-5 QC Sample: L2241763-02 Client ID: W4

	MS	<i>I</i>	ISD Acceptance	9
Surrogate	% Recovery	Qualifier % Recovery	v Qualifier Criteria	
2,4,6-Tribromophenol	120	82	10-120	
2-Fluorobiphenyl	72	50	15-120	
2-Fluorophenol	64	46	21-120	
4-Terphenyl-d14	70	48	41-149	
Nitrobenzene-d5	72	51	23-120	
Phenol-d6	56	39	10-120	



### **METALS**



08/01/22 17:35

Date Collected:

**Project Name:** Lab Number: ORP #1 L2241763 **Project Number: Report Date:** 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-01

Client ID: W3

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	field Lab										
Arsenic, Total	0.011		mg/l	0.005	0.002	1	08/05/22 09:44	08/17/22 11:27	EPA 3005A	1,6010D	JF
Dissolved Metals - I	Mansfield I	Lab									
Arsenic, Dissolved	0.003	J	mg/l	0.005	0.002	1	08/09/22 08:58	08/17/22 22:25	EPA 3005A	1,6010D	JF



08/01/22 16:40

Date Collected:

**Project Name:** Lab Number: ORP #1 L2241763 **Project Number:** Report Date: 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-02

Client ID: W4

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	field Lab										
Arsenic, Total	0.025		mg/l	0.005	0.002	1	08/05/22 09:44	08/17/22 11:37	EPA 3005A	1,6010D	JF
Dissolved Metals - N	Mansfield l	_ab									
Arsenic, Dissolved	0.004	J	mg/l	0.005	0.002	1	08/09/22 08:58	08/18/22 11:09	EPA 3005A	1,6010D	MC



08/02/22 10:00

Date Collected:

**Project Name:** Lab Number: ORP #1 L2241763 **Project Number: Report Date:** 0283-017-001 08/19/22

**SAMPLE RESULTS** 

Lab ID: L2241763-06

Client ID: W32

Date Received: 08/03/22 Sample Location: OLEAN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	field Lab										
Arsenic, Total	0.022		mg/l	0.005	0.002	1	08/05/22 09:44	08/17/22 11:30	EPA 3005A	1,6010D	JF
Dissolved Metals - N	/lansfield L	_ab									
Arsenic, Dissolved	800.0		mg/l	0.005	0.002	1	08/09/22 08:58	08/17/22 22:28	EPA 3005A	1,6010D	JF



08/01/22 08:00

 Project Name:
 ORP #1
 Lab Number:
 L2241763

 Project Number:
 0283-017-001
 Report Date:
 08/19/22

SAMPLE RESULTS

Lab ID:L2241763-07Date Collected:Client ID:BLIND DUPDate Received:Sample Location:OLEAN, NYField Prep:

Date Received: 08/03/22
Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	sfield Lab										
Arsenic, Total	0.012		mg/l	0.005	0.002	1	08/05/22 09:44	4 08/17/22 11:34	EPA 3005A	1,6010D	JF
Dissolved Metals -	Mansfield I	Lab									
Arsenic, Dissolved	0.003	J	mg/l	0.005	0.002	1	08/09/22 10:3	7 08/17/22 16:53	EPA 3005A	1,6010D	JF



Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

**Report Date:** 

08/19/22

# Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared		Analytica Method	
Total Metals - Mansfield	d Lab for sample(s):	01-02,06-	07 Bate	ch: WG	1671558-1				
Arsenic, Total	ND	mg/l	0.005	0.002	1	08/05/22 09:44	08/17/22 11:20	1,6010D	JF

**Prep Information** 

Digestion Method: EPA 3005A

Parameter	Result Qu	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - M	lansfield Lab fo	r sample	(s): 01-02	2,06 Ba	atch: Wo	G1671853-	1			
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	08/09/22 08:58	08/17/22 21:30	1,6010D	JF

**Prep Information** 

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - M	ansfield Lab	for sample	e(s): 07	Batch: V	VG1672	953-1				
Arsenic, Dissolved	ND		mg/l	0.005	0.002	1	08/09/22 10:37	08/17/22 16:05	1,6010D	JF

**Prep Information** 

Digestion Method: EPA 3005A



# Lab Control Sample Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 0283-017-001

Lab Number:

L2241763

Report Date:

08/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 01-02,06-07	Batch: \	WG1671558-2					
Arsenic, Total	94		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sa	ample(s): 01-02,0	6 Batch	: WG1671853-2					
Arsenic, Dissolved	106		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sa	ample(s): 07 Ba	tch: WG1	672953-2					
Arsenic, Dissolved	110		-		80-120	-		

#### Matrix Spike Analysis Batch Quality Control

Project Name: ORP #1

**Project Number:** 

0283-017-001

Lab Number:

L2241763

Report Date:

08/19/22

arameter		Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Man	sfield Lab	Associated sam	ple(s): 01-0	2,06-07	QC Batch ID: V	VG1671	558-3 WG1	671558-4 C	C Samı	ole: L22417	763-02	Client I	D: W4
Arsenic, Total		0.025	0.12	0.139	95		0.138	94		75-125	1		20
Total Metals - Man Sample	sfield Lab	Associated sam	ple(s): 01-0	02,06-07	QC Batch ID: V	VG1671	558-7 WG1	671558-8 C	)C Samı	ole: L22417	'88-03	Client I	D: MS
Arsenic, Total		0.004J	0.12	0.128	107		0.126	105		75-125	2		20
Dissolved Metals -	Mansfield	I Lab Associated	sample(s):	01-02,06	QC Batch ID:	WG167	1853-3 WG	1671853-4	QC Sar	nple: L224	1763-02	Clien	ID: W4
Arsenic, Dissolved		0.004J	0.12	0.129	108		0.132	110		75-125	2		20
Dissolved Metals -	Mansfield	Lab Associated	sample(s):	01-02,06	QC Batch ID:	WG167	1853-7 Q	C Sample: L	2241797	7-01 Clier	nt ID: M	S Samp	le
Arsenic, Dissolved		0.008	0.12	0.135	106		-	-		75-125	-		20
Dissolved Metals -	Mansfield	Lab Associated	sample(s):	07 QC E	Batch ID: WG16	72953-3	3 QC San	nple: L224170	63-07	Client ID:	BLIND D	UP	
Arsenic, Dissolved		0.003J	0.24	0.135	56	Q	-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

L2241763

Lab Number:

08/19/22 0283-017-001 Report Date:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual RI	PD Limits
Dissolved Metals - Mansfield Lab Associated sample(s):	07 QC Batch ID: WG1	672953-4 QC Sample:	L2241763-07	Client ID:	BLIND DUP	
Arsenic, Dissolved	0.003J	0.002J	mg/l	NC		20



**Project Name:** 

**Project Number:** 

ORP #1

Project Name: ORP #1

Project Number: 0283-017-001

YES

**Lab Number:** L2241763 **Report Date:** 08/19/22

#### Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Cooler Custody Seal

A Absent B Absent

Container Info	rmation	Initial Final Temp Type Cooler pH pH deg C Pres Seal		Frozen					
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2241763-01A	Vial HCI preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-01B	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-01C	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-01D	Plastic 250ml HNO3 preserved	Α	<2	<2	2.2	Υ	Absent		AS-TI(180)
L2241763-01E	Plastic 250ml unpreserved	Α	7	7	2.2	Υ	Absent		-
L2241763-01F	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-01G	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-01X	Plastic 120ml HNO3 preserved Filtrates	Α	NA		2.2	Υ	Absent		AS-SI(180)
L2241763-02A	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02A1	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02A2	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02B	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02B1	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02B2	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02C	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02C1	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02C2	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-02D	Plastic 250ml HNO3 preserved	Α	<2	<2	2.2	Υ	Absent		AS-TI(180)
L2241763-02D1	Plastic 250ml HNO3 preserved	Α	<2	<2	2.2	Υ	Absent		AS-TI(180)
L2241763-02D2	Plastic 250ml HNO3 preserved	Α	<2	<2	2.2	Υ	Absent		AS-TI(180)
L2241763-02E	Plastic 250ml unpreserved	Α	7	7	2.2	Υ	Absent		-
L2241763-02E1	Plastic 250ml unpreserved	Α	7	7	2.2	Υ	Absent		-



