

Periodic Review Report

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

June 2022

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**

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PERIODIC REVIEW REPORT (2021/2022)

Olean Redevelopment Parcel 1

Table of Contents

1.0	INTRODUCTION.....	1
1.1	Site Background.....	1
1.2	Purpose/Scope.....	2
2.0	SITE OVERVIEW.....	3
2.1	Interim Remedial Measures (IRM).....	3
2.2	Remedial Actions.....	3
2.3	Site Redevelopment Activities.....	5
3.0	SITE MANAGEMENT PLAN.....	7
3.1	IC/EC Plan	7
3.1.1	<i>Institutional Controls</i>	7
3.1.2	<i>Engineering Controls</i>	7
3.1.3	<i>Site Inspection & IC/EC Compliance</i>	7
3.2	Monitoring and Sampling Plan	8
3.2.1	<i>LNAPL Monitoring/Recovery System</i>	8
3.2.2	<i>Groundwater Sampling and Analysis</i>	9
3.2.2.1	<i>Groundwater Elevations</i>	9
3.2.2.2	<i>Analytical Data</i>	9
3.2.3	<i>SVE System and Monitoring</i>	10
3.2.3.1	<i>Results</i>	11
3.2.4	<i>Site-Wide Inspection – Cover System Monitoring</i>	11
3.2.5	<i>Discussion of Monitoring Results</i>	12
3.3	Operation & Maintenance Plan.....	13
3.3.1	<i>SVE System</i>	13
3.3.1.1	<i>Routine System Operation and Maintenance</i>	13
3.3.1.2	<i>System Monitoring Devices and Alarms</i>	13
4.0	CONCLUSIONS AND RECOMMENDATIONS.....	14
4.1	Conclusions.....	14
4.2	Recommendations.....	14
5.0	DECLARATION/LIMITATION.....	15
6.0	REFERENCES	16

PERIODIC REVIEW REPORT (2021/2022)

Olean Redevelopment Parcel 1

Table of Contents

FIGURES

Figure 1	Site Location and Vicinity Map
Figure 2	Site Plan (Pre-Remediation)
Figure 3	Site Plan Post-Remediation & Post-Redevelopment
Figure 4	Survey / Tax Parcel Map
Figure 5	Site Cover System
Figure 6	Groundwater Isopotential Map (June 2021)
Figure 7	SVE System Layout

TABLES

Table 1	LNAPL System Inspection Log
Table 2	Groundwater Monitoring Well Water Levels
Table 3	2008-2021 Groundwater Analytical Summary - Organics
Table 4	2008-2021 Groundwater Analytical Summary - Metals

APPENDICIES

Appendix A	IC/EC Form
Appendix B	Site Photo Log
Appendix C	Groundwater Sampling Field Forms and Analytical Data
Appendix D	SVE System Documentation

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, 2021 to May 9, 2022. 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)¹. 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.

¹ 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
 - Building 1: One vertical concrete tank of unknown size removed.
 - Building 4: Two approx. 3,000-gallon suspected septic tanks closed in-place and one approx. 1,000-gallon aluminum lined concrete tank removed.
 - Building 6: One approx. 700-gallon concrete and one approx. 500-gallon steel tank removed.
 - 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 on-site 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, 2022, Benchmark's Certifying Professional Engineer performed a Site visit and assessment. At the time of the inspection, vegetative regrowth was noted in the area

surrounding the newly constructed HK Olean Hotel and in the area west of the hotel that had minor rutting caused by construction vehicles. These minor cover imperfections were repaired during final site work. At the time of the April 14, 2022 Site inspection, no observable indication of intrusive activities, cover failure, or use of groundwater were noted.

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 26, 2022. During this reporting period, no LNAPL was recovered from the five wells monitored. Since issuance of the COC, estimates of the quantity of LNAPL recovered are less than 1 gallon in well W10; less than 3 gallons in wells W9 and W27; less than 11 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 no sock change outs at any of the on-site wells 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

In email correspondence dated June 22, 2021, NYSDEC agreed to a decreased sampling program. Therefore, during the June 27-28, 2021 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-VOCs 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. Table 2 summarizes the groundwater elevations from 2015 through 2021. Table 3 (VOCs and SVOCS) and Table 4 (metals) summarize the analytical results as well as historic groundwater quality data. Appendix C includes field notes and laboratory analytical data packages from the 2021 groundwater sampling event.

3.2.2.1 Groundwater Elevations

The groundwater elevations in Table 2 were used to prepare an isopotential map for June 2021 (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 at the time of well gauging as it was covered by construction equipment or a car. During the next groundwater monitoring event, the well will be located using GPS Trimble to confirm it is still accessible.

3.2.2.2 Analytical Data

Table 3 (VOCs and SVOCS) and Table 4 (metals) summarize the analytical data from the 2021 sampling event.

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 19 ug/L; 1,3,5-trimethylbenzene at 5.1 ug/L; benzene at 21 ug/L; ethylbenzene at 5.6 ug/L; and total xylenes at 40 ug/L
- Well W4: 1,2,4-trimethylbenzene at 7.1 ug/L and chlorobenzene at 5.2 ug/L
- Well 7A: 1,4-dichlorobenzene at 5.0 ug/L; and chlorobenzene at 11 ug/L

VOC TICs were generally consistent with historical results.

SVOCs

SVOCs were not detected in any wells above GWQS/GVs. SVOC TICs decreased in all wells sampled during the June 2021 event compared to the June 2020 results. A significant decrease in TICs was identified at wells W30 and W31, which were both greater than 100 ug/L during the June 2020 sampling event but decreased to 9.2 ug/L and 45 ug/L respectively during the June 2021 event.

Metals

Well W4 was the only location out of the three wells sampled that exceeded its GWQS for total arsenic (45.76 ug/L); however, the dissolved arsenic concentration at W4 was 4.81 ug/L indicating arsenic is primarily in its particulate (insoluble) form. NYSDEC approved the discontinuation of lead analysis following the 2020/2021 reporting year.

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 a 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.

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 May 2022 is approximately 6,312 pounds. The rate of VOC removal was initially over 20 pounds per day (lb/d) but was on average 0.7 lb/d during the 2021/2022 reporting period, which is consistent with the 2020/2021 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 June 2021 system check, PID readings from the individual wells ranged from 0.0 to 189.5 ppm compared to the most recent system check in March 2022 with PID readings ranging from 0.0 to 28.7 ppm. A significant decrease in PID values was noted across all three SVE wells compared to the 2020/2021 reporting period results. Specifically, the PID readings in well 1-SVE-7 decreased from 291.1 ppm (January 2021) to 189.5 ppm (June 2021) to 28.7 ppm (March 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 were turned off due to low PID reading and an effort to focus the vacuum at locations of higher PID readings.

The system influent air PID readings fluctuated between 11.6 and 18.7 ppm from June 2021 to March 2022 compared to a high of 34.9 ppm in January 2021.

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 2022 Site inspection, the cover systems were intact and functioning as intended. Vegetative regrowth was noted in the area surrounding the newly constructed HK Olean Hotel and in the area west of the hotel that had minor rutting caused by construction vehicles. 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 four 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 2021/2022 reporting period. Wells W9, W26, and W27 had measurable product but no recovered product during the 2021/2022 reporting period. The last date product was removed from well W27 was December 20, 2018.

The groundwater in wells W30 and W31 meets NYSDEC GWQS/GVs for VOCs and SVOCs. Six VOCs were detected at concentrations above GWQSs/GVs; specifically, five VOCs in well W3, two VOCs in well W4, and two VOCs in well 7A exceeded GWQS/GVs. All monitoring wells except well W4 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 SVE was operational, and 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, 2022 inspection, the Site covered by this PRR was fully compliant with the IC/EC requirements.

- VOC concentrations in wells W3, W4, and W7A exceeded GWQs. SVOC concentrations were below GWQs in all wells. Only well W4 exceeded the GWQS for arsenic during the 2021 sampling.
- No LNAPL was recovered from the five monitored wells during the reporting period. NYSDEC approved removal of well W26 from the LNAPL monitoring program in May 2018; however, Benchmark continues to monitor for LNAPL.
- 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 0.7 lb/d during the 2021/2022 reporting period. During the reporting period, the three operating wells (1-SVE-2, 1-SVE-3, and 1-SVE-7) showed an overall decrease in well head PID concentrations. The PID readings from well 1-SVE-7 decreased by approximately 160 ppm between June 2021 and March 2022. These decreases indicate a significant improvement in subsurface soil vapor quality.

4.2 Recommendations

Olean Gateway LLC intends to submit a separate request for SVE system discontinuance in accordance with the SMP.

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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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
Ollean Redevelopment Site 1 (C905031)
Ollean, New York

Date	Inspector's Initials	W5						W9						W10						W-26						W27					
		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	Y	18.61	18.74	0.13	0	N	N	NA	19.1	0	0	N	Y	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	Y	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	Y	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	Y	17.4	18.8	1.4	0.75	N	Y	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	Y	17.92	18.81	0.22	0	N	N	NA	18.79	0	0	N
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	Y	19.01	20.20	1.19	0.25	N	N	NA	19.99	0	0	N
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	Y	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	Y	20.95	21.19	0.24	0	N	Y	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	Y	21.55	21.89	0.34	0	N	Y	22.65	22.78	0.13	0	N
10/29/20	CWE	N	NA	26.06	0	71.25	NA	Y	22.41	22.51	0.1	0	N	Y	22.79	23.06	0.27	0	N	Y	21.72	22.00	0.28	0	N	Y	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	Y	24.10	24.51	0.41	0	N	Y	22.24	22.30	0.06	0	N
12/17/20	CFD	Y	24.88	24.90	0.02	71.25	NA	Y	19.96	20.10	0.14	0.25	N	Y	22.19	22.20	0.01	0.1	N	Y	21.41	21.60	0.19	0.25	N	Y	22.08	22.15	0.07	0	N
1/21/21	CWE	N	NA	23.10	0	75.25	NA	Y	19.95	20.00	0.05	0	N	N	NA	20.55	0	0	N	Y	19.49	19.69	0.2	0	N	Y	20.10	20.31	0.21	0	N
2/25/21	CWE	N	NA	24.75	0	75.25	NA	Y	21.03	21.23	0.2	0	N	N	NA	21.51	0	0	N	Y	20.59	20.80	0.21	0	N	Y	21.59	21.65	0.06	0	N
3/25/21	CWE	N	NA	23.51	0	75.25	NA	Y	20.14	20.21	0.07	0	N	N	NA	20.73	0	0	N	Y	19.56	19.70	0.14	0	N	Y	20.34	20.61	0.27	0	N
4/12/21	CWE	N	NA	23.15	0	75.25	NA	Y	19.75	19.87	0.12	0	N	N	NA	20.25	0	0	N	Y	19.21	19.40	0.19	0	N	Y	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	Y	18.71	18.82	0.22	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	Y	17.61	17.82	0.21	0	N	Y	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	Y	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	Y	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	Y	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	Y	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	Y	17.50	17.65	0.15	0	N	Y	18.12	18.20	0.08	0	N
Quantity of LNAPL Recovered Since COC						75.25 gal	Quantity of LNAPL Recovered Since COC						2.6 gal	Quantity of LNAPL Recovered Since COC						10.3 gal	Quantity of LNAPL Recovered Since COC						1.5 gal				
Quantity of LNAPL Recovered in Reporting Period						0.0 gal	Quantity of LNAPL Recovered in Reporting Period						0.0 gal	Quantity of LNAPL Recovered in Reporting Period						0.0 gal	Quantity of LNAPL Recovered in Reporting Period						0.0 gal				

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	Description
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 4/11/17	W32, W31, W7A no LNAPL detected
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)	9/2/2015 & 9/3/2015		8/9/2016		12/14/2016		5/16 to 5/18/17		12/20 to 12/22/17		6/13/2018		12/19 to 12/20/18		7/9 to 7/10/19		6/16 to 6/18/20		6/27/2021					
				Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)			
WCMW-15	1	GWQM	1429.28	21.60	1407.68	22.81	1406.47	--	--	18.11	1411.17	20.68	1408.60	19.75	1409.53	17.28	0	1412.00	18.17	0	1411.11	19.72	0	1409.56	20.50	0	1408.78
W3	1	GWQM	1424.64	17.66	1406.98	18.75	1405.89	--	--	14.66	1409.98	16.95	1407.69	16.00	1408.64	14.95	0	1409.69	--	--	--	16.05	0	1408.59	16.61	0	1408.03
W4	1	GWQM	1425.06	See Note 1	--	19.40	1405.66	--	--	15.37	1409.69	buried		16.65	1408.41	15.61	0	1409.45	--	--	--	16.71	0	1408.35	17.25	0	1407.81
W5	1	LNAPL	1432.25	21.11	1405.05	--	--	--	--	--	--	--	--	--	--	20.97	0	1411.28	--	--	--	22.39	0	1409.86	23.09	0.02	1409.18
W7A	1	LNAPL	1425.25	--	--	--	--	--	--	--	--	--	--	--	--	15.75	0	--	16.08	0	--	16.96	0	1408.29	17.54	0	1407.71
W9	1	LNAPL	1428.75	21.20	1407.75	--	--	--	--	--	--	--	--	--	--	17.83	0	1410.92	18.16	0	1410.59	19.10	0	1409.65	20.14	0.24	1408.82
W10	1	LNAPL	1429.39	21.80	1407.76	--	--	--	--	--	--	--	--	--	--	18.24	0	1411.15	18.70	0	1410.69	19.70	0	1409.69	20.41	0	1408.98
W11	1	GWQM	1426.61	19.98	1406.63	20.84	1405.77	--	--	16.68	1409.93	18.75	1407.86	17.35	1409.26	16.98	0	1409.63	17.13	0	1409.48	17.40	0	1409.21	--	--	--
W26	1	LNAPL	1427.57	20.98	1407.23	--	--	--	--	--	--	--	--	19.30	1408.79	17.53	0.03	1410.07	17.62	0	1409.95	19.76	0	1407.81	19.93	0.64	1408.20
W27	1	LNAPL	1429.5	21.36	1408.23	--	--	--	--	--	--	--	--	--	--	17.81	0	1411.69	18.70	0	1410.8	19.68	0	1409.82	20.70	0.25	1409.02
W30	1	GWQM	1425.72	19.70	1406.02	20.65	1405.07	--	--	16.45	1409.27	18.76	1406.96	17.95	1407.77	16.70	0	1409.02	15.91	0	1409.81	18.00	0	1407.72	18.58	0	1407.14
W31	1	GWQM	1429.1	--	--	22.56	1406.54	--	--	17.80	1411.30	20.32	1408.78	19.45	1409.65	18.04	0	1411.06	18.50	0	1410.6	19.43	0	1409.67	20.12	0	1408.98
W32	1	GWQM	1429.31	--	--	--	--	--	--	--	--	--	--	--	--	18.00	0	1411.31	17.81	0	1411.5	19.45	0	1409.86	20.19	0	1409.12

Notes:
 Depth to water from top of well riser.
 1) Wells were inaccessible due to construction activities
 2) W5 well riser 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:
 NA = Not available
 -- = not measured

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



TABLE 3
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS

OLEAN REDEVELOPMENT SITE 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Data																						
		W3																						
		09/04/08	11/10/09	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	
Volatile Organic Compounds (ug/L)																								
1,2,4-Trimethylbenzene	5	36.5	25	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	
1,2-Dichlorobenzene	3	2	1.2	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	
1,3,5-Trimethylbenzene	5	8.8	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	
1,4-Dichlorobenzene	3	2.2	1.4	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	
Acetone	50	6.1	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene	1	15.5	16.4	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	
Chlorobenzene	5	9.9	6.9	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	
Cyclohexane	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	14.4	NA	ND	ND	ND	ND	10.4	33.2	ND	2.6 J	9.3 J	41	
Ethylbenzene	5	5.1	4.9	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	
m&p-Xylene	--	16.1	17.1	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	
Methylcyclohexane	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.34	NA	NA	ND	ND	ND	ND	20.2	ND	ND	4.8 J	30	
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
n-Propylbenzene	5	2.3	1.9	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	
o-Xylene	--	27.3	22.4	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	
sec-Butylbenzene	5	ND	0.4	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	
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	5	2.1	1.7	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	
Total xylenes	5	43.5	39.5	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	
Total VOCs	--	177	148	115	157	105	190	107	57	67	61	47	38	2.9	4.4	3.1	ND	103	135	ND	7.9	47	209	
Total TICs	--	NA	184	58	235	83	189	78	5.7	44	114	41	NA	ND	ND	8.3	0.47	51	53	41	ND	9.0	45	
Semi-Volatile Organic Compounds (ug/L)																								
Di-n-butyl phthalate	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	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	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4
Phenanthrene	50	0.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2 J F2 B	ND	0.15
Phenol	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total SVOCs	--	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND	1.6
Total TICs	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	361	159	ND	72	144	52	285	272	174	

Notes:

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- 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.
- Well MCMW15 was "dry" for the September 2015 sampling event.
- Well W4 was buried for the December 2017 sampling event.
- 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.
 "--" = 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.
 F2 = MS/MSD RPD exceeds control limit
 B = Compound was found in the blank and sample.

BOLD = Analytical result exceeds individual GWQS/GV.