**Lab Number:** L2241763

**Report Date:** 08/19/22

**Project Number:** 0283-017-001

ORP #1

Project Name:

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2241763-02E2	Plastic 250ml unpreserved	Α	7	7	2.2	Υ	Absent		-
L2241763-02F	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-02F1	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-02F2	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-02G	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-02G1	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-02G2	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-02X	Plastic 120ml HNO3 preserved Filtrates	Α	NA		2.2	Υ	Absent		AS-SI(180)
L2241763-02X1	Plastic 120ml HNO3 preserved Filtrates	Α	NA		2.2	Υ	Absent		AS-SI(180)
L2241763-02X2	Plastic 120ml HNO3 preserved Filtrates	Α	NA		2.2	Υ	Absent		AS-SI(180)
L2241763-03A	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-03B	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-03C	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-03D	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-03E	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-04A	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-04B	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-04C	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-04D	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-04E	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-05A	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-05B	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-05C	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-05D	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-05E	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-06A	Plastic 250ml unpreserved	Α	7	7	2.2	Υ	Absent		-
L2241763-06B	Plastic 250ml HNO3 preserved	Α	<2	<2	2.2	Υ	Absent		AS-TI(180)
L2241763-06X	Plastic 120ml HNO3 preserved Filtrates	Α	NA		2.2	Υ	Absent		AS-SI(180)



**Lab Number:** L2241763

Report Date: 08/19/22

**Project Number:** 0283-017-001

ORP #1

Project Name:

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2241763-07A	Vial HCl preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-07B	Vial HCI preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-07C	Vial HCI preserved	Α	NA		2.2	Υ	Absent		NYTCL-8260-R2(14)
L2241763-07D	Plastic 250ml HNO3 preserved	Α	<2	<2	2.2	Υ	Absent		AS-TI(180)
L2241763-07E	Plastic 250ml unpreserved	Α	7	7	2.2	Υ	Absent		-
L2241763-07F	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-07G	Amber 250ml unpreserved	Α	7	7	2.2	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2241763-07X	Plastic 120ml HNO3 preserved Filtrates	Α	NA		2.2	Υ	Absent		AS-SI(180)
L2241763-08A	Vial HCI preserved	В	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2241763-08B	Vial HCI preserved	В	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)

#### **Container Comments**

L2241763-03E cap cracked, sample intact.

L2241763-04E cap cracked, sample intact.



**Project Name:** Lab Number: ORP #1 L2241763 **Project Number:** 0283-017-001 **Report Date:** 08/19/22

#### GLOSSARY

#### **Acronyms**

LOQ

MS

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.) - 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

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

MDI - 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.

> - 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.

TEO - 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:
 ORP #1
 Lab Number:
 L2241763

 Project Number:
 0283-017-001
 Report Date:
 08/19/22

#### **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, Benzo(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.
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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:
 ORP #1
 Lab Number:
 L2241763

 Project Number:
 0283-017-001
 Report Date:
 08/19/22

#### Data Qualifiers

Identified Compounds (TICs).

- 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.
- ${f P}$  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.
- 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.)

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 ORP #1
 Lab Number:
 L2241763

 Project Number:
 0283-017-001
 Report Date:
 08/19/22

#### **REFERENCES**

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.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Revision 19 Published Date: 4/2/2021 1:14:23 PM

ID No.:17873

Page 1 of 1

#### Certification Information

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

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

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

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

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

#### **Mansfield Facility**

**SM 2540D:** TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; 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 II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

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.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

	NEW YORK	Service Centers			Pag	e		10000			100	S 75 10 10	
ALPHA	CHAIN OF CUSTODY	Mahwah, NJ 07430: 35 Whitn Albany, NY 12205: 14 Walker Tonawanda, NY 14150: 275 C	Way	05	i o	of 4			Rec's	d	814	128	ALPHA JOB# 4763
Westborough, MA 01581	Mansfield, MA 02048	Project Information	N. C.		PH THE STATE OF TH	100	Deliv	erable	es				Billing Information
8 Walkup Dr. TEL: 508-898-9220	320 Forbes Blvd TEL: 508-822-9300	Project Name: ORP	#1					ASP	-A		☐ AS	P-B	Same as Client Info
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41763-01	w3		8-1-55	1735	water	CEH	×	×	×	×					
02	W4		8-1-35	1640			×	×	×	X					
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Preservative Code: A = None B = HCl C = HNO <sub>3</sub> O = H <sub>2</sub> SO <sub>4</sub> E = NoOH	Container Code P = Plastic A = Amber Glass V = Vial S = Class B = Bacteria Cup	Westboro: Certification of Mansfield: Certification of Temp 2.8	No: MA015	上	-	ntainer Tyr Preservati	+	A	PC	P				not be to	print clearly, legibly pletely. Samples can agged in and and time clock will not any ambiguities are
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Project Name: ORP #1 Olean Gateway

Location: Olean NY Project No.:

Date: 8-1-22

Field Team: CEH

Well N	o. W3		Diameter (ir	nches 4"		Sample Dat	te / Time: 🧣 -	1-22 /1	735
Product De	epth (fbTOR):		Water Colu	mn (ft): Que	89.63	DTW when	sampled:	7.96	
DTW (stati	c) (fbTOR):	7.75	One Well V	olume (gal):	2.24	Purpose:	Development	t 🔲 Sample	Purge & Sample
Total Depti	n (fbTOR): 37	.38	Total Volum	ne Purged (gal):	14.00	Purge Meth	od: Low FI	OW	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1705	o Initial	0.00	7.60	17.4	1009	911	0.89	-56	Struckids no alor
170 8	1 17.91	1.00	7.11	15.4	1010	59	0.79	-42	clear, no alon
1711	2 17.94	2.00	7.00	14.5	1012	26.7	6.91	-38	11 11 11
1715	3 17.94	4.00	6.98	14.5	1017	16.4	0.81	-39	it it it
1720	4 17.95	6-00	6.93	14.2	1076	14.3	0.84	-43	11 11 11
1725	5 17.96	8.00	6.93	14.1	1064	9.31	0.63	-48	)) ii ((
1730	6 17.95	10.00	6.94	14.0	1103	9.95	0.75	- Go	1 11 1/
	7								
	8								
	9								
	10								
Sample	Information:								•
1735	\$1 17.96	12.00	6.95	14.1	1126	9.96	0.76	-70	clear modo
1745	S2 17.98	14.00	6.96	15.5	1217	8.31	0.81	- 94	11 11 (1