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



TABLE 3
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS

OLEAN REDEVELOPMENT SITE 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Date																	
		W4																	
		09/04/08	11/04/09	08/13/10	11/10/10	02/18/11	05/19/11	08/18/11	11/17/11	02/23/12	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
Volatile Organic Compounds (ug/L)																			
1,2,4-Trimethylbenzene	5	19.5	10.2	1.3 J	11.9	6.3	9.4	0.34 J	0.6 J	3.1	0.62	ND	ND	NA	1.65	ND	ND	ND	7.1
1,2-Dichlorobenzene	3	2.3	2.1	0.96 J	2.2	1.6	2.2	0.83 J	0.9 J	1.3	ND	ND	ND	NA	ND	ND	ND	ND	1.8
1,3,5-Trimethylbenzene	5	7	2.9	0.34 J	3.5	1.8	2.4	ND	ND	0.69	ND	ND	ND	NA	ND	ND	ND	ND	1.1
1,4-Dichlorobenzene	3	1.4	1.3	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
Acetone	50	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	12
Benzene	1	0.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Chlorobenzene	5	6.3	5.1	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
Cyclohexane	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	6.5	NA	15	8.4	24	26	29
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
m&p-Xylene	--	0.53	0.31	ND	0.33	ND	ND	ND	ND	ND	0.53	ND	ND	NA	ND	ND	ND	ND	ND
Methylcyclohexane	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	24.1	4.7	16	20	32
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
o-Xylene	--	0.84	0.54	ND	0.6	ND	0.51	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
sec-Butylbenzene	5	1.2	0.9	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
tert-Butylbenzene	5	ND	0.47	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
Toluene	5	0.45	ND	ND	ND	ND	0.43	0.53 J	ND	0.31	0.35	ND	ND	NA	ND	ND	ND	ND	ND
Total xylenes	5	1.4	0.85	ND	0.92	ND	ND	ND	ND	0.22	0.53	ND	ND	NA	ND	ND	ND	ND	ND
Total VOCs	--	51	25	7.7	27	17	25	7.2	6.7	15	2.9	3.8	12	NA	47	13	40	46	89
<i>Total TICs</i>	--	<i>NA</i>	<i>144</i>	<i>25</i>	<i>216</i>	<i>37</i>	<i>157</i>	<i>11</i>	<i>ND</i>	<i>57</i>	<i>79</i>	<i>20</i>	<i>41</i>	<i>NA</i>	<i>80</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>54</i>
Semi-Volatile Organic Compounds (ug/L)																			
Di-n-butyl phthalate	--	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	ND	NA	ND	ND
Fluoranthene	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	0.09 J
Fluorene	50	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	0.7 J H	NA	ND	0.7
Naphthalene	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	ND	NA	ND	0.26
Phenanthrene	50	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	ND	4.4 J B	ND	0.22
Phenol	--	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND
Total SVOCs	--	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	0.70	4.4	ND	1.3
<i>Total TICs</i>	--	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>279</i>	<i>6128</i>	<i>NA</i>	<i>309</i>	<i>211</i>	<i>324</i>	<i>277</i>	<i>113</i>

Notes:

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- 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.
- Well MCMW15 was "dry" for the September 2015 sampling event.
- Well W4 was buried for the December 2017 sampling event.
- 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.
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 F2 = MS/MSD RPD exceeds control limit
 B = Compound was found in the blank and sample.

BOLD = Analytical result exceeds individual GWQS/GV.

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



TABLE 3
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS

OLEAN REDEVELOPMENT SITE 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Date													
		W7A		W11											
		06/18/20	06/28/21	09/04/08	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)															
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	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	ND
1,4-Dichlorobenzene	3	3.3	5	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	--	7.4	1.1 J	NA	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	NA	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<i>Total TICs</i>	--	56	82	NA	29	NA	ND	52	0.53	0.92	ND	1.6	ND	9.4	ND
Semi-Volatile Organic Compounds (ug/L)															
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	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND
Fluorene	50	ND	0.26	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	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total SVOCs	--	0.93	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38	3.5	0.9
<i>Total TICs</i>	--	193	106	NA	ND	ND	ND	ND	15	74	25	24	94	362	213

Notes:

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- 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.
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TABLE 3
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS

OLEAN REDEVELOPMENT SITE 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Date												
		W30												
		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
Volatile Organic Compounds (ug/L)														
1,2,4-Trimethylbenzene	5	0.85	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
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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	0.32	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
Cyclohexane	--	ND	5.93	NA	6.72	ND	ND	ND	5.25	ND	ND	7.2 J	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	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
Methylcyclohexane	--	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J
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	--	0.32	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
tert-Butylbenzene	5	0.63	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
Total xylenes	5	1.11	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
Total TICs	--	128	60	NA	64	ND	23	2.2	48	92	ND	ND	ND	4.8
Semi-Volatile Organic Compounds (ug/L)														
Di-n-butyl phthalate	--	NA	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
Fluorene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	ND	0.1
Naphthalene	10	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4 J B	0.73 J F1 B	ND
Phenol	--	NA	ND	ND	ND	ND	ND	ND	ND	ND	4.9 J	ND	ND	ND
Total SVOCs	--	NA	ND	ND	ND	ND	ND	ND	ND	ND	5.3	2.4	0.73	0
Total TICs	--	NA	ND	ND	ND	15	142	9.4	21	145	2,818	322	148	9.2

Notes:

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- 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.
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TABLE 3
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS

OLEAN REDEVELOPMENT SITE 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Date																					
		W31								WCMW15								W10		W27		W32	
		08/11/16	05/18/17	12/20/17	06/13/18	12/19/18	06/26/19	06/16/20	06/28/21	09/03/08	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	ND	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	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	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	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	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	--	24.8	15.6	10.1	12.8	ND	11	11	2.7 J	NA	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	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	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	--	38.4	47.5	29.7	39.8	9.7	34	37	21	NA	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	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	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	ND	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	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	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	--	76	71	44	58	10	45	48	27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	--	234	175	94	210	82	28	42	51	ND	ND	ND	1.2	ND	12	ND	ND	ND	ND	35	ND	96	879
Semi-Volatile Organic Compounds (ug/L)																							
Di-n-butyl phthalate	--	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND
Fluoranthene	50	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	ND
Fluorene	50	ND	ND	ND	ND	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	ND	ND	0.42 J B	ND	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	0.07 J	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	2.7 J B	ND	3.4 J B	ND	3.2 J B	3.1 J B
Phenol	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total SVOCs	--	ND	ND	ND	ND	ND	2.7	0.62	1	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	3.4	ND	3.2	3.1
Total TICs	--	197	76	5.7	336	115	317	199	45	NA	13	16	4.6	ND	28	65	271	295	309	200	256	565	732

Notes:

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.
- 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.
- Well MCMW15 was "dry" for the September 2015 sampling event.
- Well W4 was buried for the December 2017 sampling event.
- 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.
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TABLE 4
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - METALS

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Date							
		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
Metals (ug/L)									
Arsenic (total)	25	7	ND	ND	ND	ND	ND	17	8.06
Arsenic (dissolved)	25	NA	NA	NA	NA	NA	NA	NA	3.49
Lead	25	<3.0	ND	ND	10.6	ND	ND	ND	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.

09/04/08 = Dates highlighted in blue indicate samples collected pre-remediation; all other sampling events occurred post-remediation.



TABLE 4
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - METALS

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and 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
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
Arsenic (dissolved)	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.81
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

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
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - METALS**

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

Parameter ¹	GWQS/GV ²	Sample Location and Date															
		W7A ⁴		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
Metals (ug/L)																	
Arsenic (total)	25	ND	ND	ND	6.8	ND	ND	10.9	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
Lead	25	ND	ND	ND	11.8	ND	ND	12	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.
3. Well W-4 was buried for the December 2017 sampling event.
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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
2008-2021 GROUNDWATER ANALYTICAL SUMMARY - METALS

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 1
OLEAN, NEW YORK

Parameter ¹	GWQS/GV ²	Sample Location and Date																
		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	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	ND	ND	ND	ND	ND	ND	35	15	16.9	<3.0	ND	ND	15.8	ND	13 J	ND
Arsenic (dissolved)	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.71	NA	NA	NA	NA	NA	NA	NA
Lead	25	NA	ND	ND	ND	ND	3.3 J	ND	ND	3.2 J	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:

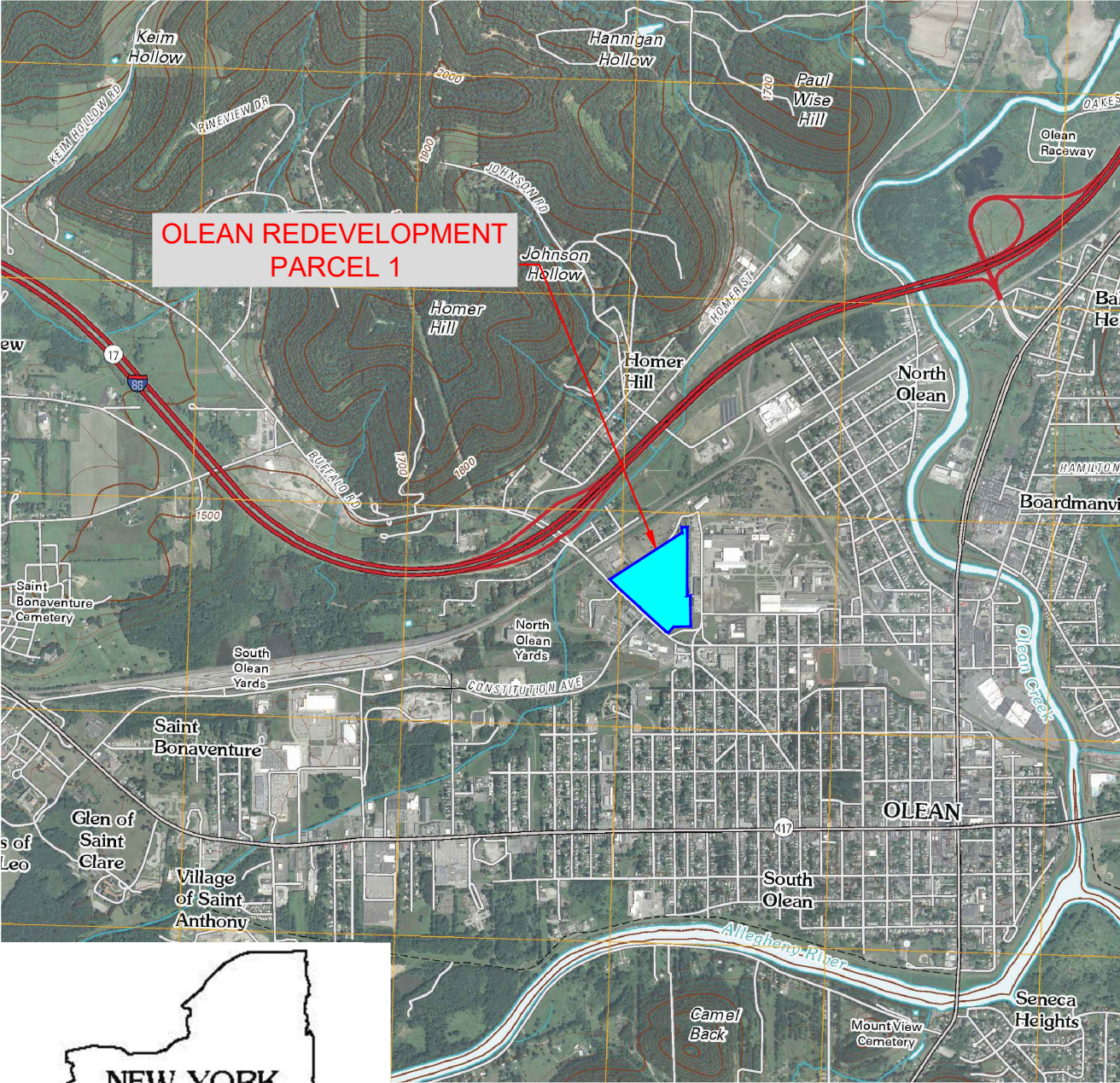
- ND = Parameter not detected above laboratory detection limit.
- NA = Not analyzed
- J = Approximate value less than reporting limit but greater than or equal to method detection limit.

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

FIGURES

FIGURE 1

F:\CAD\TurnKey\Olean Gateway\2022 PRR\Figure 1- Site Location and Vicinity\ORP1.dwg, 3/28/2022 2:58:51 PM



**OLEAN REDEVELOPMENT
PARCEL 1**



BASE MAP USGS OLEAN NY QUADRANGLE 2010
APPROXIMATE SCALE 1" = 2,500'



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

PROJECT NO.: 0283-017-001

DATE: MARCH 2022

DRAFTED BY: RFL

SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

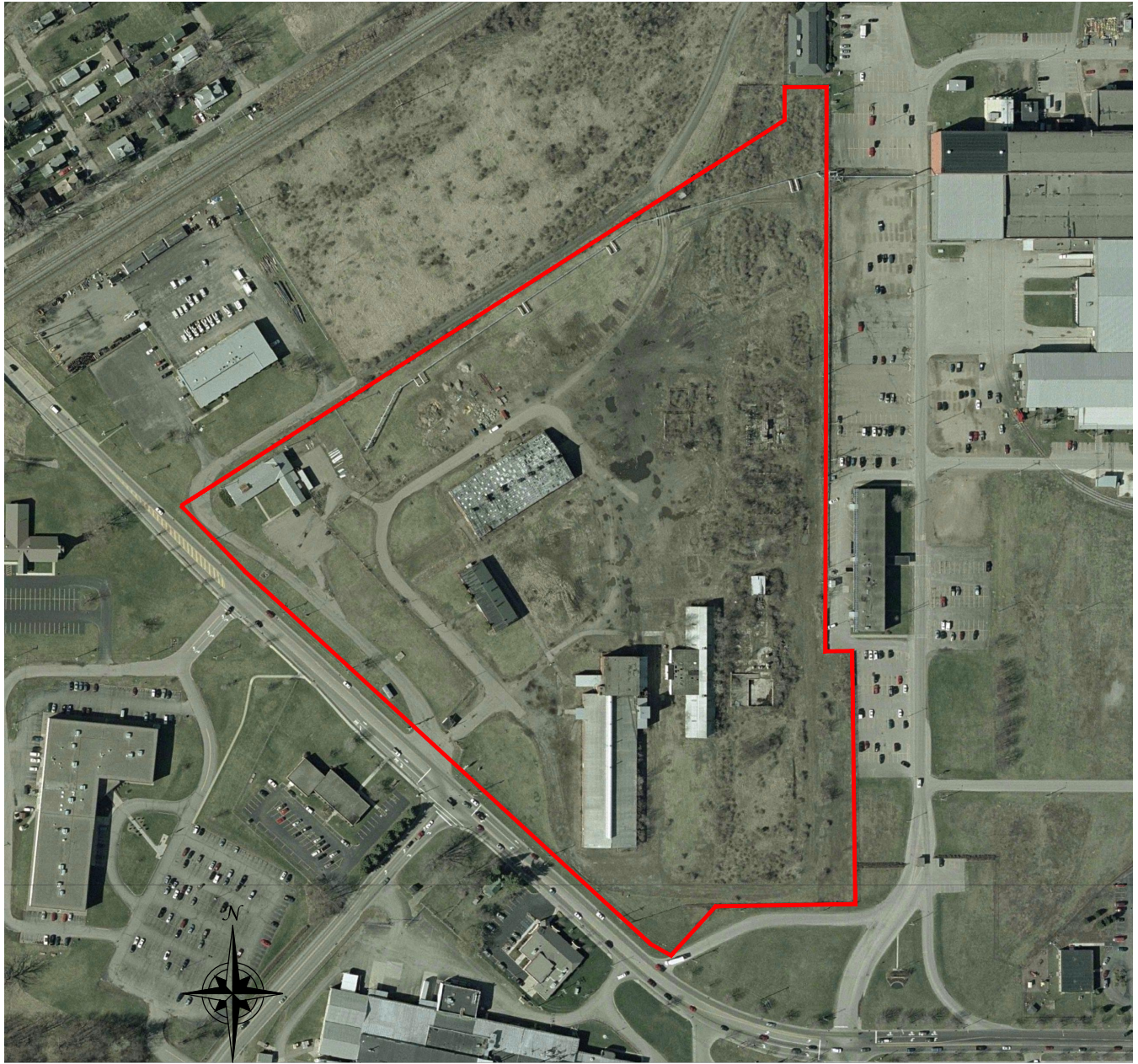
OLEAN REDEVELOPMENT SITE 1
NYSDEC BCP SITE NO. C905031
OLEAN, NEW YORK

PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC

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FIGURE 2



APPROXIMATE SCALE 1" = 300'

— Property Boundary (Approximate)

Base Image NYS GIS Clearinghouse 2002



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PROJECT NO.: 0283-017-001

DATE: MARCH 2022

DRAFTED BY: RFL

SITE PLAN PRE-REMEDATION

PERIODIC REVIEW REPORT

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

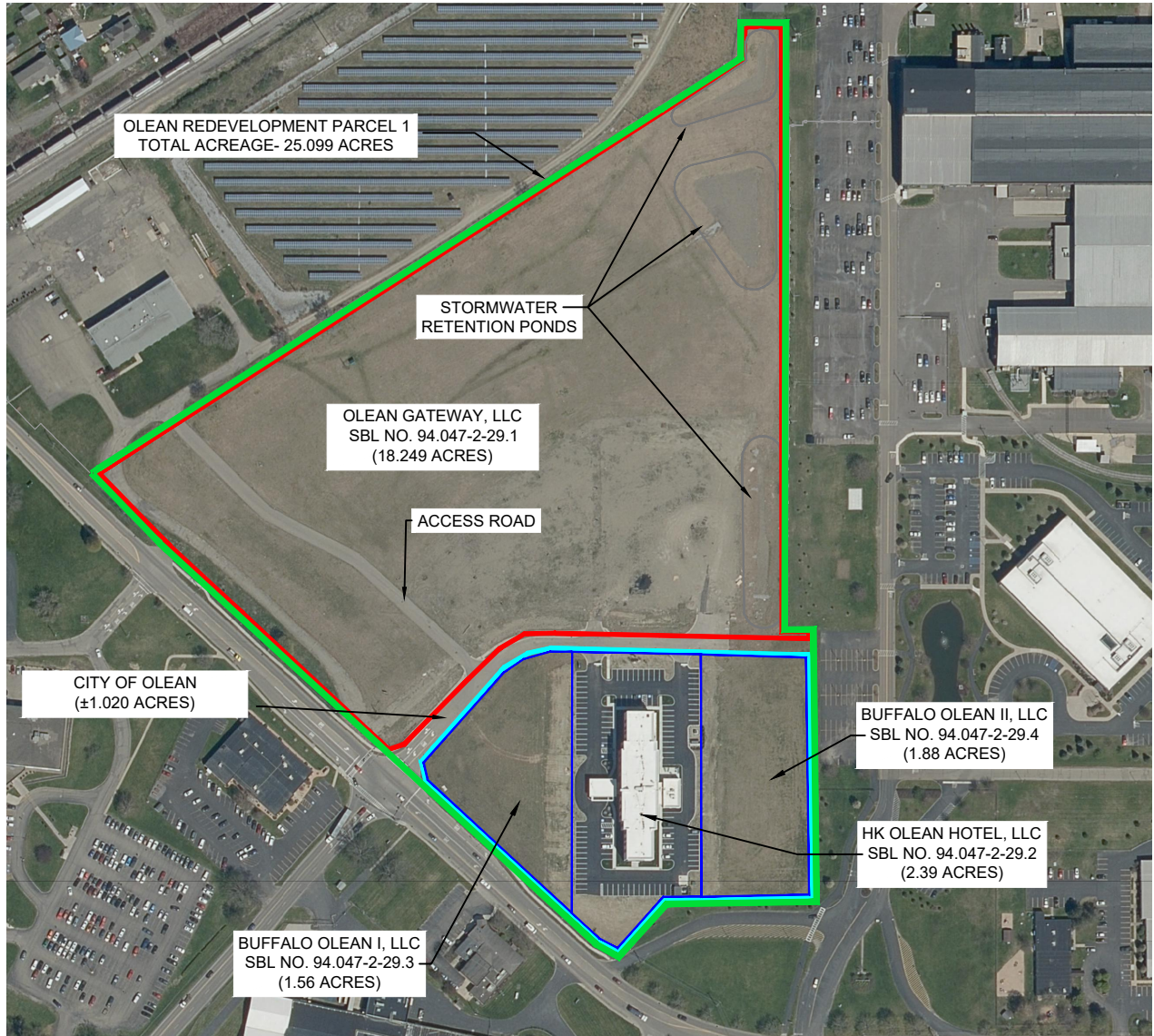
PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL, LLC

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FIGURE 3



LEGEND:

- 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'



Base Image NYS Clearinghouse 2021



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PROJECT NO.: 0283-017-001

DATE: MARCH 2022

DRAFTED BY: CMC/RFL

SITE PLAN POST-REMEDIAL & POST-REDEVELOPMENT

PERIODIC REVIEW REPORT

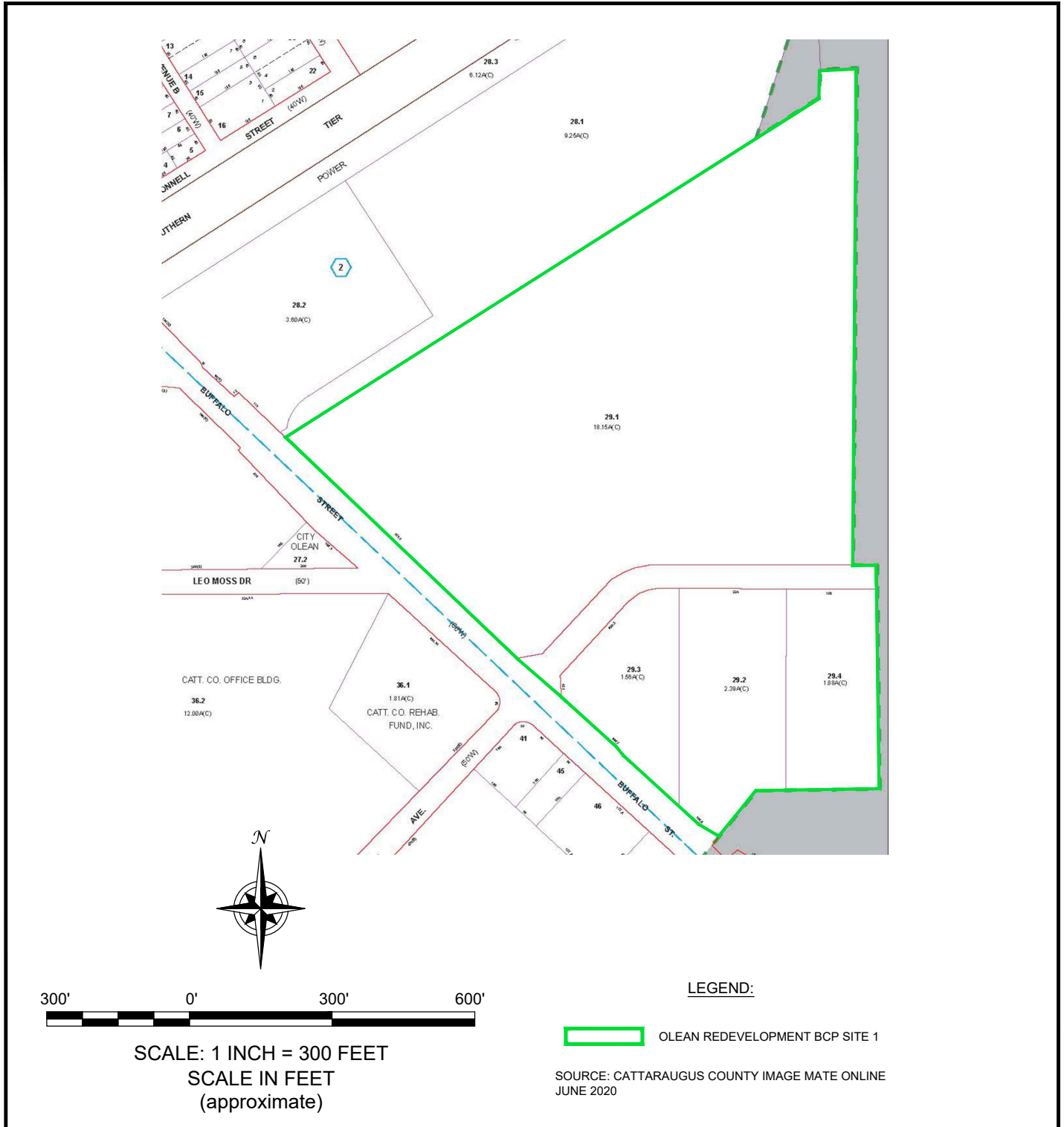

OLEAN REDEVELOPMENT PARCEL 1
NYSDEC BCP SITE NO. C905031
OLEAN, NEW YORK

PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC

DISCLAIMER: PROPERTY OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC. & 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.

FIGURE 4






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

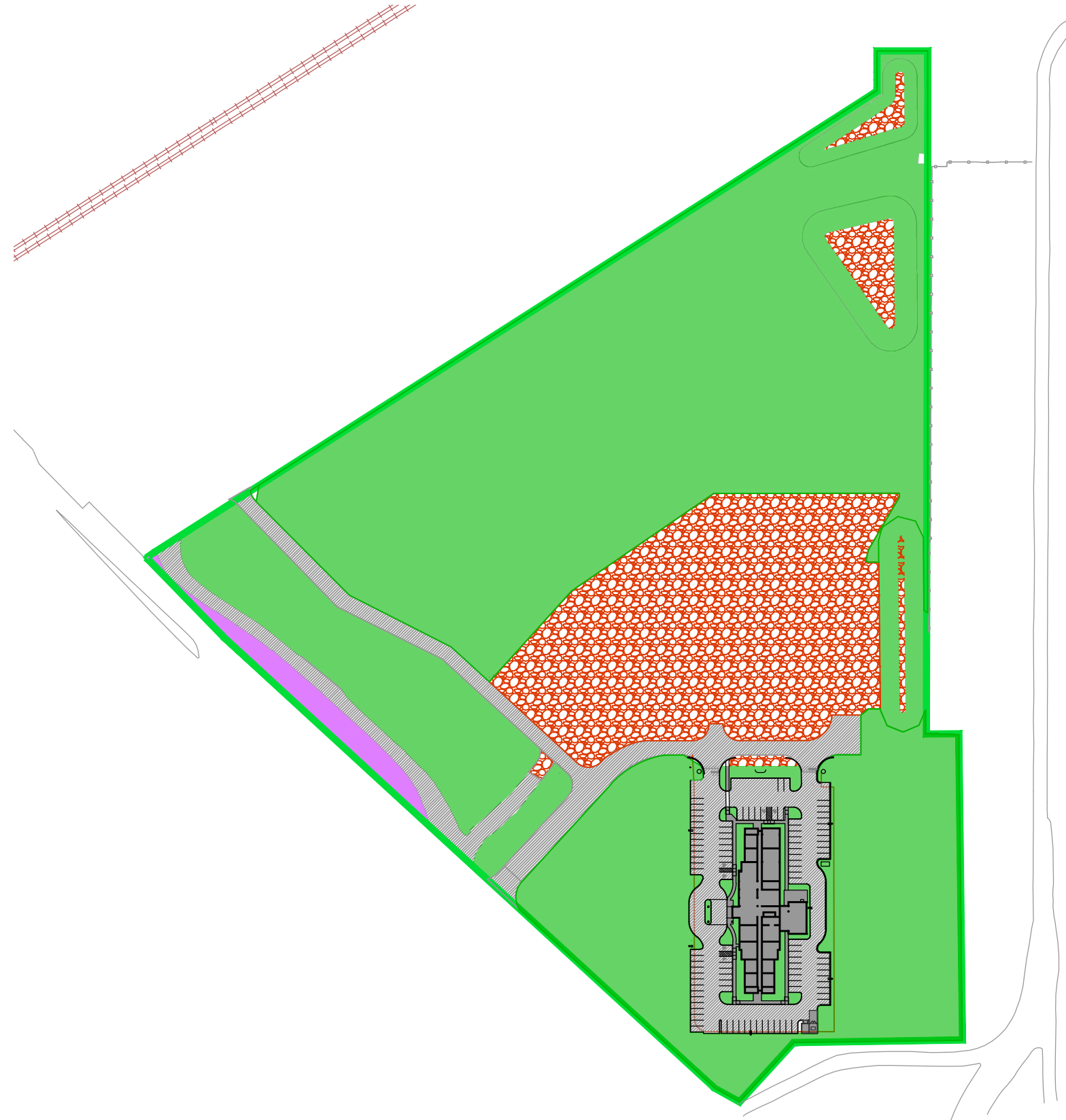
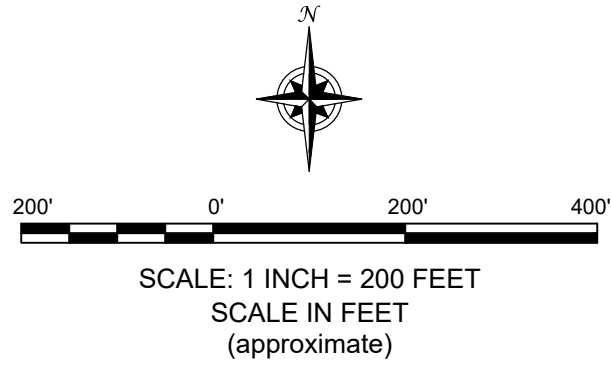
PROJECT NO.: 0283-017-001
DATE: JUNE 2020
DRAFTED BY: RFL

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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- LEGEND:**
-  BCP SITE 1 PARCEL BOUNDARY
 -  ASPHALT COVER
 -  CRUSHED CONCRETE/AGGREGATE COVER
 -  VEGETATED SOIL COVER
 -  EXISTING SOIL COVER



SITE COVER SYSTEM

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT SITE 1
NYSDEC BCP SITE NO. C905031
OLEAN, NEW YORK
PREPARED FOR

OLEAN GATEWAY LLC & HK OLEAN HOTEL, LLC

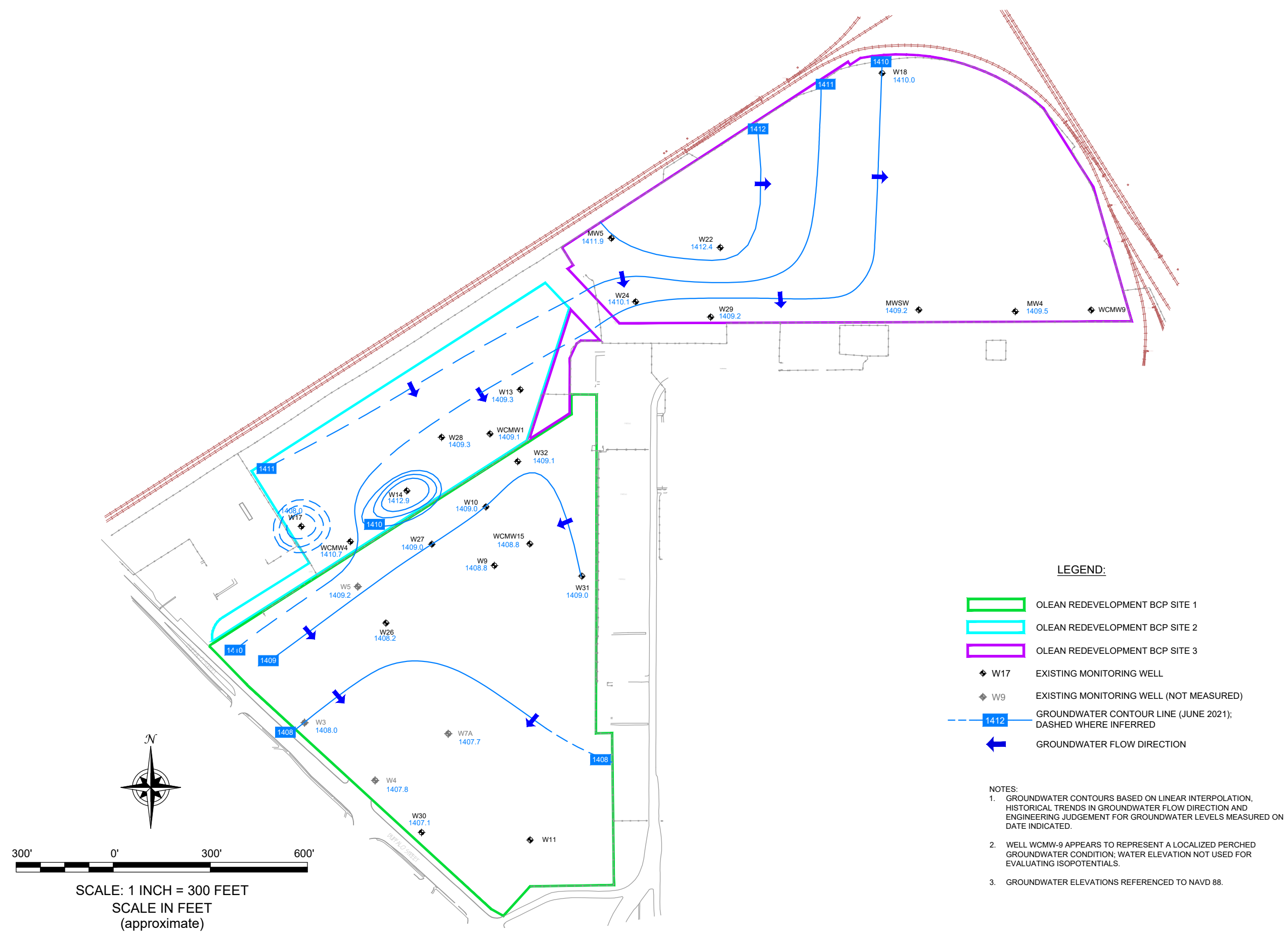


2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218,
(716) 856-0599

JOB NO.: 0283-017-001

FIGURE 5

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LEGEND:

- OLEAN REDEVELOPMENT BCP SITE 1
- OLEAN REDEVELOPMENT BCP SITE 2
- OLEAN REDEVELOPMENT BCP SITE 3
- W17 EXISTING MONITORING WELL
- W9 EXISTING MONITORING WELL (NOT MEASURED)
- 1412 GROUNDWATER CONTOUR LINE (JUNE 2021); DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

- NOTES:**
1. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION, HISTORICAL TRENDS IN GROUNDWATER FLOW DIRECTION AND ENGINEERING JUDGEMENT FOR GROUNDWATER LEVELS MEASURED ON DATE INDICATED.
 2. WELL WCMW-9 APPEARS TO REPRESENT A LOCALIZED PERCHED GROUNDWATER CONDITION; WATER ELEVATION NOT USED FOR EVALUATING ISOPOTENTIALS.
 3. GROUNDWATER ELEVATIONS REFERENCED TO NAVD 88.