Well N	o. W4		Diameter (ir	nches 4"		Sample Dat	e / Time: 8	1-22 / 10	640		
Product De	pth (fbTOR):		Water Colu	mn (ft): 8.6	8	DTW when		60			
DTW (stati	c) (fbTOR): 18	.40	One Well V		5.67	Purpose:	Development		e 🔀 Purge & Sample		
Total Depth	n (fbTOR): 🧎	7.08	Total Volum	e Purged (gal):	8.00	Purge Method: Low Flow					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
1605	o Initial	0.00	7.41	19.0	1046	>1000	0.42	-88	Turkid, SL Petros		
1609	1 18.89	0.50	7.00	16-9	1040	71000	0.62	- 85	11 (1 (		
1613	2 19.15	1.00	6.91	16.1	1638	255	0.73	-85	St Turbid, 11 11		
1616	3 19.30	1.50	6.90	15.8	1044	152	0.80	- 95	11 11 11 11		
1620	4 19.35	2.00	6,90	15.8	1043	128	0.74	-85	It It it it it		
1623	5 19.40	2.50	6.91	15.3	1004	178	0.74	-86	11 11 15 16		
1626	6 19.57	3.00	6.93	15.3	1047	174	0.69	-87	it It It a		
1630	7 19.61	3.50	6.43	15.6	1046	152	0.76	-88	H H H H H		
1633	19.57	4.00	6.94	15.4	1059	161	0.65	-89	II II II II		
	9										
	10										
Sample	Information:										
1640	51 19.GC	4.50	6.96	15.1	1047	163	0.64	-89	SL TUTLID, SL De		
1700	52 19.93	8-00	7.04	16.9	1055	401	0.76	-93	11 11 11 11		

REMARKS: Took MS/MSD with W4

Took Blind Dup with w3

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pН	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV



ocation:	me: ORp			Projec	t No.:		Field T	eam:				
				10-14/7500;								
Well No	o. W5		Diameter (i	nches):		Sample Date / Time:						
Product De	pth (fbTOR):		Water Colu	mn (fl):		DTW when sampled:						
DTW (statio	c) (fbTOR):	24.33	One Well V	olume (gal):		Purpose:	Developmen	t Samp	le Purge	& Sample		
Total Depth	n (fbTOR):	24.36	Total Volum	ne Purged (gal)		Purge Method:						
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)				Appearance & Odor		
	o Initial											
	1											
	2											
	3											
	4											
	5											
	6											
	7											
	8							12				
	9											
	10											
Sample	Information	:					-					
	S1						1	T				
	52								<u> </u>			
Well No	o. W7A		Diameter (i	nches 2"		Sample Da	te / Time: 2	1-22 /	1550			
Product De			Water Colu		.24	DTW when		9.16	1330			
DTW (static		8.63			2.00	Purpose:	Developmen		e X Purge	& Sample		
Total Depth		30.87		ne Purged (gal):			nod: Lew Fl		2.5			
Time	Water Level	Acc. Volume	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appear			
	(fbTOR)	(gallons)				(1110)	(IIIg/L)	(,,,,,				
1540	o Initial	0.00	7.34	19.7	994.1	121	0.84	-85	SI Tubid S	L Peter		
1543	1 19.66	1.00	7.07	17.4	1023	52.6	0.76	-88	cleur	h 10		
	2 19.12	1.75	7.07	16.8	1038	29.1	0.78	-90	11	16 16		
	3 14.16	2.50	7.09	16.0	1047	32.4	0.80	~90		l u		
1548	4 19.15	3.25	7.08	15.6	1047	31.0	0.76	- 90	11	H JL		
	5											
	6											
	7											
	8											
	9											
	10											
Sample	Information	:					,					
1550	S1 19.16	4.00	7.09	15.4	1055	37.5	0.81	-91	Clear, St	Prelos		
	52 19.14	5.00	7 23	15.1	1065	68.1	0.79	-101	II II	· · · ·		

Diam. Vol. (g/ft)

1" 0.041

2" 0.163

4" 0.653

1.469

6"

Volume Calculation

 Parameter
 Criteria

 pH
 ± 0.1 unit

 SC
 ± 3%

 Turbidity
 ± 10%

 DO
 ± 0.3 mg/L

 ORP
 ± 10 mV

Stabilization Criteria

PREPARED BY:

**REMARKS:** W5 Historic Product Encountered

Note: All measurements are in feet, distance from top of riser.



Project Na	me: oRpi							Date:		
Location:				Project I	No.:			Field Te	am:	
Well N	o. W9		Diameter (i	nches):		Sample	Date /	Time:		
Product De	epth (fbTOR):	21.00	Water Colu			DTW w				
DTW (stati		21.11		/olume (gal):		Purpos	e: 🔲 [	Development	Sample	Purge & Sample
Total Depth	ı (fbTOR):			ne Purged (gal):		Purge N	/lethod:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidit (NTU)		DO (mg/L)	ORP (mV)	Appearance & Odor
	o Initial	1				1	$\neg$			
	1					1				
	2					1				
	3									
	4					1	$\neg$			
	5					<del>                                     </del>	$\neg$			
	6						$\neg$			
	7					1	_			
	8					1	$\dashv$			
	9	1				1	$\dashv$			
	10					1	$\dashv$			
Sample	Information:									
Campic	S1					T				
	S2			<u> </u>		+	-			
						1				
Well No	o. W26		Diameter (ii	nches):		Sample	Date /	Time:		
Product De	pth (fbTOR):		Water Colu	mn (ft):		DTW w	hen san	npled:		
DTW (statio		20.40		olume (gal):		Purpose		Development	Sample	Purge & Sample
Total Depth	(fbTOR):	20.42	Total Volum	ne Purged (gal):		Purge N	lethod:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp, (deg_C)	SC (uS)	Turbidit (NTU)		DO (mg/L)	ORP (mV)	Appearance & Odor
	o Initial									
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample I	nformation:			·			_			
- Gumpio .	S1					T -		- T		
	S2					1	_			
									Stabili	zation Criteria
REMARK	S: W9 & W	V26 Historic F	Product End	ountered			Volume	Calculation	Paramete	S. 1122-yp., Ort. Increditional Control
							Diam.	Vol. (g/ft)	рН	± 0,1 unit
							1"	0.041	SC	± 3%
							2"	0.163	Turbidity	
81-4 Att .							4"	0.653	DO	± 0.3 mg/L
ivote: All me	easurements	are in feet, o	ustance from	n top of riser.			6"	1,469	ORP	± 10 mV



Project Name: ORP - 1

Location: Project No.: Field Team: CEH

Well I	No. W27		Diameter (i	nches):		Sample Date	e / Time:			
Product [	Depth (fbTOR):		Water Colu	mn (ft):		DTW when :	sampled:			
DTW (sta	atic) (fbTOR):	21.38	One Well V	olume (gal):		Purpose:	Development			
Total Dep	pth (fbTOR):	21.40	Total Volum	e Purged (gal):		Purge Method:				
Time	Water Level (fbTOR)	Acc Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
	o Initial									
	1		1)							
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample	e Information:							<u> </u>		
	S1									
	S2									

Well No	. <b>W</b> 30		Diameter (in	ches 2"		Sample Dat	e / Time: 🖇 ~	1-22/	1510		
Product Dep	oth (fbTOR):		Water Colur	nn (ft):	1. G8	DTW when	sampled: 19	.80			
DTW (static	) (fbTOR):	9.74	One Well Vo		1.58	Purpose: Development Sample Purge & Sample					
Total Depth	(fbTOR): 3	19.42	Total Volum	e Purged (gal):	6.00	Purge Method: Low Flow					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
1455	o Initial	5.00	8.06	14.4	742.2	820	1.73	-71	Turnids no odor		
1454	in the same	0.50	6.78	17.6	939.7	637	0.89	<b>- 2</b> 9	11 (4 (7)		
1501	2 19.80	1.00	6.79	16.6	1039	103	0.92	~33	SLTURBED, nood		
1503	3 14.80	₹.00	6.83	16.2	1072	32-0	0.80	-39	clearingodo		
1505	4 14.80	3.00	6.89	16.2	1116	15.4	0-84	-42	11 14 11		
1507	5 19.80	4.00	6.87	16-3	1124	15.4	0.81	.47	$\mu = \alpha \cdot q$		
	6										
	7										
	8										
	9										
	10										
	nformation:										
.010	S1 19.80	5.00	6.91	16.0	1144	13.0	0.79	-49	clear, no odor		
1520	82 19.80	6.00	7.00	18.5	1173	207	1.09	~63	SLTubriding		
								Stab	oilization Criteria		