GROUNDWATER ISOPOTENTIAL MAP (JUNE 2021)

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 1
NYSDEC BCP SITE NO. C905031
OLEAN, NEW YORK
PREPARED FOR
OLEAN GATEWAY LLC & HK HOTEL LLC

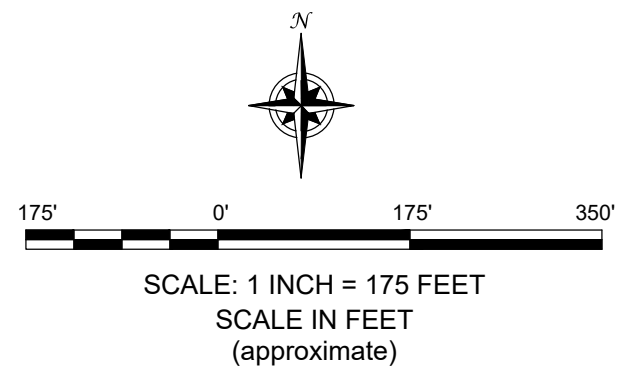
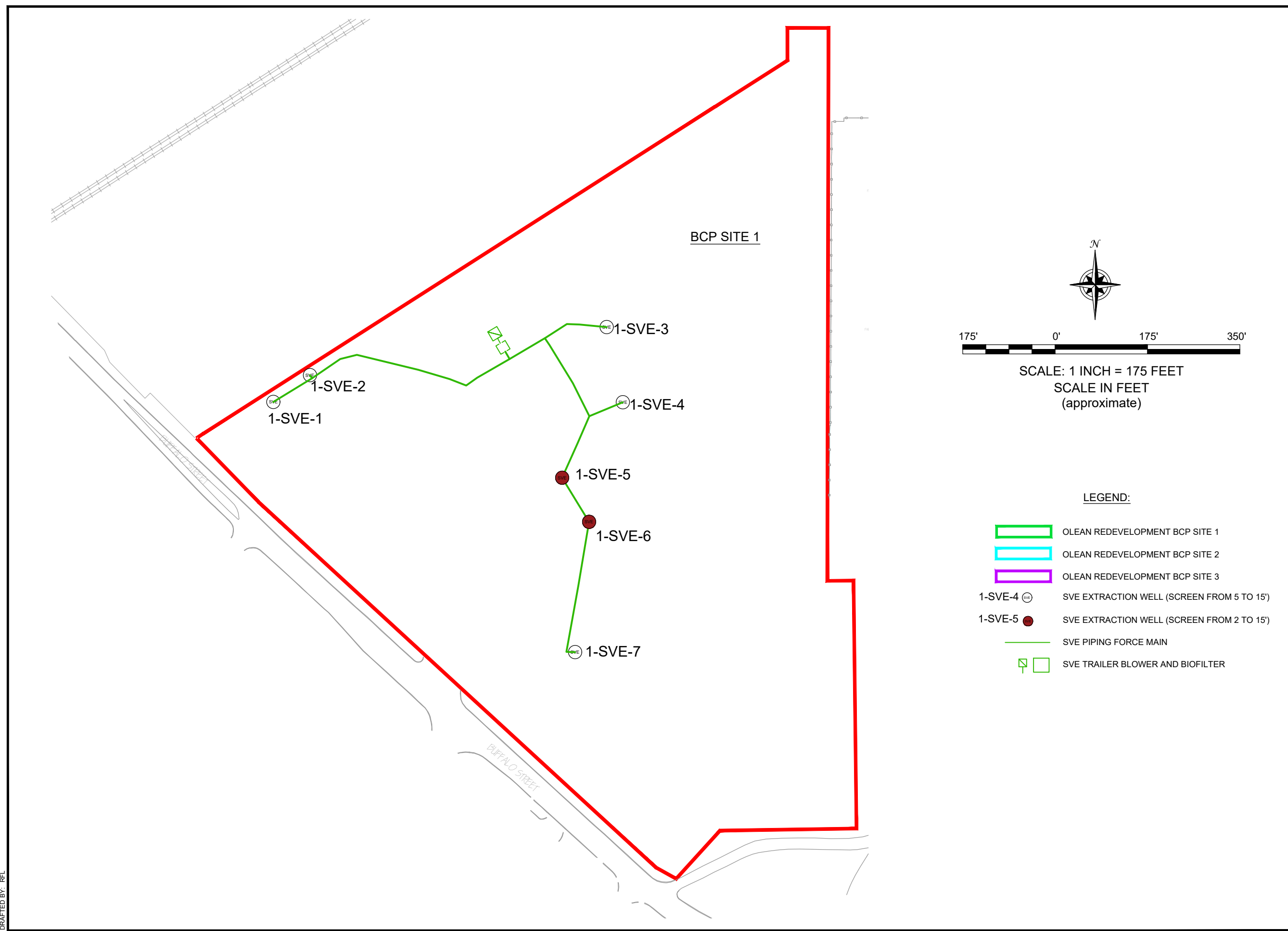









2556 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218.
(716) 856-0599

JOB NO.: 0283-017-001

FIGURE 6

DISCLAIMER: PROPERTY OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC. 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 ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.



- LEGEND:**
-  OLEAN REDEVELOPMENT BCP SITE 1
 -  OLEAN REDEVELOPMENT BCP SITE 2
 -  OLEAN REDEVELOPMENT BCP SITE 3
 - 1-SVE-4  SVE EXTRACTION WELL (SCREEN FROM 5 TO 15')
 - 1-SVE-5  SVE EXTRACTION WELL (SCREEN FROM 2 TO 15')
 -  SVE PIPING FORCE MAIN
 -  SVE TRAILER BLOWER AND BIOFILTER

SVE SYSTEM LAYOUT

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 1
NYSDEC BCP SITE NO. C905031
OLEAN, NEW YORK
PREPARED FOR
OLEAN GATEWAY LLC & HK OLEAN HOTEL LLC



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218.
(716) 866-0599

JOB NO.: 0283-017-001

FIGURE 7

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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



Site Details

Site No. C905031

Box 1

Site Name Olean Redevelopment Parcel 1

Site Address: 1404-1406 & 1420 Buffalo Street Zip Code: 14760
 City/Town: Olean
 County: Cattaraugus
 Site Acreage: 25.099

Reporting Period: May 09, 2021 to May 09, 2022

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct?

If NO, include handwritten above or on a separate sheet. | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. | | |
| 5. Is the site currently undergoing development? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Box 2

- | | YES | NO |
|--|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?
Commercial and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

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
<input type="checkbox"/>	<input checked="" type="checkbox"/>

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)

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C905031

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

City of Olean

O&M Plan

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management 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.

-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~~

HK Olean Hotel, LLC

94.047-2-29.2

Landuse Restriction
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
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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- 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.

94.047-2-29.3

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.

-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.

94.047-2-29.4

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.

-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.

~~94.047-2-30~~

Olean Gateway, LLC

94.047-2-29.1

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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-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.

Box 4

Description of Engineering Controls

Parcel

Engineering Control

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~~

94.047-2-29.2

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

94.047-2-29.3

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.

~~94.047-2-30~~

94.047-2-29.1

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.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS
SITE NO. 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

I 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

6/6/22
Date

EC CERTIFICATIONS

Box 7

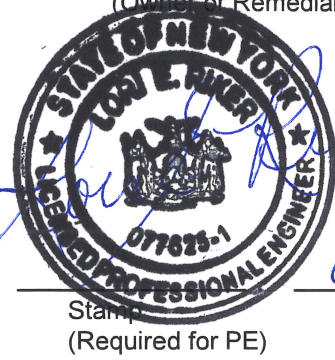
Professional Engineer Signature

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.

I Lori Riker, P.E. at Benchmark Civil/Environmental Engineering & Geology, PLLC
2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218
print name print business address

am certifying as a Professional Engineer for the Owner
(Owner or Remedial Party)

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



6/8/2022
Date

APPENDIX B

SITE PHOTOGRAPHIC LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



CONDITIONS DURING APRIL 12, 2022 SITE INSPECTION

- Photo 1: View along the northern boundary of the Site (looking northeast)
- Photo 2: View of the northern parcel vegetative site cover and belt skimmer (looking south)
- Photo 3: View of SVE trailer and biofilter (looking north)
- Photo 4: View of northern stormwater retention area at northern boundary (looking south)

SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



- Photo 5: Crushed concrete/aggregate cover along the western boundary on Olean Gateway LLC parcel (looking west)
- Photo 6: View of vegetative cover on Buffalo Olean II, LLC parcel in the southwestern portion of the Site (looking south)
- Photo 7: View of entrance road and HK Olean Hotel (looking south)
- Photo 8: View of western face of newly constructed HK Olean Hotel with minimal rutting in vegetative cover area to the west of the building (looking southeast)

SITE PHOTOGRAPHS

Photo 9:



Photo 10:



Photo 11:



Photo 12:



Photo 9: Vegetative cover area south of newly constructed HK Olean Hotel (looking southeast)

Photo 10: View of vegetative cover on parcel Buffalo Olean I, LLC (looking north)

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

Photo 12: View of vegetative cover along Olean Gateway LLC northwestern parcel boundary (looking southeast)

APPENDIX C

GROUNDWATER SAMPLING FIELD FORMS AND ANALYTICAL DATA

Project Name: JRP-1

Date: 6/27/21

Location:

Project No.:

Field Team:

Well No. <u>W3</u>		Diameter (inches): <u>4</u>				Sample Date / Time: <u>6/27/21</u>			
Product Depth (fbTOR):		Water Column (ft): <u>10.77</u>				DTW when sampled:			
DTW (static) (fbTOR): <u>16.61</u>		One Well Volume (gal): <u>7.03</u>				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>27.39</u>		Total Volume Purged (gal): <u>21.10</u>				Purge Method: <u>LOW FLOW</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1320	0 Initial	—	6.88	15.9	914.9	47.7	1.63	-23	CLEAR
1325	1 16.85	7.10	6.86	14.6	1092	26.5	0.87	-24	FAINT ODOR
1336	2 16.85	14.20	6.80	14.0	1165	17.1	0.70	-37	
1335	3 16.85	21.30	6.72	14.4	1186	12.2	—	-43	
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
1345	S1 16.85	26.00	6.86	15.1	1190	11.4	0.78	-47	†
1347	S2 16.85	27.00	6.83	13.7	1174	7.26	0.85	-48	

Well No. <u>W4</u>		Diameter (inches): <u>4</u>				Sample Date / Time: <u>6/27/21</u>			
Product Depth (fbTOR):		Water Column (ft): <u>9.36</u>				DTW when sampled:			
DTW (static) (fbTOR): <u>17.25</u>		One Well Volume (gal): <u>6.11</u>				Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>26.61</u>		Total Volume Purged (gal): <u>18.34</u>				Purge Method: <u>LOW FLOW</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1406	0 Initial	—	7.23	17.1	814.2	88.0	1.08	-27	CLEAR NO
1413	1 20.20	6.20	6.90	15.5	812.0	755	0.62	-46	ODOR
1417	2 20.35	12.40	6.83	14.9	849.2	>1000	0.60	-50	CLEAR TINT
1429	3 20.40	18.60	6.84	14.7	844.7	>1000	1.29	-49	TURBID FAINT ODOR
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
1426	S1 20.51	20.50	6.84	14.7	868.1	>1000	0.74	-49	"
1430	S2 20.53	21.00	6.84	13.7	901.3	>1000	0.92	-48	

REMARKS: W3 MS/MSD BD

Stabilization Criteria

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

Volume Calculation

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

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

Project Name: ORP-1

Date: 6/27/21

Location:

Project No.:

Field Team:

Well No. <u>W14</u>			Diameter (inches): <u>4</u>			Sample Date / Time:			
Product Depth (fbTOR): <u>19.24</u>			Water Column (ft): <u>10.1</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>19.34</u>			One Well Volume (gal): <u>6.59</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>29.44</u>			Total Volume Purged (gal): <u>19.99</u>			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
0	Initial	-							
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
	S1								
	S2								

Well No. <u>W32</u>			Diameter (inches): <u>4</u>			Sample Date / Time: <u>6/27/21 1245</u>			
Product Depth (fbTOR):			Water Column (ft): <u>9.86</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>20.19</u>			One Well Volume (gal): <u>6.44</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>30.05</u>			Total Volume Purged (gal): <u>19.32</u>			Purge Method: <u>LOW FLOW</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1154	0 Initial	-	<u>6.91</u>						
1206	1 23.20	6.50	6.97	16.3	1350	34.3	1.28	16	CLEAR FAINT ODOR
1225	2 24.57	13.00	6.93	16.7	1341	115	2.38	-19	
1236	3 24.63	19.50	6.83	16.5	1278	259	1.18	-12	VERY TURBID
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
1245	S1 25.45	20.50	6.80		1256	150	1.23	-42	
1249	S2 25.51	21.00	6.79		1249	129		-46	

REMARKS: W3 23.09 VERY MINOR UNCL MAY
32.72 ~~PRODUCT~~ NEED TO
SAMPLE
3'-4 1/2' FOR TOP TO TOP OF ATTACHMENT

Volume Calculation

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

Stabilization Criteria

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

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

PREPARED BY:

Project Name: ORP-1

Date: 6/28/21

Location:

Project No.:

Field Team: CS

Well No. <u>W31</u>			Diameter (inches): <u>2</u>			Sample Date / Time: <u>6/28/21 935</u>			
Product Depth (fbTOR):			Water Column (ft): <u>6.57</u>			DTW when sampled: <u>20.15</u>			
DTW (static) (fbTOR): <u>20.12</u>			One Well Volume (gal): <u>1.07</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>26.69</u>			Total Volume Purged (gal): <u>3.21</u>			Purge Method: <u>Low Flow</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
<u>924</u>	0 Initial	—	<u>7.44</u>	<u>15.8</u>	<u>1423</u>	<u>217</u>	<u>1.37</u>	<u>60</u>	<u>CLEAR, PAINT</u> odor
<u>926</u>	1 <u>20.13</u>	<u>1.10</u>	<u>7.43</u>	<u>15.0</u>	<u>1281</u>	<u>33.0</u>	<u>1.55</u>	<u>43</u>	
<u>928</u>	2 <u>20.14</u>	<u>2.20</u>	<u>7.19</u>	<u>14.7</u>	<u>1276</u>	<u>21.2</u>	<u>1.85</u>	<u>18</u>	
<u>930</u>	3 <u>20.15</u>	<u>3.30</u>	<u>7.11</u>	<u>13.5</u>	<u>1271</u>	<u>14.8</u>	<u>1.64</u>	<u>9</u>	
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
<u>935</u>	S1 <u>20.15</u>	<u>4.50</u>	<u>7.05</u>	<u>14.0</u>	<u>1268</u>	<u>16.3</u>	<u>1.75</u>	<u>-18</u>	<u>"</u>
<u>937</u>	S2 <u>20.15</u>	<u>5.00</u>	<u>7.04</u>	<u>13.5</u>	<u>1285</u>	<u>11.1</u>	<u>1.80</u>	<u>-9</u>	<u>"</u>

Well No. <u>W30</u>			Diameter (inches): <u>2</u>			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft): <u>10.92</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>18.58</u>			One Well Volume (gal): <u>1.78</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>29.50</u>			Total Volume Purged (gal): <u>5.34</u>			Purge Method: <u>Low Flow</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
<u>1015</u>	0 Initial	—	<u>7.81</u>	<u>15.3</u>	<u>557.9</u>	<u>84.7</u>	<u>3.21</u>	<u>60</u>	<u>CLEAR, YELLOW</u> TINT
<u>1016</u>	1 <u>18.75</u>	<u>1.80</u>	<u>6.97</u>	<u>14.4</u>	<u>928.2</u>	<u>24.6</u>	<u>1.85</u>	<u>86</u>	<u>NO ODOR</u>
<u>1019</u>	2 <u>18.65</u>	<u>3.60</u>	<u>6.89</u>	<u>14.3</u>	<u>979.1</u>	<u>22.0</u>	<u>1.76</u>	<u>77</u>	<u>CLEAR, PAINT</u> odor
<u>1022</u>	3 <u>18.62</u>	<u>5.40</u>	<u>6.85</u>	<u>14.1</u>	<u>1083</u>	<u>25.3</u>	<u>1.85</u>	<u>71</u>	
4									
5									
6									
7									
8									
9									
10									
Sample Information:									
<u>1026</u>	S1 <u>18.61</u>	<u>6.50</u>	<u>6.79</u>	<u>14.3</u>	<u>1130</u>	<u>19.4</u>	<u>1.31</u>	<u>65</u>	<u>"</u>
<u>1028</u>	S2 <u>18.61</u>	<u>7.25</u>	<u>6.79</u>	<u>13.9</u>	<u>1148</u>	<u>16.7</u>	<u>1.79</u>	<u>63</u>	<u>"</u>

REMARKS:

Note: All water level 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
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Project Name: ORP-1