 REMARKS:
 W27 Historic Product Encountered
 Volume Calculation

 Diam.
 Vol. (g/ft)

 1" 0.041
 2" 0.163

 4" 0.653
 4" 0.653

 Note: All measurements are in feet, distance from top of riser.
 6" 1.469

 Parameter
 Criteria

 pH
 ± 0.1 unit

 SC
 ± 3%

 Turbidity
 ± 10%

 DO
 ± 0.3 mg/L

 ORP
 ± 10 mV



Project Name: ORP 1

Location:

8-1-22 Date:

Project No.:

Field Team: CE H

Well N	o. W31		Diameter (	inches 2"		Sample Da	te / Time: 8-	-22 /14	25
Product D	epth (fbTOR):		Water Colu	ımn (ft): 5	<b>65</b>	DTW when	sampled: 21-	32	
DTW (stat	ic) (fbTOR):	11.09	One Well \	/olume (gal):	0.92	Purpose:	Development	Sample	Purge & Sample
Total Dept	th (fbTOR):	16.94	Total Volum	ne Purged (gal)	6.50	Purge Meth	od: Low Flo	W	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1412	o Initial	6.00	7.65	20.5	1185	>1000	0.60	-38	Turkid, no ode
1415	1 21.32	0.50	7.10	17.8	1197	180	0.76	-62	St Turbid, 11 "
1417	2 21.33	1-56	7.06	17.6	1200	63.5	0.73	- 69	Cleur , no od
1419	3 21.33	2.50	7.03	16.4	1211	32.4	0.68	-71	H LE G
1421	4 21.33	3.50	7.04	16.6	1210	23.8	0.77	- 73	11 11 11
1423	5 21-32	4.50	7.02	16.2	1211	18.2	0.69	~73	(1) (6 6)
	6								
	7								
	8								
	9								
	10								
Sample	Information			**					
1425	51 21.32	5.50	6.99	16.2	1218	14.7	0.71	-71	clarino odo
1430	52 21.32	6.50	7410	16.6	1225	11.9	0 76	- 88	11 11 11

Well N	lo. W32		Diameter (i	nches 4"		Sample Da	te / Time: 🖇 🕆	2-22/	1000
Product D	epth (fbTOR):		Water Colu	mn (ft): 8.6	68	DTW when	sampled: 2	1.44	
DTW (sta	tic) (fbTOR):	11 40	One Well V	olume (gal):	5.67	Purpose:	Developmen	t Samp	ole 📝 Purge & Sample
Total Dep	th (fbTOR): 3	0.08	Total Volum	e Purged (gal):	8.00	Purge Meth	od: Low Flu	W	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
13 11	o Initial	0.00	6.65	18.2	1401	55.9	0.76	- 39	clear, no ado-
1313	1 23.40	1.00	6.86	16.6	1378	64.2	0.75	-92	n a a
1323	2 20.50	4.00	7.00	17.4	1353	>1000	0.54	-103	Turbil SL Petrol
1331	3 29.03	7.00	6.91	17.9	1324	>1000	0.46	-110	11 11 11
1333	4 Direy	8.00							
	5								
	6								
	7								
	8								
	9								
	10								
Sample	Information:		6.62						
1000	51 21.44	8.00	want-	18.1	1319	21.9	1.02	-18	Clear, SL Petrol
1019	5221.74	8.00	6.79	18.6	1308	26.8	0.86	-94	11 11 11

REMARKS: U32 Replaced tubing during Sampling Previous Note: All measurements are in feet, distance from top of riser.

Volume Calculation Diam. Vol. (g/ft) 1" 0.041 2" 0.163 4" 0.653 6" 1.469

Parameter Criteria рΗ ± 0.1 unit SC ± 3% Turbidity ± 10% DO ± 0.3 mg/L ORP ± 10 mV

# **EQUIPMENT CALIBRATION LOG**

Date: 8/11/22

ı,	NKEY	S. T. C.
Î	NK	CHAIRT

PROJECT INFORMATION:
Project Name: ORP #1 Olean Gateway
Project No.:

Client:					Instrument Source:	t Source:	BM	Rental
METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
	units	1230	Myron L Company Ultra Meter 6P	6243084 K	CEH	4.00 7.00 10.01	3.98	
☐ Turbidity meter	UTN		Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) □ 13120C030432 (Q) □		< 0.4 or 10 for 2100 a 20 100 800	4.85	
☐ Turbidity meter	UTN		LaMotte 2020	6523-1816 (La)		0.0 NTU 1.0 NTU 10.0 NTU		
以 Sp. Cond. meter	Sm	1330	Myron L Company Ultra Meter 6P	6213516	CEN	<b>7</b> 0℃ mS @ 25 ℃	7000	
□ PID	ppm		MinRAE 2000			open air zero ppm Iso. Gas		MIBK response factor = 1.0
✓ Dissolved Oxygen	mdd	જ્લ	HACH Model HQ30d	080700023281	#37	100% Satuartion	% 00)	-
☐ Particulate meter	mg/m <sub>3</sub>					zero air		
□ Oxygen	%					open air		Ť
Hydrogen sulfide	mdd					open air		
Carbon monoxide	mdd					open air		
	%					open air		
☐ Radiation Meter	uR/H					background area		

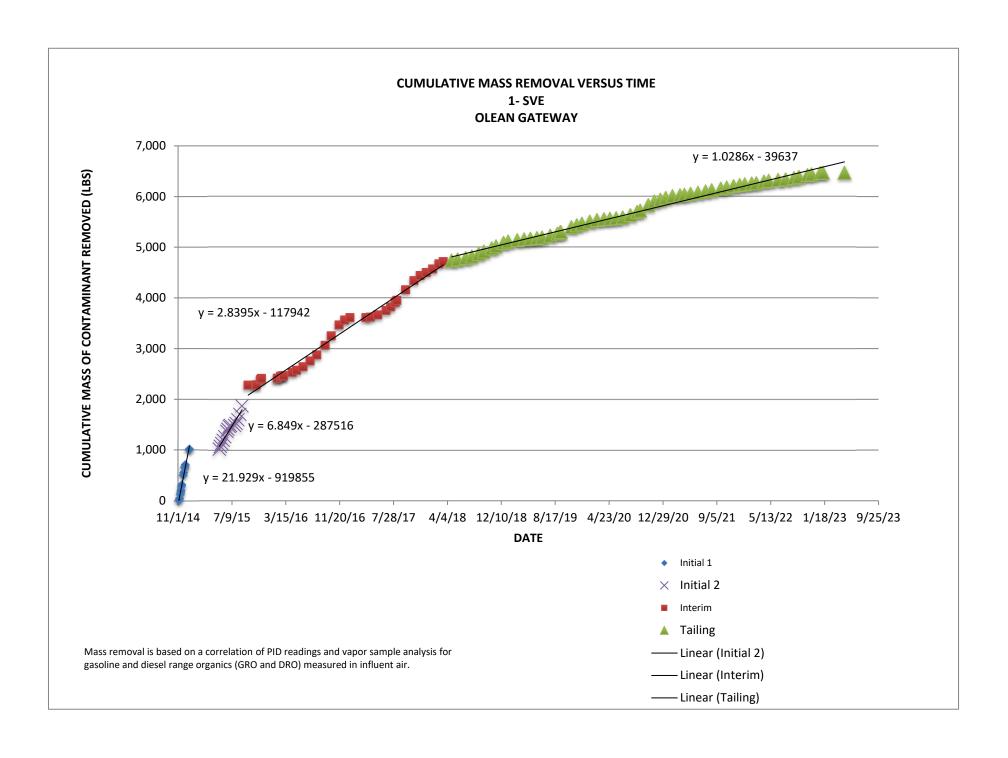
ADDITIONAL REMARKS: PREPARED BY:

DATE: 8/11/32

## **APPENDIX D**

**SVE SYSTEM DOCUMENTATION** 







#### Table D-1- Summary of SVE System VOC Mass Removal for 1-SVE Periodic Review Report Olean Redevelopment Site 1 NYSDEC BCP Site No. C905031 Olean, New York

11/23  15   383   190.1   106   5   273   15.0   10500   2   2.08   1617030   5.1   27.5   2.444   System shut down (frazen)   27411   456   190.1   50   5   130   14.0   105000   2   208   0   0.0   0.0   0.2   2.444   System shut down (frazen)   27211   458   191.8   55   5   143   14.0   105000   2   208   511566   2.7   2.3   2.416	Date	Elapsed Time	SVE Operation Time	Influent (Untreated) PID Reading	Effluent PID Reading Biofilter	Corrected Influent Concentration <sup>1</sup>	Vacuum	Air Velocity	Pipe Diameter	Air Flow Rate	Volume of Air Processed Since Previous Reading	Rate of VOC Removal	VOCs Removed Since Last Monitoring Period	Total VOC Removal to Date	Notes
1969    1	11/4/14												(lb)	(lb)	
													6.7	7	
1979	11/7/14	3	2.81	420	30	1091	14.0	8500	2	168	495307	16.5	34.7	41	
1996   9, 87   1976   1976   1976   1976   1976   1976   1986   1986   2   1984   230000   2084   346   275   266   197															
1977  1979															
1964   20   1977   688   20   1700   18.0   1900   2   184   759112   20.0   1905   50.0   1907   1907   1907   1908															
1999   1979	11/18/14			685	30	1779		9800		194	212690			312	
1999   20   20   20   20   20   20   20															
1999   1999   300   30															
1911   1918	12/22/14	48	47.94	345		896	15.0	9800		194		15.7		1,004	
1979   1972   5.5.09   200   15   5.33   13.0   1800   2   1770   1907004   8.4   53.0   1.071   3yyeen relateded   1907005   1.0															System off
															System restarted
BOTIST   273   7.4 06   226   115   610   120   10000   2   200   200004   11.4   71.4   1.061															,
	5/29/15	206	67.09	220	10	571	11.5	8900		176	1770171	9.1	60.4	1,190	
	7/1/15	239	100.1	0	10	0	12.0	10500	2	208	1498406	0.0	18.2	1,483	Blower Failed
BBMT6  274   1166   169   10											_				Blower Replaced
BPATES   283   1244   3330   19   857   140   19000   2   208   3048969   110   1056   1.701															
									2						
10/28/15   356   162.7   250   10   649   12.0   15000   2   208   0   0.0   0.0   2.278   Power line bit by contact of the	8/24/15	293	134.6	350	15	909	13.0	10500	2	208	3040516	17.0	167.7	1,869	
10/29/16   399   166.8   110   5   286   15.0   11000   2   208   917774   5.3   8.2   2.287   Restart system   1111715   378   184.7   105   5   273   15.0   11000   2   208   5688971   5.1   98.8   2.385   System shut down (frozen   1112715   333   110.1   1105   5   273   15.0   11000   2   208   5688971   5.1   98.8   2.385   System shut down (frozen   1112715   333   110.1   1105   5   273   15.0   11000   2   208   0   0   0   0   0   0   2.414   System restarted   22468   488   1918   55   5   144   14.0   11000   2   208   511956   2.7   2.3   2.441   System restarted   22698   1918   55   5   144   14.0   11000   2   208   511956   2.7   2.3   2.441   System restarted   22698   479   4885   0   0   0   0   0   0   0   0   0															Power line hit by contractor; austern down
11/23/15   383   190,1   105   5   273   15,0   10600   2   208   1617030   6.1   27.5   2.414   System shut down (frazen 22/16   486   100,1   50   5   130   14.0   10500   2   208   0   0   0   0   0   2.414   System restarted 22/16   488   1918   55   5   143   14.0   10500   2   208   511956   2.7   2.3   2.416   System restarted 22/16   472   205   6   5   10   149   14.0   8800   2   174   3483335   2.6   38.7   2.453   System shut down for main and the system of th															
24/16   456   190.1   50   5   130   14.0   10500   2   208   0   0.0   0.0   2.414   System restated	11/17/15	378	184.7			273	15.0	10500		208	5668971	5.1	98.8		System shut down (frozen tank)
2016   458   1918   55   5															System shut down (frozen tank)
27816   472   206 6   65   10   169   14.0   8800   2   174   3483835   2.6   36.7   2.453   System that down for main control of the contr															System restarted
22-10   479   48-5   0   0   0   0   0   0   0   0   0															
3/11/6   482   488.5   0   0   0   0   0   0.0   8800   2   174   0   0.0   0.0   2.788   Repair knock-out valve	2/26/16	479	458.5	0	0	0	0.0	8800	2	174	63528153	0.0	334.9	2,788	System shut down for maintenance; knock- out valve malfunction
4/13/16         528         498.9         45         5         117         17.0         8800         2         174         10145877         1.8         37.0         2.825           5/3/16         546         519.2         50         5         130         18.0         8800         2         174         5096485         2.0         39.3         2.884           7/6*16         566         549.1         58         2         151         17.0         9600         2         190         8185581         2.6         68.9         2,933           7/6*16         609         581.9         100         10         220         16.0         9600         2         190         8879022         4.4         115.0         3.048           8/5*16         640         612.9         75         3         195         15.0         9600         2         190         8510949         3.3         120.8         3.169           9/13/16         679         652.1         140         10         364         15.0         9600         2         190         852428         8.2         261.4         3.617           11/16/16         743         72.28         110	3/1/16	482	458.5				0.0	8800		174	0	0.0	0.0	2,788	
SCI16   S46   519.2   50   5   130   18.0   8800   2   174   5086485   2.0   39.3   2.864															
6/216   576															
8/6/16   640   612.9   75   3   195   15.0   9600   2   190   851949   3.3   120.8   3,169     9/13/16   679   662.1   140   10   364   15.0   9600   2   190   10720028   6.2   186.9   3,356     10/11/16   707   686.9   160   10   416   17.0   9600   2   190   9538428   8.8   261.4   3,617     11/16/16   743   722.8   110   5   286   18.0   9600   2   190   9538428   8.8   261.4   3,617     11/16/16   743   722.8   110   5   286   18.0   9600   2   190   9538428   8.8   261.4   3,617     11/16/16   743   722.8   110   5   286   18.0   9600   2   190   9853279   4.9   246.0   3,863     12/12/16   769   748.8   60   5   156   32.0   9600   2   190   7115290   2.7   98.1   3,961     18/17   794   773.7   25   5   65   37.0   9600   2   190   6818463   1.1   47.0   4,008   Blower motor failure; new blo     3/21/17   868   773.7   20   1   52   39   27.5   9600   2   190   0   0.0   0.0   0.0   4,008   Blower motor failure; new blo     3/21/17   889   794.7   15   2   39   27.5   9600   2   190   5795898   0.7   7.0   4,015     5/15/17   923   828.6   45   2   117   28.0   9600   2   190   9275850   2.0   45.1   4,060     6/23/17   962   867.5   59   1.5   153   25.0   9600   2   190   10674362   2.6   90.0   4,150     7/14/17   983   888.5   85   2.5   221   24.0   9600   2   190   5736892   5.1   93.9   4,311     8/11/17   1011   916.7   115.3   4   300   23.0   9600   2   190   1914155   5.1   35.7   4,347     9/21/17   1052   967.9   113.8   3.7   296   23.0   9600   2   190   7673744   1.7   61.2   4,898     1/28/17   1120   1025.5   60   12   156   24.0   9600   2   190   7673744   1.7   61.2   4,898     1/28/18   1265   1171.1   19.2   1.1   50   40.0   9600   2   190   10663355   0.9   24.9   5,135     4/23/18   1265   1171.1   19.2   1.1   50   40.0   9600   2   190   10663355   0.9   24.9   5,135															
Section   Sect	7/5/16	609	581.9	100	10	260	16.0	9600	2	190	8979022	4.4	115.0	3,048	
10 11/16															
11/16/16         743         722.8         110         5         286         18.0         9600         2         190         9852379         4.9         246.0         3,863           12/12/16         769         748.8         60         5         156         32.0         9600         2         190         7115290         2.7         98.1         3,961           11/6/17         794         773.7         25         5         65         37.0         9600         2         190         6818463         1.1         47.0         4,008         Blower motor failure; new blo           3/21/17         868         773.7         20         1         52         16.0         9600         2         190         0         0.0         0.0         4,008         Blower replaced           4/11/17         899         794.7         15         2         39         27.5         9600         2         190         575988         0.7         7.0         4,015           6/23/17         962         867.5         59         1.5         153         25.0         9600         2         190         10674362         2.6         90.0         4,150           7/14/17 <td></td>															
12/12/16   769   748.8   60   6   156   32.0   9600   2   190   7115290   2.7   98.1   3.961															
3/21/17   868   773.7   20	12/12/16	769		60		156	32.0	9600			7115290	2.7			