Date: 6/28/21

Location: _____

Project No.: _____

Field Team: _____

Well No. W7A			Diameter (inches): 1.5 <u>2</u>			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft): <u>13.46</u>			DTW when sampled:			
DTW (static) (fbTOR): <u>17.54</u>			One Well Volume (gal): <u>2.19</u>			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
Total Depth (fbTOR): <u>31.00</u>			Total Volume Purged (gal): <u>6.58</u>			Purge Method: <u>LOW FLOW</u>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1113	0 Initial	—	7.50	18.0	935.9	16.7	0.92	21	CLEAR, WKEY
1116	1 18.14	2.20	7.01	15.0	1204	27.8	0.93	-29	TINT, Faint Odor
1121	2 18.18	4.40	6.96	15.0	1049	24.6	0.88	-42	
1123	3 18.06	6.60	6.96	14.2	1055	36.6		-47	
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
1127	S1 18.01	7.50	6.96	14.5	1077	64.9	1.07	-54	SL. TURBID
1130	S2 17.79	8.50	6.97	14.3	1085	138	1.23	-56	

Well No. W11			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
Total Depth (fbTOR):			Total Volume 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
	0 Initial								
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

COULD NOT LOCATE

REMARKS:

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

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

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

PREPARED BY: _____



EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: ORR-2/1

Project No.:

Client:

Date: 6/27/21

Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
<input type="checkbox"/> pH meter	units	<u>731</u>	Myron L Company Ultra Meter 6P	<input type="checkbox"/> 6213516 <input type="checkbox"/> 6243084 <input type="checkbox"/> 6212375 <input type="checkbox"/> 6243003 <input checked="" type="checkbox"/> 6223973	<u>CS</u>	4.00 7.00 10.01	<u>4.00</u> <u>7.01</u> <u>10.01</u>	
<input type="checkbox"/> Turbidity meter	NTU	<u>734</u>	Hach 2100P or 2100Q Turbidimeter	<input type="checkbox"/> 06120C020523 (P) <input type="checkbox"/> 13120C030432 (Q) <input type="checkbox"/> 17110C062619 (Q) <input checked="" type="checkbox"/> <u>07110C070405</u>	<u>CS</u>	10 NTU verification < 0.4 20 100 800	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
<input type="checkbox"/> Sp. Cond. meter	uS mS	<u>732</u>	Myron L Company Ultra Meter 6P	<input type="checkbox"/> 6213516 <input type="checkbox"/> 6243084 <input type="checkbox"/> 6212375 <input type="checkbox"/> 6243003 <input checked="" type="checkbox"/> 6223973	<u>CS</u>	<u>7000</u> mS @ 25 °C	<u>7000</u>	MIBK response factor = 1.0
<input type="checkbox"/> PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		
<input checked="" type="checkbox"/> Dissolved Oxygen	ppm	<u>730</u>	HACH Model HQ30d	<input type="checkbox"/> 080700023281 <input type="checkbox"/> 100500041867 <input checked="" type="checkbox"/> 140200100319	<u>CS</u>	100% Saturation	<u>100%</u>	
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: CS

DATE: 6/27/21

PROJECT INFORMATION:

Project Name: *077-1*

Project No.:

Client:

Date: *6/20/14*

Instrument Source: BM Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
<input checked="" type="checkbox"/> pH meter	units	<i>908</i>	Myron L Company Ultra Meter 6P	<input type="checkbox"/> 6213516 <input type="checkbox"/> 6243084 <input type="checkbox"/> 6212375 <input type="checkbox"/> 6243003 <input checked="" type="checkbox"/> 6223973	<i>CS</i>	4.00 7.00 10.01	<i>3.97</i> <i>7.01</i> <i>10.01</i>	
<input checked="" type="checkbox"/> Turbidity meter	NTU	<i>913</i>	Hach 2100P or 2100Q Turbidimeter	<input type="checkbox"/> 06120C020523 (P) <input type="checkbox"/> 13120C030432 (Q) <input type="checkbox"/> 17110C062619 (Q) <i>07110C026405 X</i>		10 NTU verification < 0.4 20 100 800	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Sp. Cond. meter	uS mS	<i>909</i>	Myron L Company Ultra Meter 6P	<input type="checkbox"/> 6213516 <input type="checkbox"/> 6243084 <input type="checkbox"/> 6212375 <input type="checkbox"/> 6243003 <input checked="" type="checkbox"/> 6223973	<i>CS</i>	<i>7000</i> mS @ 25 °C	<i>7004</i>	
<input type="checkbox"/> PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
<input checked="" type="checkbox"/> Dissolved Oxygen	ppm	<i>912</i>	HACH Model HQ30d	<input type="checkbox"/> 080700023281 <input type="checkbox"/> 100500041867 <input checked="" type="checkbox"/> 140200100319	<i>CS</i>	100% Saturation	<i>100%</i>	
<input type="checkbox"/> Particulate meter	mg/m ³					zero air		
<input type="checkbox"/> Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY:

DATE:



ANALYTICAL REPORT

Lab Number:	L2134972
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:	07/30/21

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508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2134972-01	W3	WATER	OLEAN, NY	06/27/21 13:45	06/28/21
L2134972-02	W4	WATER	OLEAN, NY	06/27/21 14:26	06/28/21
L2134972-03	W7A	WATER	OLEAN, NY	06/28/21 11:27	06/28/21
L2134972-04	W30	WATER	OLEAN, NY	06/28/21 10:26	06/28/21
L2134972-05	W31	WATER	OLEAN, NY	06/28/21 09:35	06/28/21
L2134972-06	W32	WATER	OLEAN, NY	06/27/21 12:45	06/28/21
L2134972-07	BLIND DUP	WATER	OLEAN, NY	06/27/21 12:00	06/28/21
L2134972-08	TRIP BLANK	WATER	OLEAN, NY	06/28/21 00:00	06/28/21

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

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

L2134972-01, -02, -06, and -07: The Dissolved Metals analysis was received at the laboratory beyond the recommended 24 hour holding time for filtration. The sample was filtered and preserved appropriately.

Semivolatile Organics


The WG1519831-1 Method Blank, associated with L2134972-01, -02, and -07, has TICs detected. The results are qualified with a "B" for any associated samples that have detections of the same TICs.

The WG1520209-1 Method Blank, associated with L2134972-03 through -05, has TICs detected. The results are qualified with a "B" for any associated samples that have detections of the same TICs.

The WG1519831-8/-9 MS/MSD recoveries, performed on L2134972-01, are 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.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 07/30/21

ORGANICS

VOLATILES

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
 Client ID: W3
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/08/21 15:19
 Analyst: LAC

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	2.8		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	21		ug/l	0.50	0.16	1
Toluene	1.9	J	ug/l	2.5	0.70	1
Ethylbenzene	5.6		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	0.72	J	ug/l	2.5	0.70	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
Client ID: W3
Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
Date Received: 06/28/21
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	0.77	J	ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	15		ug/l	2.5	0.70	1
o-Xylene	25		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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.3	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	41		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	30		ug/l	10	0.40	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
 Client ID: W3
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
 Date Received: 06/28/21
 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	44.8	J	ug/l			1
Unknown Benzene	2.63	J	ug/l			1
Propane, 2-(ethylthio)-	3.29	NJ	ug/l			1
Pentane, 3-methyl-	3.76	NJ	ug/l			1
Unknown Benzene	2.43	J	ug/l			1
Benzene, 1,2,4,5-tetramethyl-	2.14	NJ	ug/l			1
Unknown	3.76	J	ug/l			1
Butane, 2-Methyl-	2.20	NJ	ug/l			1
Unknown Cycloalkane	3.64	J	ug/l			1
Unknown Cyclopentane	2.85	J	ug/l			1
Cyclopentane, Methyl-	18.1	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	107		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/08/21 15:42
 Analyst: MKS

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	5.2		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	1.8	J	ug/l	2.5	0.70	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
Client ID: W4
Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
Date Received: 06/28/21
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	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	12		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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	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
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	29		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	32		ug/l	10	0.40	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 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	53.7	J	ug/l			1
Unknown	4.15	J	ug/l			1
Cyclohexane, 1,1-dimethyl-	4.51	NJ	ug/l			1
Unknown	3.98	J	ug/l			1
Unknown	4.09	J	ug/l			1
Unknown	9.20	J	ug/l			1
Unknown Cycloalkane	4.90	J	ug/l			1
Butane, 2-Methyl-	5.05	NJ	ug/l			1
Unknown Cycloalkane	3.48	J	ug/l			1
Indane	3.75	NJ	ug/l			1
Unknown Cyclohexane	10.6	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	105		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
Client ID: W7A
Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/08/21 16:05
Analyst: MKS

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	11		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	1.2	J	ug/l	2.5	0.70	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
Client ID: W7A
Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	0.92	J	ug/l	2.5	0.70	1
1,4-Dichlorobenzene	5.0		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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	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
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	1.1	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	6.7	J	ug/l	10	0.40	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
 Client ID: W7A
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
 Date Received: 06/28/21
 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	81.5	J	ug/l			1
Unknown	10.4	J	ug/l			1
Pentane, 2,4-dimethyl-	3.83	NJ	ug/l			1
Unknown	7.61	J	ug/l			1
Cyclohexane, 1,1-dimethyl-	12.8	NJ	ug/l			1
Unknown Cyclopentane	13.8	J	ug/l			1
Unknown Cyclohexane	4.84	J	ug/l			1
Unknown	4.09	J	ug/l			1
Unknown Cycloalkane	7.16	J	ug/l			1
Unknown Cyclohexane	6.17	J	ug/l			1
Pentane, 2,3-dimethyl-	10.8	NJ	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	106		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
 Client ID: W30
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/08/21 16:28
 Analyst: MKS

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	1.5	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	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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
Client ID: W30
Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
Date Received: 06/28/21
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	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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	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
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	0.55	J	ug/l	10	0.40	1

Tentatively Identified Compounds

Total TIC Compounds	4.84	J	ug/l			1
Pentane, 2,3-dimethyl-	1.05	NJ	ug/l			1
Unknown	1.51	J	ug/l			1
Cyclohexane, 1,1-dimethyl-	2.28	NJ	ug/l			1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
 Client ID: W30
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	107		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
 Client ID: W31
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/08/21 16:51
 Analyst: MKS

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	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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
Client ID: W31
Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
Date Received: 06/28/21
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	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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	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
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	2.7	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	21		ug/l	10	0.40	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
 Client ID: W31
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
 Date Received: 06/28/21
 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	50.7	J	ug/l			1
Unknown Benzene	2.78	J	ug/l			1
Pentane, 2,3-dimethyl-	2.86	NJ	ug/l			1
Unknown	6.27	J	ug/l			1
Unknown Benzene	3.75	J	ug/l			1
Unknown Cyclohexane	4.94	J	ug/l			1
Cyclohexane, 1,1-dimethyl-	4.41	NJ	ug/l			1
Pentane, 3-methyl-	2.98	NJ	ug/l			1
Unknown Cyclopentane	6.89	J	ug/l			1
Unknown Cyclohexane	9.93	J	ug/l			1
Unknown Cycloalkane	5.85	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	104		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/08/21 22:00
 Analyst: NLK

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	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	20		ug/l	0.50	0.16	1
Toluene	1.8	J	ug/l	2.5	0.70	1
Ethylbenzene	5.2		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	0.74	J	ug/l	2.5	0.70	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
Date Received: 06/28/21
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	0.75	J	ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	14		ug/l	2.5	0.70	1
o-Xylene	24		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	1.5	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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.2	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	34		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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 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	83.3	J	ug/l			1
Dodecane, 4-methyl-	4.33	NJ	ug/l			1
Cyclopentane, Methyl-	15.3	NJ	ug/l			1
Unknown Alkane	23.4	J	ug/l			1
Unknown Naphthalene	6.75	J	ug/l			1
Unknown Alkane	4.30	J	ug/l			1
Tridecane	5.84	NJ	ug/l			1
Tridecane, 4-methyl-	6.29	NJ	ug/l			1
Unknown Naphthalene	3.44	J	ug/l			1
Unknown Alkane	8.85	J	ug/l			1
Unknown Alkane	4.76	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	105		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-08
 Client ID: TRIP BLANK
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 00:00
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/08/21 14:56
 Analyst: LAC

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	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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-08
Client ID: TRIP BLANK
Sample Location: OLEAN, NY

Date Collected: 06/28/21 00:00
Date Received: 06/28/21
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	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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	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
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	1.04	J	ug/l	1
Unknown Benzene	1.04	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	107		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/08/21 09:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,08 Batch: WG1521957-5					
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 Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 07/08/21 09:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,08 Batch: WG1521957-5					
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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	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
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

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/08/21 09:09
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,08 Batch: WG1521957-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/08/21 20:04
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1522258-5					
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 Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/08/21 20:04
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1522258-5					
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
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	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
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

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/08/21 20:04
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1522258-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08 Batch: WG1521957-3 WG1521957-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	95		93		63-130	2		20
1,1,2-Trichloroethane	94		92		70-130	2		20
Tetrachloroethene	97		98		70-130	1		20
Chlorobenzene	96		96		75-130	0		20
Trichlorofluoromethane	120		120		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	95		93		70-130	2		20
cis-1,3-Dichloropropene	100		98		70-130	2		20
Bromoform	88		87		54-136	1		20
1,1,2,2-Tetrachloroethane	96		94		67-130	2		20
Benzene	100		100		70-130	0		20
Toluene	97		95		70-130	2		20
Ethylbenzene	98		97		70-130	1		20
Chloromethane	110		110		64-130	0		20
Bromomethane	68		80		39-139	16		20
Vinyl chloride	110		110		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08 Batch: WG1521957-3 WG1521957-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	93		91		70-130	2		20
1,3-Dichlorobenzene	94		92		70-130	2		20
1,4-Dichlorobenzene	93		93		70-130	0		20
Methyl tert butyl ether	96		95		63-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	100		100		36-147	0		20
Acetone	100		98		58-148	2		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	94		89		63-138	5		20
4-Methyl-2-pentanone	94		86		59-130	9		20
2-Hexanone	96		90		57-130	6		20
Bromochloromethane	110		100		70-130	10		20
1,2-Dibromoethane	95		94		70-130	1		20
1,2-Dibromo-3-chloropropane	85		83		41-144	2		20
Isopropylbenzene	96		96		70-130	0		20
1,2,3-Trichlorobenzene	80		82		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08 Batch: WG1521957-3 WG1521957-4								
1,2,4-Trichlorobenzene	89		90		70-130	1		20
Methyl Acetate	100		100		70-130	0		20
Cyclohexane	120		120		70-130	0		20
1,4-Dioxane	80		82		56-162	2		20
Freon-113	110		120		70-130	9		20
Methyl cyclohexane	100		110		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		109		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	104		103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1522258-3 WG1522258-4								
Methylene chloride	98		95		70-130	3		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		97		63-132	3		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	99		98		63-130	1		20
1,1,2-Trichloroethane	98		97		70-130	1		20
Tetrachloroethene	92		92		70-130	0		20
Chlorobenzene	99		98		75-130	1		20
Trichlorofluoromethane	96		95		62-150	1		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		99		67-130	1		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	98		97		70-130	1		20
cis-1,3-Dichloropropene	99		95		70-130	4		20
Bromoform	94		91		54-136	3		20
1,1,1,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	97		95		70-130	2		20
Toluene	96		94		70-130	2		20
Ethylbenzene	97		96		70-130	1		20
Chloromethane	96		92		64-130	4		20
Bromomethane	63		73		39-139	15		20
Vinyl chloride	94		93		55-140	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1522258-3 WG1522258-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	92		90		61-145	2		20
trans-1,2-Dichloroethene	96		95		70-130	1		20
Trichloroethene	97		95		70-130	2		20
1,2-Dichlorobenzene	100		98		70-130	2		20
1,3-Dichlorobenzene	99		97		70-130	2		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	100		96		63-130	4		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	84		84		36-147	0		20
Acetone	97		100		58-148	3		20
Carbon disulfide	97		93		51-130	4		20
2-Butanone	100		97		63-138	3		20
4-Methyl-2-pentanone	98		99		59-130	1		20
2-Hexanone	100		99		57-130	1		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	97		95		41-144	2		20
Isopropylbenzene	98		96		70-130	2		20
1,2,3-Trichlorobenzene	97		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1522258-3 WG1522258-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	110		100		70-130	10		20
Cyclohexane	98		97		70-130	1		20
1,4-Dioxane	82		72		56-162	13		20
Freon-113	93		92		70-130	1		20
Methyl cyclohexane	90		89		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117		117		70-130
Toluene-d8	107		108		70-130
4-Bromofluorobenzene	109		110		70-130
Dibromofluoromethane	110		109		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08 QC Batch ID: WG1521957-6 WG1521957-7 QC Sample: L2134972-01 Client ID: W3												
Methylene chloride	ND	10	9.7	97		10	100		70-130	3		20
1,1-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
Chloroform	ND	10	10	100		11	110		70-130	10		20
Carbon tetrachloride	ND	10	11	110		12	120		63-132	9		20
1,2-Dichloropropane	ND	10	10	100		11	110		70-130	10		20
Dibromochloromethane	ND	10	10	100		11	110		63-130	10		20
1,1,2-Trichloroethane	ND	10	12	120		13	130		70-130	8		20
Tetrachloroethene	ND	10	10	100		10	100		70-130	0		20
Chlorobenzene	2.8	10	13	102		13	102		75-130	0		20
Trichlorofluoromethane	ND	10	11	110		12	120		62-150	9		20
1,2-Dichloroethane	ND	10	11	110		12	120		70-130	9		20
1,1,1-Trichloroethane	ND	10	11	110		12	120		67-130	9		20
Bromodichloromethane	ND	10	10	100		11	110		67-130	10		20
trans-1,3-Dichloropropene	ND	10	10	100		11	110		70-130	10		20
cis-1,3-Dichloropropene	ND	10	9.3	93		10	100		70-130	7		20
Bromoform	ND	10	9.3	93		10	100		54-136	7		20
1,1,2,2-Tetrachloroethane	ND	10	11	110		12	120		67-130	9		20
Benzene	21	10	31	100		32	110		70-130	3		20
Toluene	1.9J	10	12	120		12	120		70-130	0		20
Ethylbenzene	5.6	10	15	94		16	104		70-130	6		20
Chloromethane	ND	10	10	100		10	100		64-130	0		20
Bromomethane	ND	10	5.6	56		6.5	65		39-139	15		20
Vinyl chloride	ND	10	11	110		11	110		55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08 QC Batch ID: WG1521957-6 WG1521957-7 QC Sample: L2134972-01 Client ID: W3												
Chloroethane	ND	10	11	110		12	120		55-138	9		20
1,1-Dichloroethene	ND	10	10	100		11	110		61-145	10		20
trans-1,2-Dichloroethene	ND	10	10	100		11	110		70-130	10		20
Trichloroethene	ND	10	10	100		11	110		70-130	10		20
1,2-Dichlorobenzene	0.72J	10	11	110		11	110		70-130	0		20
1,3-Dichlorobenzene	ND	10	9.8	98		10	100		70-130	2		20
1,4-Dichlorobenzene	0.77J	10	10	100		11	110		70-130	10		20
Methyl tert butyl ether	ND	10	9.9	99		11	110		63-130	11		20
p/m-Xylene	15	20	35	100		36	105		70-130	3		20
o-Xylene	25	20	45	100		46	105		70-130	2		20
cis-1,2-Dichloroethene	ND	10	10	100		11	110		70-130	10		20
Styrene	ND	20	19	95		20	100		70-130	5		20
Dichlorodifluoromethane	ND	10	9.2	92		9.7	97		36-147	5		20
Acetone	ND	10	14	140		17	170	Q	58-148	19		20
Carbon disulfide	ND	10	10	100		11	110		51-130	10		20
2-Butanone	ND	10	15	150	Q	16	160	Q	63-138	6		20
4-Methyl-2-pentanone	ND	10	12	120		13	130		59-130	8		20
2-Hexanone	ND	10	12	120		14	140	Q	57-130	15		20
Bromochloromethane	ND	10	10	100		11	110		70-130	10		20
1,2-Dibromoethane	ND	10	10	100		11	110		70-130	10		20
1,2-Dibromo-3-chloropropane	ND	10	11	110		13	130		41-144	17		20
Isopropylbenzene	1.3J	10	11	110		12	120		70-130	9		20
1,2,3-Trichlorobenzene	ND	10	11	110		12	120		70-130	9		20

Matrix Spike Analysis Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08 QC Batch ID: WG1521957-6 WG1521957-7 QC Sample: L2134972-01 Client ID: W3												
1,2,4-Trichlorobenzene	ND	10	10	100		12	120		70-130	18		20
Methyl Acetate	ND	10	9.5	95		11	110		70-130	15		20
Cyclohexane	41	10	48	70		48	70		70-130	0		20
1,4-Dioxane	ND	500	280	56		430	86		56-162	42	Q	20
Freon-113	ND	10	10	100		10	100		70-130	0		20
Methyl cyclohexane	30	10	37	70		37	70		70-130	0		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	117		120		70-130
4-Bromofluorobenzene	108		109		70-130
Dibromofluoromethane	109		109		70-130
Toluene-d8	109		108		70-130



SEMIVOLATILES

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
 Client ID: W3
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/07/21 01:38
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 08:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough 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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
Client ID: W3
Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
Client ID: W3
Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
Date Received: 06/28/21
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	174	J	ug/l			1
Unknown	7.85	J	ug/l			1
Unknown	9.05	J	ug/l			1
Unknown	10.5	J	ug/l			1
Unknown Organic Acid	31.1	J	ug/l			1
Unknown	8.07	J	ug/l			1
Unknown	9.20	J	ug/l			1
Unknown	9.67	J	ug/l			1
Unknown Benzene	9.34	J	ug/l			1
Unknown Organic Acid	8.44	J	ug/l			1
Unknown Organic Acid	10.2	J	ug/l			1
Unknown	8.18	J	ug/l			1
Unknown Alkane	25.0	J	ug/l			1
Unknown	9.53	J	ug/l			1
Unknown Benzene	8.04	J	ug/l			1
Unknown Alkane	9.74	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	93		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
 Client ID: W3
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/04/21 12:11
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 08:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	1.4		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.06	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.06	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.15		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.06	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.80		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
 Client ID: W3
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	189	Q	10-120
4-Terphenyl-d14	113		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/06/21 23:00
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 08:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough 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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
Client ID: W4
Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 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	113	J	ug/l			1
Unknown	5.60	J	ug/l			1
Unknown	9.71	J	ug/l			1
Unknown	6.11	J	ug/l			1
Unknown Alkane	5.27	J	ug/l			1
Unknown Alkane	6.69	J	ug/l			1
Unknown Alkane	12.2	J	ug/l			1
Unknown Alkane	5.64	J	ug/l			1
Unknown	5.93	J	ug/l			1
Unknown	6.51	J	ug/l			1
Unknown Cycloalkane	5.78	J	ug/l			1
Unknown Alkane	9.16	J	ug/l			1
Unknown Cycloalkane	6.98	J	ug/l			1
Unknown	5.09	J	ug/l			1
Unknown	12.9	J	ug/l			1
Unknown	9.60	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	66		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/04/21 14:29
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 08:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.17		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.09	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.26		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.09	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.33		ug/l	0.10	0.01	1
Acenaphthylene	0.08	J	ug/l	0.10	0.01	1
Anthracene	0.19		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.01	1
Fluorene	0.70		ug/l	0.10	0.01	1
Phenanthrene	0.22		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.35		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.08	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	136	Q	10-120
4-Terphenyl-d14	77		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
 Client ID: W7A
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/07/21 15:15
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough 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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
 Client ID: W7A
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
 Client ID: W7A
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
 Date Received: 06/28/21
 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	106	J	ug/l			1
Unknown	3.42	J	ug/l			1
Unknown	3.85	J	ug/l			1
Unknown	3.16	J	ug/l			1
Unknown	4.22	J	ug/l			1
Unknown	4.18	J	ug/l			1
Unknown Benzene	5.02	J	ug/l			1
Unknown	3.13	J	ug/l			1
Unknown	4.33	J	ug/l			1
Unknown	3.27	J	ug/l			1
Unknown	4.84	J	ug/l			1
Unknown Alkane	4.25	J	ug/l			1
Sulfur	6.00	NJ	ug/l			1
Cyclic Octaatomic Sulfur	48.8	NJ	ug/l			1
Unknown Benzene	4.14	J	ug/l			1
Unknown	3.82	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		21-120
Phenol-d6	75		10-120
Nitrobenzene-d5	121	Q	23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	119		10-120
4-Terphenyl-d14	102		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
 Client ID: W7A
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/07/21 12:39
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.29		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.08	J	ug/l	0.10	0.01	1
Acenaphthylene	0.07	J	ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.26		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.14		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-03
 Client ID: W7A
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 11:27
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	97		15-120
2,4,6-Tribromophenol	192	Q	10-120
4-Terphenyl-d14	114		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
 Client ID: W30
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/07/21 19:37
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough 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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
Client ID: W30
Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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

Tentatively Identified Compounds

Total TIC Compounds	9.23	J	ug/l		1
Unknown	1.45	J	ug/l		1
Unknown	1.71	J	ug/l		1
Unknown	1.53	J	ug/l		1
Unknown	2.65	J	ug/l		1
Unknown Organic Acid	1.89	JB	ug/l		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		21-120
Phenol-d6	75		10-120
Nitrobenzene-d5	124	Q	23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	100		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
 Client ID: W30
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/07/21 12:58
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.10		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-04
 Client ID: W30
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 10:26
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	102		15-120
2,4,6-Tribromophenol	183	Q	10-120
4-Terphenyl-d14	120		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
 Client ID: W31
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/07/21 14:49
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough 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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
Client ID: W31
Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
 Client ID: W31
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Tentatively Identified Compounds

Total TIC Compounds	44.6	J	ug/l			1
Unknown	3.89	J	ug/l			1
Unknown	2.44	J	ug/l			1
Unknown	2.51	J	ug/l			1
Unknown	2.58	J	ug/l			1
Unknown	9.27	J	ug/l			1
Unknown	1.89	J	ug/l			1
Unknown	2.44	J	ug/l			1
Unknown	3.67	J	ug/l			1
Unknown	3.78	J	ug/l			1
Unknown	2.54	J	ug/l			1
Unknown	3.24	J	ug/l			1
Unknown Benzene	2.91	J	ug/l			1
Unknown	1.74	J	ug/l			1
Unknown	1.71	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		21-120
Phenol-d6	69		10-120
Nitrobenzene-d5	120		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	119		10-120
4-Terphenyl-d14	101		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
 Client ID: W31
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/07/21 13:18
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.20		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.07	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.54		ug/l	0.10	0.01	1
Phenanthrene	0.20		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-05
 Client ID: W31
 Sample Location: OLEAN, NY

Date Collected: 06/28/21 09:35
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	100		15-120
2,4,6-Tribromophenol	204	Q	10-120
4-Terphenyl-d14	116		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/06/21 22:37
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 08:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough 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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
Client ID: BLIND DUP
Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
Date Received: 06/28/21
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 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	178	J	ug/l			1
Unknown Organic Acid	8.33	J	ug/l			1
Unknown	8.36	J	ug/l			1
Unknown	8.54	J	ug/l			1
Unknown Alkane	8.54	J	ug/l			1
Unknown Organic Acid	30.3	J	ug/l			1
Unknown	9.96	J	ug/l			1
Unknown Alkane	10.0	J	ug/l			1
Unknown Organic Acid	8.98	J	ug/l			1
Unknown	8.47	J	ug/l			1
Unknown Benzene	9.20	J	ug/l			1
Unknown	8.58	J	ug/l			1
Unknown	23.8	J	ug/l			1
Unknown	11.5	J	ug/l			1
Unknown	11.6	J	ug/l			1
Unknown Organic Acid	11.9	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	71		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/04/21 14:48
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/03/21 08:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	1.2		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.13		ug/l	0.10	0.01	1
Phenanthrene	0.10		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.61		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	148	Q	10-120
4-Terphenyl-d14	85		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 07/06/21 10:44
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/02/21 10:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,07 Batch: WG1519831-1					
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	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		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: L2134972
Report Date: 07/30/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/06/21 10:44
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/02/21 10:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,07 Batch: WG1519831-1					
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	5.67	J	ug/l
Unknown	1.49	J	ug/l
Unknown	1.89	J	ug/l
Unknown Alcohol	2.29	J	ug/l

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/06/21 10:44
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/02/21 10:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,07 Batch: WG1519831-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	33		10-120
4-Terphenyl-d14	79		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/03/21 13:35
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/02/21 10:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,07 Batch: WG1519832-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		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	ND		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	ND		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	ND		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	ND		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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/03/21 13:35
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 07/02/21 10:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,07 Batch: WG1519832-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	96		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/09/21 09:42
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-05 Batch: WG1520209-1					
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	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		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: L2134972
Report Date: 07/30/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/09/21 09:42
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-05 Batch: WG1520209-1					
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	26.7	J	ug/l
Unknown	4.07	J	ug/l
Unknown Alcohol	1.89	J	ug/l
Unknown	1.67	J	ug/l
Unknown	3.60	J	ug/l
Unknown Alkene	3.38	J	ug/l
Unknown	3.82	J	ug/l

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/09/21 09:42
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-05 Batch: WG1520209-1					

Tentatively Identified Compounds

Unknown Organic Acid	5.74	J	ug/l		
Unknown	2.51	J	ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	94		41-149

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/06/21 12:46
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-05 Batch: WG1520210-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		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	ND		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	ND		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	ND		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	ND		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
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/06/21 12:46
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/03/21 18:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-05 Batch: WG1520210-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	116		10-120
4-Terphenyl-d14	126		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1519831-2 WG1519831-3								
Bis(2-chloroethyl)ether	91		66		40-140	32	Q	30
3,3'-Dichlorobenzidine	63		47		40-140	29		30
2,4-Dinitrotoluene	96		66		48-143	37	Q	30
2,6-Dinitrotoluene	95		61		40-140	44	Q	30
4-Chlorophenyl phenyl ether	83		60		40-140	32	Q	30
4-Bromophenyl phenyl ether	84		58		40-140	37	Q	30
Bis(2-chloroisopropyl)ether	114		82		40-140	33	Q	30
Bis(2-chloroethoxy)methane	94		69		40-140	31	Q	30
Hexachlorocyclopentadiene	61		46		40-140	28		30
Isophorone	84		64		40-140	27		30
Nitrobenzene	103		73		40-140	34	Q	30
NDPA/DPA	82		59		40-140	33	Q	30
n-Nitrosodi-n-propylamine	98		76		29-132	25		30
Bis(2-ethylhexyl)phthalate	84		58		40-140	37	Q	30
Butyl benzyl phthalate	87		62		40-140	34	Q	30
Di-n-butylphthalate	82		57		40-140	36	Q	30
Di-n-octylphthalate	80		57		40-140	34	Q	30
Diethyl phthalate	85		62		40-140	31	Q	30
Dimethyl phthalate	82		58		40-140	34	Q	30
Biphenyl	78		53		40-140	38	Q	30
4-Chloroaniline	91		59		40-140	43	Q	30
2-Nitroaniline	91		66		52-143	32	Q	30
3-Nitroaniline	82		59		25-145	33	Q	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1519831-2 WG1519831-3								
4-Nitroaniline	84		63		51-143	29		30
Dibenzofuran	82		60		40-140	31	Q	30
1,2,4,5-Tetrachlorobenzene	78		54		2-134	36	Q	30
Acetophenone	83		60		39-129	32	Q	30
2,4,6-Trichlorophenol	99		65		30-130	41	Q	30
p-Chloro-m-cresol	101	Q	71		23-97	35	Q	30
2-Chlorophenol	91		65		27-123	33	Q	30
2,4-Dichlorophenol	96		68		30-130	34	Q	30
2,4-Dimethylphenol	64		48		30-130	29		30
2-Nitrophenol	106		74		30-130	36	Q	30
4-Nitrophenol	120	Q	80		10-80	40	Q	30
2,4-Dinitrophenol	107		90		20-130	17		30
4,6-Dinitro-o-cresol	108		83		20-164	26		30
Phenol	74		53		12-110	33	Q	30
2-Methylphenol	89		60		30-130	39	Q	30
3-Methylphenol/4-Methylphenol	96		68		30-130	34	Q	30
2,4,5-Trichlorophenol	97		67		30-130	37	Q	30
Carbazole	89		59		55-144	41	Q	30
Atrazine	93		65		40-140	35	Q	30
Benzaldehyde	81		59		40-140	31	Q	30
Caprolactam	62		51		10-130	19		30
2,3,4,6-Tetrachlorophenol	104		72		40-140	36	Q	30