4/11/17         889         794.7         15         2         39         27.5         9600         2         190         5759589         0.7         7.0         4,015           5/15/17         923         828.6         45         2         117         26.0         9600         2         190         9275850         2.0         45.1         4,060           6/23/17         962         867.5         59         1.5         153         25.0         9600         2         190         10674362         2.6         90.0         4,150           7/14/17         983         888.5         85         2.5         221         24.0         9600         2         190         5753881         3.8         67.2         4,217           8/4/17         1004         990.7         114.7         4.1         298         23.0         9600         2         190         5756892         5.1         93.9         4.311           8/11/17         1011         916.7         115.3         4         300         23.0         9600         2         190         1914155         5.1         35.7         4,347           9/21/17         1052         967.9         113															Blower motor failure; new blower ordered.
5/15/17         923         828.6         45         2         117         26.0         9600         2         190         9275850         2.0         45.1         4,060           6/23/17         962         867.5         59         1.5         153         25.0         9600         2         190         10674362         2.6         90.0         4,150           7/14/17         983         888.5         85         2.5         221         24.0         9600         2         190         5756881         3.8         67.2         4,217           8/4/17         1004         909.7         114.7         4.1         298         23.0         9600         2         190         5756881         3.8         67.2         4,217           8/4/17         1011         916.7         115.3         4         300         23.0         9600         2         190         5796692         5.1         93.9         4,311           9/21/17         1052         967.9         113.8         3.7         296         23.0         9600         2         190         11297509         5.1         209.9         4,557           10/30/17         1091         966.7															Blower replaced
6/23/17         962         867.5         59         1.5         153         25.0         9600         2         190         10674362         2.6         90.0         4,150           7/14/17         983         888.5         85         2.5         221         24.0         9600         2         190         5753881         3.8         67.2         4,217           8/4/17         1004         909.7         114.7         4.1         298         23.0         9600         2         190         5796692         5.1         93.9         4,311           8/11/17         1011         916.7         115.3         4         300         23.0         9600         2         190         1941455         5.1         35.7         4,347           9/21/17         1052         967.9         113.8         3.7         296         23.0         9600         2         190         11297699         5.1         209.9         4,557           10/30/17         1091         996.7         95.5         13.8         248         20.0         9600         2         190         10631551         4.2         180.5         4,737           11/28/17         1120         1025.5															
8/4/17         1004         999.7         114.7         4.1         298         23.0         9600         2         190         5796692         5.1         93.9         4,311           8/11/17         1011         916.7         115.3         4         300         23.0         9600         2         190         1914155         5.1         35.7         4,347           9/21/17         1052         967.9         113.8         3.7         296         23.0         9600         2         190         11297509         5.1         209.9         4,557           10/30/17         1091         996.7         95.5         13.8         248         20.0         9600         2         190         10631551         4.2         180.5         4,737           11/28/17         1120         1025.5         60         12         156         24.0         9600         2         190         7695413         2.7         99.6         4,837           12/26/17         1148         1053.5         38.4         3.4         100         27.0         9600         2         190         7673744         1.7         61.2         4,888           12/23/18         1207															
8/11/17         1011         916.7         115.3         4         300         23.0         9600         2         190         1914155         5.1         35.7         4,347           9/21/17         1052         967.9         113.8         3.7         296         23.0         9600         2         190         11297509         5.1         209.9         4,557           10/30/17         1091         996.7         95.5         13.8         248         20.0         9600         2         190         10631551         4.2         180.5         4,737           11/28/17         1120         1025.5         60         12         156         24.0         9600         2         190         7895413         2.7         99.6         4,837           12/28/17         1148         1053.5         38.4         3.4         100         27.0         9600         2         190         7895413         2.7         99.6         4,837           12/26/17         1148         1053.5         38.4         3.4         100         27.0         9600         2         190         7873744         1.7         61.2         4,888           12/23/18         1176 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
9/21/17 1052 957.9 113.8 3.7 296 23.0 9600 2 190 11297509 5.1 209.9 4.557  10/30/17 1091 996.7 95.5 13.8 248 20.0 9600 2 190 10631551 4.2 180.5 4.737  11/28/17 1120 1025.5 60 12 156 24.0 9600 2 190 7695413 2.7 99.6 4.837  12/26/17 1148 1053.5 38.4 3.4 100 27.0 9600 2 190 7673744 1.7 61.2 4.898  12/26/18 1178 1083.5 65 33.8 169 48.0 9600 2 190 822684 2.9 68.9 4.967  2/23/18 1207 1112.6 90 NA 234 48.0 9600 2 190 7951544 4.0 99.9 5.067  3/15/18 1226 1132.1 9.6 1.2 25 48.0 9600 2 190 5357160 0.4 43.3 5.110  4/23/18 1265 1171.1 19.2 1.1 50 40.0 9600 2 190 10663355 0.9 24.9 5.135															
10/30/17         1091         996.7         95.5         13.8         248         20.0         9600         2         190         10631551         4.2         180.5         4,737           11/28/17         1120         1025.5         60         12         156         24.0         9600         2         190         7895413         2.7         99.6         4,837           12/26/17         1148         1053.5         38.4         3.4         100         27.0         9600         2         190         7673744         1.7         61.2         4,898           1/25/18         1178         1083.5         65         33.8         169         48.0         9600         2         190         8222684         2.9         68.9         4,967           2/23/18         1207         1112.6         90         NA         234         48.0         9600         2         190         822684         2.9         68.9         4,967           3/15/18         1226         1132.1         9.6         1.2         25         48.0         9600         2         190         5357160         0.4         43.3         5,110           4/23/18         1265         1171.1<															
12/26/17     1148     1053.5     38.4     3.4     100     27.0     9600     2     190     7673744     1.7     61.2     4,898       1/25/18     1178     1083.5     65     33.8     169     48.0     9600     2     190     8222684     2.9     68.9     4,967       2/23/18     1207     1112.6     90     NA     234     48.0     9600     2     190     7951544     4.0     99.9     5,067       3/15/18     1226     1132.1     9.6     1.2     25     48.0     9600     2     190     5357160     0.4     43.3     5,110       4/23/18     1265     1171.1     19.2     1.1     50     40.0     9600     2     190     10663355     0.9     24.9     5,135															
1/25/18     1178     1083.5     65     33.8     169     48.0     9600     2     190     8222684     2.9     68.9     4,967       2/23/18     1207     1112.6     90     NA     234     48.0     9600     2     190     7951544     4.0     99.9     5,067       3/15/18     1226     1132.1     9.6     1.2     25     48.0     9600     2     190     5357160     0.4     43.3     5,110       4/23/18     1265     1171.1     19.2     1.1     50     40.0     9600     2     190     10663355     0.9     24.9     5,135															
2/23/18     1207     1112.6     90     NA     234     48.0     9600     2     190     7951544     4.0     99.9     5,067       3/15/18     1226     1132.1     9.6     1.2     25     48.0     9600     2     190     5357160     0.4     43.3     5,110       4/23/18     1265     1171.1     19.2     1.1     50     40.0     9600     2     190     10663355     0.9     24.9     5,135															
3/15/18 1226 1132.1 9.6 1.2 25 48.0 9600 2 190 5357160 0.4 43.3 5,110 4/23/18 1265 1171.1 19.2 1.1 50 40.0 9600 2 190 10663355 0.9 24.9 5,135															
4/23/18 1265 1171.1 19.2 1.1 50 40.0 9600 2 190 10663355 0.9 24.9 5,135															
50440 4000 44004 450	4/23/18														
	5/21/18	1293	1199.1	15.2	1.4	39	48.0	9600	2	190	7655742	0.7	21.4	5,157	
															Bio-filter raked 6/8/18 & 6/22/18 Bio-filter raked 7/6/2018 & 7/20/18



# Table D-1- Summary of SVE System VOC Mass Removal for 1-SVE Periodic Review Report Olean Redevelopment Site 1 NYSDEC BCP Site No. C905031 Olean, New York

Date	Elapsed Time	SVE Operation Time	Influent (Untreated) PID Reading	Effluent PID Reading Biofilter	Corrected Influent Concentration <sup>1</sup>	Vacuum	Air Velocity	Pipe Diameter	Air Flow Rate	Volume of Air Processed Since Previous Reading	Rate of VOC Removal	VOCs Removed Since Last Monitoring Period	Total VOC Removal to Date	Notes
	(days)	(days)	(ppm)	(ppm)	(mg/m³)	(in of H <sub>2</sub> O)	(Ft/Min)	(in)	(ACFM)	(CF)	(lb/day)	(lb)	(lb)	
8/27/18	1391	1297.1	43	5	112	38.0	9600	2	190	8749419	1.9	54.6	5,266	Bio-filter raked 8/3/2018, 8/17/18, & 8/31/18
9/20/18	1415	1321.1	37.8	7	98	45.0	9600	2	190	6562064	1.7	43.0	5,309	Bio-filter raked 9/14/18 & 9/28/18
10/26/18	1452	1357.5	43.2	4.3	112	43.0	9600	2	190	9964616	1.9	65.5	5,374	Bio-filter raked 10/12/18 & 10/26/18
11/15/18	1472	1377.5	47.4	6.7	123	48.0	9600	2	190	5466488	2.1	40.2	5,415	Bio-filter raked 11/2/18, 11/16/18, & 11/30/18
12/20/18	1506	1412.1	39.7	4.2	103	45.0	9600	2	190	9450056	1.8	66.7	5,481	Bio-filter raked 12/14/2018 & 12/28/18
1/11/19	1528	1434.1	17.2	2.3	45	30.0	9600	2	190	6015226	0.8	27.8	5,509	Bio-filter raked 1/11/19 & 1/25/19
2/22/19	1570	1476.1	9.8	0.2	25	21.0	9600	2	190	11483613	0.4	25.1	5,534	Bio-filter raked 2/8/19 & 2/22/19
3/26/19	1602	1508.1	10.2	0.7	26	18.0	9600	2	190	8755200	0.5	14.2	5,548	Bio-filter raked 3/8/19 & 3/22/19
4/24/19	1631	1537.1	11.1	0.8	29	22.0	9600	2	190	7934400	0.5	13.7	5,562	Bio-filter raked 4/5/19 & 4/19/19
5/24/19	1661	1567	8.2	0.6	21	25.0 28.5	9600 9600	2	190	8219830	0.4	12.9	5,181	
6/17/19 7/25/19	1685 1723	1591 1629	17.4 21.3	0.1	45 55	28.5 35.0	9600	2	190 190	6575864 10411784	0.8	13.7 32.7	5,195 5,228	
8/27/19	1723	1662	36.9	0.1	96	36.0	9600	2	190	9041813	1.6	42.7	5,228	
9/9/19	1769	1675	50.1	0.1	130	36.0	9600	2	190	3561926	2.2	25.1	5,270	
9/12/19	1772	1678	56.4	1.2	147	35.0	9600	2	190	821983	2.5	7.1	5,303	
10/31/19	1821	1727	29.8	0.1	77	35.0	9600	2	190	13425722	1.3	93.9	5,396	
11/25/19	1846	1752	34.7	0.1	90	34.0	9600	2	190	6849858	1.5	35.8	5,432	
12/19/19	1870	1776	27.8	0.0	72	35.0	9600	2	190	6575864	1.2	33.3	5,466	
1/24/20	1906	1812	24.9	0.0	65	35.0	9600	2	190	9863796	1.1	42.2	5,508	
2/27/20	1940	1846	13.9	0.0	36	35.0	9600	2	190	9315807	0.6	29.3	5,537	
3/30/20	1972	1878	8.8	0.0	23	18.5	9600	2	190	8767818	0.4	16.1	5,553	
4/27/20	2000	1906	5.6	0.0	14	18.0	9600	2	190	7671841	0.2	8.9	5,562	
5/26/20	2029	1935	10.4	0.0	26	35.0	9600	2	190	7945835	0.4	10.0	5,572	
6/25/20	2059	1965	15.1	0.0	38	36.0	9600	2	190	8219830	0.7	16.5	5,589	
7/31/20	2095	2001	44.1	0.0	111	34.2	9600	2	190	9863796	1.9	45.9	5,634	
8/31/20	2126	2032	49.7	0.4	125	32.1	9600	2	190	8493824	2.1	62.7	5,697	
9/14/20	2140	2046	36.4	1.2	92	31.2	9600	2	190	3835921	1.6	26.0	5,723	
10/22/20	2178	2084	94.6	0.9	238	29.2	9600	2	190	10411784	4.1	107.3	5,830	
11/19/20	2206	2112	25.6	0.7	65	32.0	9600	2	190	7671841	1.1	72.5	5,903	
12/17/20	2234	2140	31.4	0.5	79	34.0	9600	2	190	7671841	1.4	34.4	5,937	
1/11/21	2259	2165	34.9	0.3	88	30.7	9600	2	190	6849858	1.5	35.7	5,973	
2/11/21	2290	2196	15.6	0.1	39	32.2	9600	2	190	8493824	0.7	33.7	6,007	
3/18/21	2325	2231	11.1	0.0	28	30.1	9600	2	190	9589801	0.5	20.1	6,027	
4/8/21	2346	2252	12.3	0.3	31	33.0	9600	2	190	5753881	0.5	10.6	6,038	
5/6/21	2374	2280	15.7	0.3	40	32.1	9600	2	190	7671841	0.7	16.9	6,055	
6/9/21	2408	2314	13.5	0.2	34	32.0	9600	2	190	9315807	0.6	21.4	6,076	
7/15/21	2444	2350	20.2	0.1	51	34.0	9600	2	190	9863796	0.9	26.2	6,102	
8/12/21	2472	2378	16.1	0.2	41	36.0	9600	2	190	7671841	0.7	21.9	6,124	
9/23/21	2514	2420	18.8	0.2	47	36.0	9600	2	190	11507762	0.8	31.6	6,156	
10/21/21	2542	2448	19.9	0.2	50	32.0	9600	2	190	7671841	0.9	23.4	6,179	
11/22/21	2574	2480	20.8	0.2	52	31.0	9600	2	190	8767818	0.9	28.1	6,207	
12/20/21	2602	2508	16.1	0.2	41	32.0	9600	2	190	7671841	0.7	22.3	6,229	
1/13/22 2/14/22	2626 2658	2532 2564	10.7 8.9	0.1	27	33.0 32.0	9600 9600	2	190 190	6575864 8767818	0.5	13.9	6,243 6,257	
			***					_			***		*,-**	
3/7/22 4/12/22	2679 2715	2585 2621	6.7 33	0.0	17 83	34.0 34.0	9600 9600	2	190 190	5753881 9863796	0.3 1.4	7.1 30.8	6,264 6,295	
5/3/22	2715	2621	6.1	0.0	83 15	34.0	9600	2	190	9863796 5753881	0.3	30.8 17.7	6,295	
6/16/22	2780	2686	8.3	0.1	21	30.1	9600	2	190	12055750	0.3	17.7	6,312	
7/21/22	2/80	2721	14.9	0.0	27	31.0	9600	2	190	9589801	0.4	14.2	6,326	
8/29/22	2854	2760	27.5	0.0	49	32.0	9600	2	190	10685779	0.8	25.2	6,365	
9/21/22	2877	2783	44.2	0.0	79	32.0	9600	2	190	6301870	1.3	25.2	6,305	
10/31/22	2917	2823	13.6	0.0	24	34.5	9600	2	190	10959773	0.4	35.3	6,426	
11/18/22	2935	2841	33.2	0.0	59	34.0	9600	2	190	4931898	1.0	12.9	6,439	
12/29/22	2976	2882	10.1	0.5	18	30.1	9600	2	190	11233767	0.3	27.1	6,466	
1/10/23	2988	2894	8	0.0	14	30.0	9600	2	190	3287932	0.2	3.3	6,469	Shut down system for winter
4/20/23	3088	2994	13.9	0.0	25	24.0	9600	2	190	27399433	0.0	0.0	6,469	Restart system
TILUIZO	5000	2004	13.3	0.0	20	24.0	3000	2	130	21000400	0.0	0.0	0,408	. wow. cayatom