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1519831-2 WG1519831-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	103		73		21-120
Phenol-d6	90		63		10-120
Nitrobenzene-d5	115		89		23-120
2-Fluorobiphenyl	85		57		15-120
2,4,6-Tribromophenol	109		76		10-120
4-Terphenyl-d14	102		70		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1519832-2 WG1519832-3								
Acenaphthene	68		76		40-140	11		40
2-Chloronaphthalene	63		70		40-140	11		40
Fluoranthene	77		85		40-140	10		40
Hexachlorobutadiene	45		47		40-140	4		40
Naphthalene	62		68		40-140	9		40
Benzo(a)anthracene	73		79		40-140	8		40
Benzo(a)pyrene	78		85		40-140	9		40
Benzo(b)fluoranthene	75		82		40-140	9		40
Benzo(k)fluoranthene	80		87		40-140	8		40
Chrysene	77		88		40-140	13		40
Acenaphthylene	65		73		40-140	12		40
Anthracene	77		84		40-140	9		40
Benzo(ghi)perylene	80		87		40-140	8		40
Fluorene	72		81		40-140	12		40
Phenanthrene	70		77		40-140	10		40
Dibenzo(a,h)anthracene	86		95		40-140	10		40
Indeno(1,2,3-cd)pyrene	81		89		40-140	9		40
Pyrene	76		83		40-140	9		40
2-Methylnaphthalene	62		69		40-140	11		40
Pentachlorophenol	95		103		40-140	8		40
Hexachlorobenzene	66		70		40-140	6		40
Hexachloroethane	49		52		40-140	6		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,07 Batch: WG1519832-2 WG1519832-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	65		73		21-120
Phenol-d6	55		62		10-120
Nitrobenzene-d5	82		92		23-120
2-Fluorobiphenyl	69		77		15-120
2,4,6-Tribromophenol	134	Q	151	Q	10-120
4-Terphenyl-d14	96		105		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1520209-2 WG1520209-3								
Bis(2-chloroethyl)ether	65		67		40-140	3		30
3,3'-Dichlorobenzidine	62		53		40-140	16		30
2,4-Dinitrotoluene	77		83		48-143	8		30
2,6-Dinitrotoluene	73		76		40-140	4		30
4-Chlorophenyl phenyl ether	74		73		40-140	1		30
4-Bromophenyl phenyl ether	75		74		40-140	1		30
Bis(2-chloroisopropyl)ether	66		66		40-140	0		30
Bis(2-chloroethoxy)methane	70		71		40-140	1		30
Hexachlorocyclopentadiene	60		56		40-140	7		30
Isophorone	62		64		40-140	3		30
Nitrobenzene	69		72		40-140	4		30
NDPA/DPA	72		70		40-140	3		30
n-Nitrosodi-n-propylamine	68		71		29-132	4		30
Bis(2-ethylhexyl)phthalate	85		88		40-140	3		30
Butyl benzyl phthalate	76		81		40-140	6		30
Di-n-butylphthalate	72		75		40-140	4		30
Di-n-octylphthalate	81		85		40-140	5		30
Diethyl phthalate	78		78		40-140	0		30
Dimethyl phthalate	73		75		40-140	3		30
Biphenyl	70		70		40-140	0		30
4-Chloroaniline	43		39	Q	40-140	10		30
2-Nitroaniline	72		77		52-143	7		30
3-Nitroaniline	65		64		25-145	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1520209-2 WG1520209-3								
4-Nitroaniline	72		73		51-143	1		30
Dibenzofuran	72		73		40-140	1		30
1,2,4,5-Tetrachlorobenzene	72		69		2-134	4		30
Acetophenone	64		66		39-129	3		30
2,4,6-Trichlorophenol	73		76		30-130	4		30
p-Chloro-m-cresol	74		72		23-97	3		30
2-Chlorophenol	72		71		27-123	1		30
2,4-Dichlorophenol	74		73		30-130	1		30
2,4-Dimethylphenol	50		23	Q	30-130	74	Q	30
2-Nitrophenol	73		75		30-130	3		30
4-Nitrophenol	63		64		10-80	2		30
2,4-Dinitrophenol	73		78		20-130	7		30
4,6-Dinitro-o-cresol	81		88		20-164	8		30
Phenol	51		49		12-110	4		30
2-Methylphenol	64		58		30-130	10		30
3-Methylphenol/4-Methylphenol	66		62		30-130	6		30
2,4,5-Trichlorophenol	77		76		30-130	1		30
Carbazole	76		78		55-144	3		30
Atrazine	95		97		40-140	2		30
Benzaldehyde	63		65		40-140	3		30
Caprolactam	29		29		10-130	0		30
2,3,4,6-Tetrachlorophenol	72		76		40-140	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-05 Batch: WG1520209-2 WG1520209-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	72		70		21-120
Phenol-d6	60		57		10-120
Nitrobenzene-d5	84		87		23-120
2-Fluorobiphenyl	82		87		15-120
2,4,6-Tribromophenol	90		90		10-120
4-Terphenyl-d14	93		95		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03-05 Batch: WG1520210-2 WG1520210-3								
Acenaphthene	84		80		40-140	5		40
2-Chloronaphthalene	82		79		40-140	4		40
Fluoranthene	90		91		40-140	1		40
Hexachlorobutadiene	70		66		40-140	6		40
Naphthalene	79		75		40-140	5		40
Benzo(a)anthracene	82		81		40-140	1		40
Benzo(a)pyrene	91		92		40-140	1		40
Benzo(b)fluoranthene	88		88		40-140	0		40
Benzo(k)fluoranthene	95		102		40-140	7		40
Chrysene	91		96		40-140	5		40
Acenaphthylene	83		82		40-140	1		40
Anthracene	90		90		40-140	0		40
Benzo(ghi)perylene	88		87		40-140	1		40
Fluorene	86		85		40-140	1		40
Phenanthrene	78		77		40-140	1		40
Dibenzo(a,h)anthracene	94		96		40-140	2		40
Indeno(1,2,3-cd)pyrene	87		89		40-140	2		40
Pyrene	88		90		40-140	2		40
2-Methylnaphthalene	83		80		40-140	4		40
Pentachlorophenol	72		65		40-140	10		40
Hexachlorobenzene	79		78		40-140	1		40
Hexachloroethane	73		71		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03-05 Batch: WG1520210-2 WG1520210-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	71		63		21-120
Phenol-d6	56		53		10-120
Nitrobenzene-d5	104		99		23-120
2-Fluorobiphenyl	103		94		15-120
2,4,6-Tribromophenol	161	Q	162	Q	10-120
4-Terphenyl-d14	116		121		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG1519831-8 WG1519831-9 QC Sample: L2134972-01 Client ID: W3												
Bis(2-chloroethyl)ether	ND	18.2	12	66		13	72		40-140	8		30
3,3'-Dichlorobenzidine	ND	18.2	ND	0	Q	ND	0	Q	40-140	NC		30
2,4-Dinitrotoluene	ND	18.2	14	77		15	83		48-143	7		30
2,6-Dinitrotoluene	ND	18.2	13	72		13	72		40-140	0		30
4-Chlorophenyl phenyl ether	ND	18.2	13	72		14	77		40-140	7		30
4-Bromophenyl phenyl ether	ND	18.2	13	72		14	77		40-140	7		30
Bis(2-chloroisopropyl)ether	ND	18.2	11	61		12	66		40-140	9		30
Bis(2-chloroethoxy)methane	ND	18.2	12	66		12	66		40-140	0		30
Hexachlorocyclopentadiene	ND	18.2	9.6J	53		9.6J	53		40-140	0		30
Isophorone	ND	18.2	12	66		13	72		40-140	8		30
Nitrobenzene	ND	18.2	14	77		14	77		40-140	0		30
NDPA/DPA	ND	18.2	14	77		14	77		40-140	0		30
n-Nitrosodi-n-propylamine	ND	18.2	13	72		13	72		29-132	0		30
Bis(2-ethylhexyl)phthalate	ND	18.2	16	88		16	88		40-140	0		30
Butyl benzyl phthalate	ND	18.2	16	88		17	94		40-140	6		30
Di-n-butylphthalate	ND	18.2	14	77		15	83		40-140	7		30
Di-n-octylphthalate	ND	18.2	16	88		17	94		40-140	6		30
Diethyl phthalate	ND	18.2	14	77		14	77		40-140	0		30
Dimethyl phthalate	ND	18.2	13	72		13	72		40-140	0		30
Biphenyl	ND	18.2	12	66		13	72		40-140	8		30
4-Chloroaniline	ND	18.2	7.0	39	Q	8.8	48		40-140	23		30
2-Nitroaniline	ND	18.2	17	94		16	88		52-143	6		30
3-Nitroaniline	ND	18.2	8.9	49		10	55		25-145	12		30

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG1519831-8 WG1519831-9 QC Sample: L2134972-01 Client ID: W3												
4-Nitroaniline	ND	18.2	8.2	45	Q	10	55		51-143	20		30
Dibenzofuran	ND	18.2	13	72		14	77		40-140	7		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	12	66		12	66		2-134	0		30
Acetophenone	ND	18.2	14	77		14	77		39-129	0		30
2,4,6-Trichlorophenol	ND	18.2	14	77		15	83		30-130	7		30
p-Chloro-m-cresol	ND	18.2	16	88		16	88		23-97	0		30
2-Chlorophenol	ND	18.2	13	72		13	72		27-123	0		30
2,4-Dichlorophenol	ND	18.2	13	72		13	72		30-130	0		30
2,4-Dimethylphenol	ND	18.2	8.9	49		14	77		30-130	45	Q	30
2-Nitrophenol	ND	18.2	13	72		13	72		30-130	0		30
4-Nitrophenol	ND	18.2	25	140	Q	25	140	Q	10-80	0		30
2,4-Dinitrophenol	ND	18.2	16.J	88		15.J	83		20-130	6		30
4,6-Dinitro-o-cresol	ND	18.2	12	66		12	66		20-164	0		30
Phenol	ND	18.2	11	61		12	66		12-110	9		30
2-Methylphenol	ND	18.2	13	72		14	77		30-130	7		30
3-Methylphenol/4-Methylphenol	ND	18.2	13	72		14	77		30-130	7		30
2,4,5-Trichlorophenol	ND	18.2	14	77		14	77		30-130	0		30
Carbazole	ND	18.2	15	83		15	83		55-144	0		30
Atrazine	ND	18.2	14	77		15	83		40-140	7		30
Benzaldehyde	ND	18.2	19	100		20	110		40-140	5		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		14	77		40-140	0		30

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG1519831-8 WG1519831-9 QC Sample: L2134972-01
 Client ID: W3

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	84		91		10-120
2-Fluorobiphenyl	79		82		15-120
2-Fluorophenol	78		83		21-120
4-Terphenyl-d14	86		92		41-149
Nitrobenzene-d5	88		89		23-120
Phenol-d6	66		69		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG1519832-8 WG1519832-9 QC Sample: L2134972-01 Client ID: W3												
Acenaphthene	ND	18.2	13	72		14	77		40-140	7		40
2-Chloronaphthalene	ND	18.2	13	72		14	77		40-140	7		40
Fluoranthene	ND	18.2	15	83		15	83		40-140	0		40
Hexachlorobutadiene	ND	18.2	12	66		13	72		40-140	8		40
Naphthalene	1.4	18.2	14	69		15	75		40-140	7		40
Benzo(a)anthracene	ND	18.2	14	77		15	83		40-140	7		40
Benzo(a)pyrene	0.04J	18.2	15	83		16	88		40-140	6		40
Benzo(b)fluoranthene	0.06J	18.2	15	83		15	83		40-140	0		40
Benzo(k)fluoranthene	0.02J	18.2	13	72		14	77		40-140	7		40
Chrysene	ND	18.2	13	72		14	77		40-140	7		40
Acenaphthylene	ND	18.2	13	72		14	77		40-140	7		40
Anthracene	0.05J	18.2	14	77		15	83		40-140	7		40
Benzo(ghi)perylene	0.06J	18.2	17	94		18	99		40-140	6		40
Fluorene	ND	18.2	14	77		14	77		40-140	0		40
Phenanthrene	0.15	18.2	13	71		14	76		40-140	7		40
Dibenzo(a,h)anthracene	ND	18.2	18	99		19	100		40-140	5		40
Indeno(1,2,3-cd)pyrene	0.06J	18.2	18	99		20	110		40-140	11		40
Pyrene	0.03J	18.2	14	77		15	83		40-140	7		40
2-Methylnaphthalene	0.80	18.2	14	73		15	78		40-140	7		40
Pentachlorophenol	ND	18.2	26	140		28	150	Q	40-140	7		40
Hexachlorobenzene	ND	18.2	13	72		14	77		40-140	7		40
Hexachloroethane	ND	18.2	14	77		14	77		40-140	0		40

Matrix Spike Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatiles Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG1519832-8 WG1519832-9 QC Sample: L2134972-01
 Client ID: W3

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	174	Q	185	Q	10-120
2-Fluorobiphenyl	84		89		15-120
2-Fluorophenol	85		91		21-120
4-Terphenyl-d14	104		109		41-149
Nitrobenzene-d5	99		104		23-120
Phenol-d6	75		80		10-120

METALS

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-01
 Client ID: W3
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 13:45
 Date Received: 06/28/21
 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
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Total Metals - Mansfield Lab

Arsenic, Total	0.00806		mg/l	0.00050	0.00016	1	07/07/21 03:22	07/08/21 13:05	EPA 3005A	1,6020B	CD
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Dissolved Metals - Mansfield Lab

Arsenic, Dissolved	0.00349		mg/l	0.00050	0.00016	1	07/02/21 15:24	07/25/21 19:53	EPA 3005A	1,6020B	CD
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Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-02
 Client ID: W4
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 14:26
 Date Received: 06/28/21
 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
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Total Metals - Mansfield Lab

Arsenic, Total	0.04576		mg/l	0.00050	0.00016	1	07/07/21 03:22	07/22/21 15:45	EPA 3005A	1,6020B	CD
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Dissolved Metals - Mansfield Lab

Arsenic, Dissolved	0.00481		mg/l	0.00050	0.00016	1	07/02/21 15:24	07/25/21 20:49	EPA 3005A	1,6020B	CD
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Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-06
 Client ID: W32
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:45
 Date Received: 06/28/21
 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
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Total Metals - Mansfield Lab

Arsenic, Total	0.01690		mg/l	0.00050	0.00016	1	07/07/21 03:22	07/22/21 15:50	EPA 3005A	1,6020B	CD
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Dissolved Metals - Mansfield Lab

Arsenic, Dissolved	0.00471		mg/l	0.00050	0.00016	1	07/02/21 15:24	07/25/21 20:54	EPA 3005A	1,6020B	CD
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Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

SAMPLE RESULTS

Lab ID: L2134972-07
 Client ID: BLIND DUP
 Sample Location: OLEAN, NY

Date Collected: 06/27/21 12:00
 Date Received: 06/28/21
 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
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Total Metals - Mansfield Lab

Arsenic, Total	0.00928		mg/l	0.00050	0.00016	1	07/07/21 03:22	07/22/21 15:55	EPA 3005A	1,6020B	CD
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Dissolved Metals - Mansfield Lab

Arsenic, Dissolved	0.00281		mg/l	0.00050	0.00016	1	07/02/21 15:24	07/25/21 21:45	EPA 3005A	1,6020B	CD
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Project Name: ORP-1
 Project Number: 0283-017-001

Lab Number: L2134972
 Report Date: 07/30/21

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,06-07 Batch: WG1519561-1									
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	07/07/21 03:22	07/08/21 12:46	1,6020B	CD

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02,06-07 Batch: WG1519567-1									
Arsenic, Dissolved	ND	mg/l	0.00050	0.00016	1	07/02/21 15:24	07/25/21 19:13	1,6020B	CD

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,06-07 Batch: WG1519561-2								
Arsenic, Total	103		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,06-07 Batch: WG1519567-2								
Arsenic, Dissolved	101		-		80-120	-		

Matrix Spike Analysis Batch Quality Control

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,06-07 QC Batch ID: WG1519561-3 WG1519561-4 QC Sample: L2134972-01 Client ID: W3												
Arsenic, Total	0.00806	0.12	0.1251	98		0.1227	96		75-125	2		20
Total Metals - Mansfield Lab Associated sample(s): 01-02,06-07 QC Batch ID: WG1519561-7 WG1519561-8 QC Sample: L2133100-22 Client ID: MS Sample												
Arsenic, Total	0.03031	0.12	0.1563	105		0.1553	104		75-125	1		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,06-07 QC Batch ID: WG1519567-3 WG1519567-4 QC Sample: L2134972-01 Client ID: W3												
Arsenic, Dissolved	0.00349	0.12	0.1030	83		0.1088	88		75-125	5		20

Project Name: ORP-1
 Project Number: 0283-017-001

**Lab Serial Dilution
 Analysis**
 Batch Quality Control

Lab Number: L2134972
 Report Date: 07/30/21

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,06-07 QC Batch ID: WG1519561-10 QC Sample: L2133100-22 Client ID: DUP Sample						
Arsenic, Total	0.03031	0.03140	mg/l	4		20

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2134972-01A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01A1	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01A2	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01B1	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01B2	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01C1	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01C2	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-01D	Plastic 250ml unpreserved	A	7	7	3.8	Y	Absent		-
L2134972-01D1	Plastic 250ml unpreserved	A	NA		3.8	Y	Absent		-
L2134972-01D2	Plastic 250ml unpreserved	A	NA		3.8	Y	Absent		-
L2134972-01E	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		AS-6020T(180)
L2134972-01E1	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		AS-6020T(180)
L2134972-01E2	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		AS-6020T(180)
L2134972-01F	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-01F1	Amber 250ml unpreserved	A	NA		3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-01F2	Amber 250ml unpreserved	A	NA		3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-01G	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-01G1	Amber 250ml unpreserved	A	NA		3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-01G2	Amber 250ml unpreserved	A	NA		3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-01W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.8	Y	Absent		AS-6020S(180)
L2134972-01W1	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.8	Y	Absent		AS-6020S(180)

Project Name: ORP-1

Lab Number: L2134972

Project Number: 0283-017-001

Report Date: 07/30/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2134972-01W2	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.8	Y	Absent		AS-6020S(180)
L2134972-02A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-02B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-02C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-02D	Plastic 250ml unpreserved	A	7	7	3.8	Y	Absent		-
L2134972-02E	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		AS-6020T(180)
L2134972-02F	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-02G	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-02W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.8	Y	Absent		AS-6020S(180)
L2134972-03A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-03B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-03C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-03F	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-03G	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-04A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-04B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-04C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-04F	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-04G	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-05A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-05B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-05C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-05F	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-05G	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-06D	Plastic 250ml unpreserved	A	7	7	3.8	Y	Absent		-
L2134972-06E	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		AS-6020T(180)
L2134972-06W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.8	Y	Absent		AS-6020S(180)
L2134972-07A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)

Project Name: ORP-1**Lab Number:** L2134972**Project Number:** 0283-017-001**Report Date:** 07/30/21**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2134972-07B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-07C	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-07D	Plastic 250ml unpreserved	A	7	7	3.8	Y	Absent		-
L2134972-07E	Plastic 250ml HNO3 preserved	A	<2	<2	3.8	Y	Absent		AS-6020T(180)
L2134972-07F	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-07G	Amber 250ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2134972-07W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.8	Y	Absent		AS-6020S(180)
L2134972-08A	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)
L2134972-08B	Vial HCl preserved	A	NA		3.8	Y	Absent		NYTCL-8260-R2(14)

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers



Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

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.

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'.

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

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

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

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.)

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

Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

Data Qualifiers

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: ORP-1
Project Number: 0283-017-001

Lab Number: L2134972
Report Date: 07/30/21

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624/624.1: 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; 4-Ethyltoluene.