<sup>1.</sup> The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading.

The ratio is 2.6 milligram per cubic meter for each 1 part per million on the PID for 11/14/2014 through 4/15/2020.

The ratio is 2.52 milligram per cubic meter for each 1 part per million on the PID for 4/15/2020 through 6/26/2022.

The ratio is 1.78 milligram per cubic meter for each 1 part per million on the PID for 6/27/2022 through 4/30/2023.



#### TABLE D-2 SUMMARY OF SVE SYSTEM 1

#### OLEAN REDEVELOPMENT PARCEL 1 NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

Date	Well	PID	Vacuum	System PID (ppm)	Notes		
	1-SVE-1	0.0	off				
	1-SVE-2	0.8	15.8				
	1-SVE-3	4.2	24.1	Influent: 8.3	SVE System 1 Vacuum:		
6/16/22	1-SVE-4	0.0	off	Iniliuent. 6.5	30.1 inches H <sub>2</sub> O		
	1-SVE-5	0.0	off		00.1 11101100 1120		
	1-SVE-6	0.0	off				
	1-SVE-7	70.1	24.8				
	1-SVE-1	0.0	off				
	1-SVE-2	15.0	16.5				
	1-SVE-3	17.0	24.7	Influent: 44.0	SVE System 1 Vacuum:		
9/21/22	1-SVE-4	0.0	off	Influent: 44.2	SVE System 1 Vacuum: 32 inches H₂O		
	1-SVE-5	0.0	off	]	02 mones 11 <sub>2</sub> 0		
	1-SVE-6	0.0	off	]			
	1-SVE-7	419	24.6				
	1-SVE-1	0.0	off				
	1-SVE-2	17.9	7.9 19.9				
	1-SVE-3	12.1	22.1	Influent: 33.2	SVE System 1 Vacuum:		
11/17/22	1-SVE-4	0.0	off	Iniliuent. 33.2	34 inches H <sub>2</sub> O		
	1-SVE-5	0.0	off		0 1 mones 1120		
	1-SVE-6	0.0	off				
	1-SVE-7	174.0	30.2				
	1-SVE-1	0.0	off				
	1-SVE-2	1.5	19.2				
	1-SVE-3	9.2	29.3	Influent: 10.1	SVE System 1 Vacuum:		
12/29/22	1-SVE-4	0.0	off	i illiuelit. 10.1	30.1 inches H <sub>2</sub> O		
	1-SVE-5	0.0	off				
	1-SVE-6	0.0	off				
	1-SVE-7	148.4	25.1				

Note: Wells 1-SVE-1, 1-SVE-4, 1-SVE-5, and 1-SVE-6 were turned off due to low PID reading in those locations in an effort to focus the vacuum in locations of higher PID readings.



## TABLE D-3 SUMMARY OF SVE SYSTEM INTAKE AIR ANALYTICAL DATA

#### OLEAN REDEVELOPMENT PARCEL 1 NYSDEC BCP SITE NO. C905031 OLEAN, NEW YORK

Parameter <sup>1</sup>		Sample Date <sup>2</sup>								
raiailletei	12/4/2014	8/14/2015	4/15/2020	6/27/2022	5/1/2023	from 2014				
Volatile Organics Compoun	nds (VOCs) - ug	g/m <sup>3</sup>								
2,2,4-Trimethylpentane	ND < 124	ND < 54.2	14.7	ND < 1.87	ND < 1.46	98.8%				
2-Butanone	2,800	ND < 85.2	ND < 1.47	ND < 2.95	3.01	99.9%				
4-Methyl-2-pentanone	ND < 109	ND < 118	33.0	ND < 4.10	ND < 3.2	97.1%				
Carbon disulfide	108	ND < 36.1	ND < 0.623	ND < 1.25	ND < 0.977	99.1%				
Chloroform	ND < 130	ND < 56.6	1.37	2.66	ND < 1.52	98.8%				
Cyclohexane	6,400	1,160	8.95	17.2	ND < 1.07	100%				
Dichlorodifluoromethane	ND < 132	ND < 57.4	1.79	3.42	2.64	98.0%				
Heptane	1,940	338	1.09	2.4	3.73	99.8%				
n-Hexane	737	138	1.13	2.78	3.84	99.5%				
Tetrahydrofuran	2,940	ND < 85.2	ND < 1.47	ND < 2.95	ND < 2.3	100%				

#### Notes:

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect
- 2. Vapor results from 2014 and 2015 were obtained through dilution

#### **Definitions:**

ND < RL = Parameter not detected above laboratory reporting limit.

NA = Not analyzed or not applicable