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

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

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

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


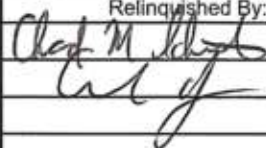
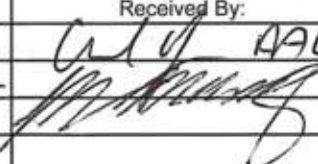
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

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

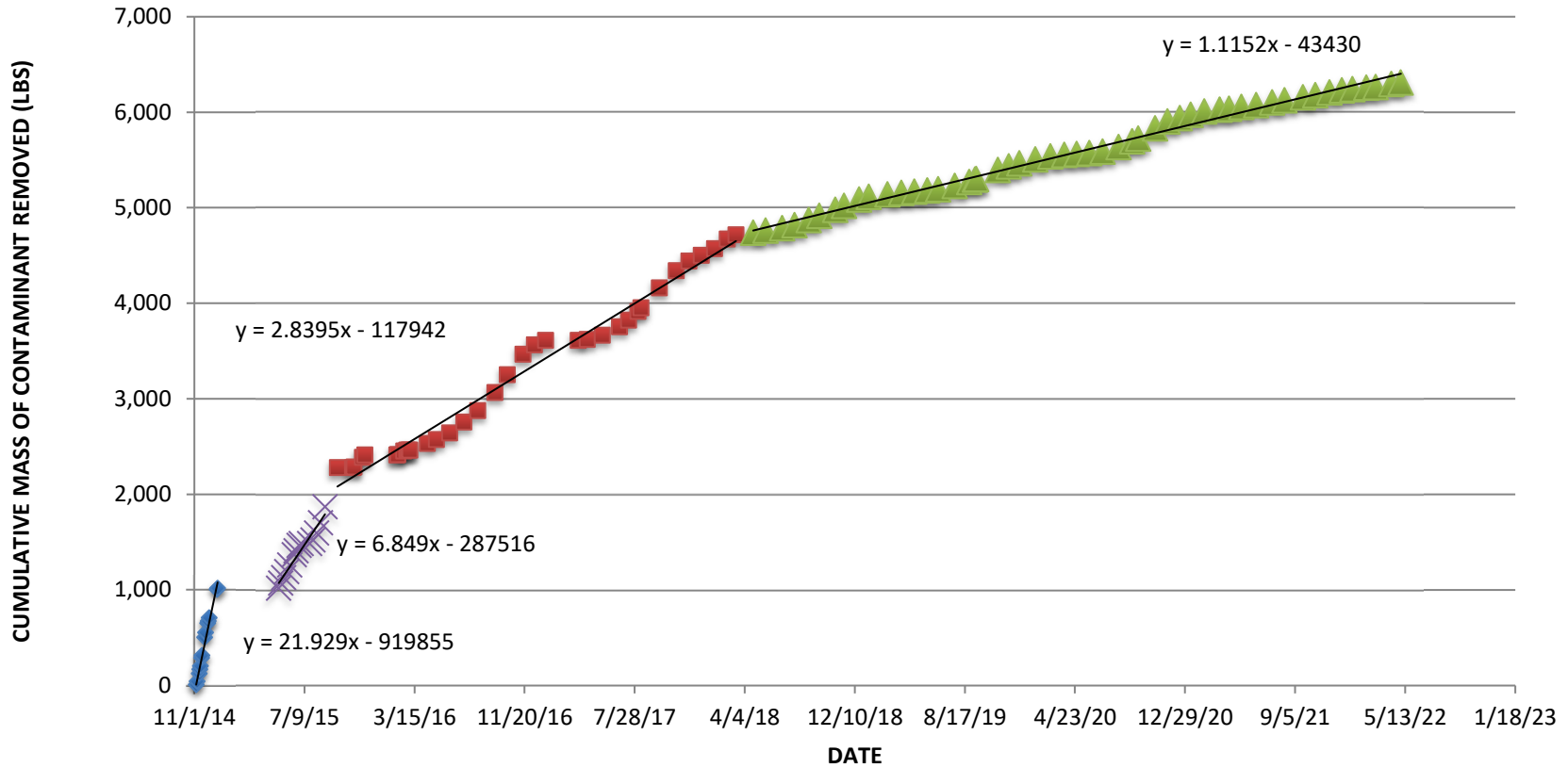
For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 6/29/21		ALPHA Job # L2134972																																																																																																																		
		Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: ORP-1 Project Location: OLEAN, NY Project # 0283-017-001		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																																																
Client Information Client: BENCHMARK TURNKEY Address: 2555 HAMBURG TRPK BUFFALO, NY 14218 Phone: 716-856-0599 Fax: Email: lriker@bm-tk.com		(Use Project name as Project #) <input type="checkbox"/> Project Manager: LORI RIKER ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input checked="" type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																				
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please specify Metals or TAL.		ANALYSIS TIC VOL + TIC TIC SVOC + TIC TOTAL METAL ARSENIC ONLY DISSOLVED METAL ARSENIC ONLY		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input checked="" type="checkbox"/> Lab to do (Please Specify below)		Total Bottle																																																																																																																				
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">TIC VOL + TIC</th> <th rowspan="2">TIC SVOC + TIC</th> <th rowspan="2">TOTAL METAL ARSENIC ONLY</th> <th rowspan="2">DISSOLVED METAL ARSENIC ONLY</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>34972 -01</td> <td>W3</td> <td>6/27/21</td> <td>1345</td> <td>A2LA</td> <td>CR</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>7</td> </tr> <tr> <td>-02</td> <td>W4</td> <td>6/27/21</td> <td>1426</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>7</td> </tr> <tr> <td>-03</td> <td>W7A</td> <td>6/28/21</td> <td>1127</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>5</td> </tr> <tr> <td>-04</td> <td>W30</td> <td>6/28/21</td> <td>1026</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>5</td> </tr> <tr> <td>-05</td> <td>W31</td> <td>6/28/21</td> <td>935</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>5</td> </tr> <tr> <td>-06</td> <td>W32</td> <td>6/27/21</td> <td>1245</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td>2</td> </tr> <tr> <td>-07</td> <td>MS/MSD</td> <td>6/27/21</td> <td>1345</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>14</td> </tr> <tr> <td>-08</td> <td>BLIND DUP</td> <td>6/27/21</td> <td>1200</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>7</td> </tr> <tr> <td>-09</td> <td>TRIP BLANK</td> <td>6/28/21</td> <td>-</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>2</td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection				Sample Matrix	Sampler's Initials	TIC VOL + TIC	TIC SVOC + TIC	TOTAL METAL ARSENIC ONLY	DISSOLVED METAL ARSENIC ONLY	Sample Specific Comments	Date	Time	34972 -01	W3	6/27/21	1345	A2LA	CR	X	X	X	X		7	-02	W4	6/27/21	1426			X	X	X	X		7	-03	W7A	6/28/21	1127			X	X				5	-04	W30	6/28/21	1026			X	X				5	-05	W31	6/28/21	935			X	X				5	-06	W32	6/27/21	1245					X	X		2	-07	MS/MSD	6/27/21	1345			X	X	X	X		14	-08	BLIND DUP	6/27/21	1200			X	X	X	X		7	-09	TRIP BLANK	6/28/21	-			X			
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-09	TRIP BLANK	6/28/21	-			X					2																																																																																																															
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type V A P P		Preservative B A C A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: 		Date/Time 6/28/21 1452		Received By: 		Date/Time 6/29/21 1452																																																																																																																		

APPENDIX D

SVE SYSTEM DOCUMENTATION

CUMULATIVE MASS REMOVAL VERSUS TIME
1- SVE
OLEAN GATEWAY



Mass removal is based on a correlation of PID readings and vapor sample analysis for gasoline and diesel range organics (GRO and DRO) measured in influent air.

- ◆ Initial 1
- × Initial 2
- Interim
- ▲ Tailing
- Linear (Initial 2)
- Linear (Interim)
- Linear (Tailing)



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

Date	Elapsed Time (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Effluent PID Reading Biofilter (ppm)	Corrected Influent Concentration ¹ (mg/m ³)	Vacuum (in of H ₂ O)	Air Velocity (Ft/Min)	Pipe Diameter (in)	Air Flow Rate (ACFM)	Volume of Air Processed Since Previous Reading (CF)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
11/4/14	0	0	260	30	675	13.5	9800	2	194	0	0.0			
11/5/14	1	0.77	385	30	1000	14.0	9800	2	194	215604	17.5	6.7	7	
11/7/14	3	2.81	420	30	1091	14.0	8500	2	168	495307	16.5	34.7	41	
11/11/14	7	7.11	477	35	1239	14.0	9800	2	194	1203304	21.6	82.1	124	
11/13/14	9	8.81	662	30	1720	14.5	9800	2	194	474912	30.0	43.9	167	
11/14/14	10	9.97	657	30	1707	15.0	9800	2	194	323406	29.8	34.6	202	
11/17/14	13	12.96	634	30	1647	15.0	9800	2	194	836194	28.8	87.5	290	
11/18/14	14	13.72	685	30	1779	14.0	9800	2	194	212690	31.1	22.8	312	
11/24/14	20	19.97	658	30	1709	16.0	9800	2	194	1749112	29.9	190.5	503	
11/26/14	22	22.02	440	30	1143	16.0	9800	2	194	573002	20.0	51.0	554	
12/1/14	27	26.85	440	11	1143	17.0	9800	2	194	1351896	20.0	96.5	650	
12/2/14	28	28.01	417	30	1083	14.0	9800	2	194	323406	18.9	22.5	673	
12/4/14	30	29.96	380	30	987	16.0	9800	2	194	544837	17.2	35.2	708	
12/22/14	48	47.94	345	20	896	15.0	9800	2	194	5028819	15.7	295.7	1,004	
12/23/14	49	48.81	360	20	935	15.0	9800	2	194	244740	16.3	14.0	1,018	System off
5/11/15	188	48.81	205	20	533	16.0	8900	2	176	0	0.0	0.0	1,018	
5/15/15	192	53.09	205	15	533	13.0	8900	2	176	1087504	8.4	53.0	1,071	System restarted
5/22/15	199	60.13	201	5	522	12.0	8900	2	176	1786047	8.3	58.8	1,129	
5/29/15	206	67.09	220	10	571	11.5	8900	2	176	1770171	9.1	60.4	1,190	
6/5/15	213	74.06	235	15	610	12.0	10500	2	208	2088404	11.4	71.4	1,261	
6/15/15	223	84.06	210	10	545	12.0	10500	2	208	2996813	10.2	108.1	1,369	
6/19/15	227	88.10	185	10	481	13.0	10500	2	208	1211212	9.0	38.8	1,408	
6/26/15	234	95.08	150	10	390	12.0	10500	2	208	2091526	7.3	56.8	1,465	
7/1/15	239	100.1	0	10	0	12.0	10500	2	208	1498406	0.0	18.2	1,483	Blower Failed
7/21/15	258	100.1	180	10	468	13.0	10500	2	208	0	0.0	0.0	1,483	Blower Replaced
7/28/15	266	107.5	210	10	545	13.0	10500	2	208	2228880	10.2	38.0	1,521	
8/5/15	274	115.6	165	10	429	13.0	10500	2	208	2430748	8.0	73.9	1,595	
8/14/15	283	124.4	330	10	857	14.0	10500	2	208	2638860	16.0	105.9	1,701	
8/24/15	293	134.6	350	15	909	13.0	10500	2	208	3040516	17.0	167.7	1,869	
9/21/15	321	162.7	250	10	649	12.0	10500	2	208	8434780	12.2	410.4	2,279	
10/26/15	356	162.7	250	10	649	12.0	10500	2	208	0	0.0	0.0	2,279	Power line hit by contractor; system down
10/29/15	359	165.8	110	5	286	15.0	10500	2	208	917774	5.3	8.2	2,287	Restart system



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

Date	Elapsed Time (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Effluent PID Reading Biofilter (ppm)	Corrected Influent Concentration ¹ (mg/m ³)	Vacuum (in of H ₂ O)	Air Velocity (Ft/Min)	Pipe Diameter (in)	Air Flow Rate (ACFM)	Volume of Air Processed Since Previous Reading (CF)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
11/17/15	378	184.7	105	5	273	15.0	10500	2	208	5668971	5.1	98.8	2,386	System shut down (frozen tank)
11/23/15	383	190.1	105	5	273	15.0	10500	2	208	1617030	5.1	27.5	2,414	System shut down (frozen tank)
2/4/16	456	190.1	50	5	130	14.0	10500	2	208	0	0.0	0.0	2,414	System restarted
2/5/16	458	191.8	55	5	143	14.0	10500	2	208	511956	2.7	2.3	2,416	
2/19/16	472	205.6	65	10	169	14.0	8800	2	174	3463935	2.6	36.7	2,453	
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
3/1/16	482	458.5	0	0	0	0.0	8800	2	174	0	0.0	0.0	2,788	Repair knock-out valve
3/4/16	485	458.5	40	10	104	18.0	8800	2	174	0	0.0	0.0	2,788	
4/13/16	526	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	2,864	
6/2/16	576	549.1	58	2	151	17.0	9600	2	190	8185581	2.6	68.9	2,933	
7/5/16	609	581.9	100	10	260	16.0	9600	2	190	8979022	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	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	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	
1/6/17	794	773.7	25	5	65	37.0	9600	2	190	6818463	1.1	47.0	4,008	Blower motor failure; new blower ordered.
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	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	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	1914155	5.1	35.7	4,347	
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	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	7951544	4.0	99.9	5,067	



Table D-1- Summary of SVE System VOC Mass Removal for 1-SVE
Periodic Review Report
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Date	Elapsed Time (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Effluent PID Reading Biofilter (ppm)	Corrected Influent Concentration ¹ (mg/m ³)	Vacuum (in of H ₂ O)	Air Velocity (Ft/Min)	Pipe Diameter (in)	Air Flow Rate (ACFM)	Volume of Air Processed Since Previous Reading (CF)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
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	
5/21/18	1293	1199.1	15.2	1.4	39	48.0	9600	2	190	7655742	0.7	21.4	5,157	
6/28/18	1331	1237.1	14.2	3.6	37	45.0	9600	2	190	10389935	0.6	24.8	5,181	Bio-filter raked 6/8/18 & 6/22/18
7/26/18	1359	1265.1	34	5	88	49.0	9600	2	190	7655742	1.5	29.9	5,211	Bio-filter raked 7/6/2018 & 7/20/18
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	9600	2	190	8219830	0.4	12.9	5,181	
6/17/19	1685	1591	17.4	0.1	45	28.5	9600	2	190	6575864	0.8	13.7	5,195	
7/25/19	1723	1629	21.3	0.1	55	35.0	9600	2	190	10411784	0.9	32.7	5,228	
8/27/19	1756	1662	36.9	0.1	96	36.0	9600	2	190	9041813	1.6	42.7	5,270	
9/9/19	1769	1675	50.1	0.9	130	36.0	9600	2	190	3561926	2.2	25.1	5,295	
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	



**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 (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Effluent PID Reading Biofilter (ppm)	Corrected Influent Concentration ¹ (mg/m ³)	Vacuum (in of H ₂ O)	Air Velocity (Ft/Min)	Pipe Diameter (in)	Air Flow Rate (ACFM)	Volume of Air Processed Since Previous Reading (CF)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
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	2626	2532	10.7	0.1	27	33.0	9600	2	190	6575864	0.5	13.9	6,243	
2/14/22	2658	2564	8.9	0.0	22	32.0	9600	2	190	8767818	0.4	13.5	6,257	
3/7/22	2679	2585	6.7	0.0	17	34.0	9600	2	190	5753881	0.3	7.1	6,264	
4/12/22	2715	2621	33	0.0	83	34.0	9600	2	190	9863796	1.4	30.8	6,295	
5/3/22	2736	2642	6.1	0.1	15	34.0	9600	2	190	5753881	0.3	17.7	6,312	

Notes:

- 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 5/3/2022.



**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
6/9/21	1-SVE-1	off	off	Influent: 13.5	SVE System 1 Vacuum: 32 inches H ₂ O
	1-SVE-2	0.0	15.6		
	1-SVE-3	0.0	26.1		
	1-SVE-4	off	off		
	1-SVE-5	off	off		
	1-SVE-6	off	off		
	1-SVE-7	189.5	22.5		
9/30/21	1-SVE-1	off	off	Influent: 18.4	SVE System 1 Vacuum: 34 inches H ₂ O
	1-SVE-2	1.7	16.5		
	1-SVE-3	10.2	24.7		
	1-SVE-4	off	off		
	1-SVE-5	off	off		
	1-SVE-6	off	off		
	1-SVE-7	67.1	24.6		
12/29/21	1-SVE-1	off	off	Influent: 11.6	SVE System 1 Vacuum: 30 inches H ₂ O
	1-SVE-2	0.4	16.0		
	1-SVE-3	0.9	24.9		
	1-SVE-4	off	off		
	1-SVE-5	off	off		
	1-SVE-6	off	off		
	1-SVE-7	40.9	24.8		
3/30/22	1-SVE-1	off	off	Influent: 18.7	SVE System 1 Vacuum: 32 inches H ₂ O
	1-SVE-2	0.0	12.1		
	1-SVE-3	2.3	22.1		
	1-SVE-4	off	off		
	1-SVE-5	off	off		
	1-SVE-6	off	off		
	1-SVE-7	28.7	24.1		

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.