



PERIODIC REVIEW REPORT
Reporting Period Through September 30, 2020

ORANGE COUNTY LANDFILL
NYSDEC SITE NO. 336007
ROUTE 17M, GOSHEN, NEW YORK

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CERTIFICATION

I, Andrew M. Millspaugh, P.E., certify that I am a New York State registered professional engineer and that this Periodic Review Report (PRR) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in accordance with the DER-approved work plan and any DER-approved modifications.



Andrew M. Millspaugh, P.E.

10/28/2020

Date

EXECUTIVE SUMMARY

The Orange County Landfill (Landfill) is located in the Town of Goshen, Orange County, New York (refer to Figure 1) and is registered as a Class 2 Inactive Hazardous Waste Disposal Site ("the Site"), Registry No. 3-36-007 by the New York State Department of Environmental Conservation (NYSDEC).

The NYSDEC issued a Record of Decision (ROD) on January 28, 1994 for Operable Unit 2 that required construction of a final cover over the Landfill waste mass, which was completed in 1995. A second ROD addressing the Site as a whole, including any contamination that may have migrated from the waste mass, was issued on March 26, 1998 for Operable Unit 1. The selected remedies for the Landfill include Institutional Controls (IC) through a Declaration of Covenants and Restrictions that restricts disturbance of the Landfill cover and places restrictions on site uses, and Engineering Controls (EC) provided by the Landfill cover and leachate collection systems, air and water quality monitoring, and regular inspections and maintenance activities. Post-closure water and air quality monitoring, leachate removal, and inspections and maintenance at the Landfill have been provided by Orange County since 1996. A Site Management Plan (SMP) was approved by the NYSDEC on August 5, 2014, which incorporates the Institutional/Engineering Control (IC/EC) Plan, the Inspection and Monitoring Plan, and the Operation and Maintenance Plan to provide for the continual post-closure monitoring and maintenance of the Landfill.

An annual Periodic Review Report (PRR) is required to document site management activities outlined in the SMP. This PRR covers the period through September 30, 2020.

The remedial program implemented at the Landfill has been successful in meeting the remedial objectives set forth in the RODs. Leachate generation and contaminant migration through groundwater has been reduced, contaminated surface run-off and direct human/animal contact with waste is eliminated, and Landfill gas migration/buildup is prevented. Groundwater seeps exhibiting some detectable leachate constituents have been occasionally observed along the banks of the Cheechunk Canal, downgradient of the Landfill. The County received NYSDEC approval of the Remedial Action Work Plan (RAWP) on March 20, 2017 to address the observed seeps. Subsequently on May 31, 2017, the County requested that the NYSDEC issue the required Water Quality Certification so that coverage under the United States Army Corps of Engineers (USACE) Nationwide Permit (NWP) No. 38 could be obtained. A revised request was submitted by the County on July 12, 2017 and the County submitted Form 4345 for Pre-Construction Notification (PCN) to the USACE Northern District on September 14, 2017. The Water Quality Certification Permit was reissued in 2019 and extended through the end of 2019 as requested by Sterling Environmental Engineering, P.C.'s (STERLING) letter dated December 31, 2018.

Field activities associated with the RAWP were initiated in October 2019, including soil excavation of the seep areas, armoring the excavation areas with stone, and installation of a 320-foot long horizontal directional drill (HDD) groundwater recovery well upgradient of the seeps. The HDD well pump and appurtenances were installed in July 2020 and are undergoing startup testing. On July 9, 2020, the County submitted a Groundwater Recovery System Pilot Program Work Plan, which was approved by the NYSDEC in July 2020. Following completion of startup testing, the pilot program will be initiated in accordance with the approved Work Plan.

In an email dated August 20, 2019, the NYSDEC informed the County that the Landfill required sampling for the emerging contaminants per-and polyfluoroalkyl substances (PFAS) and 1,4-Dioxane. On behalf of the County, STERLING submitted a Post-Closure Monitoring - Additional Analytes Sampling Plan (per-and polyfluoroalkyl substances (PFAS) & 1,4-Dioxane) on September 9, 2019. Sampling for PFAS and

1,4-Dioxane was performed concurrently with the 2020 annual groundwater sampling event on August 11, 2020.

Based on the results of activities performed from August 7, 2019 through September 30, 2020, no additional changes to the approved SMP are recommended. The requirements for discontinuing site management have not been met. As such, continued compliance with the approved SMP and the proposed seep remediation are appropriate.

1.0 INTRODUCTION

The Orange County Landfill (Landfill) is located in the Town of Goshen, Orange County, New York (refer to Figure 1) and is registered as a Class 2 Inactive Hazardous Waste Disposal Site, Registry No. 3-36-007 by the NYSDEC.

An annual Periodic Review Report (PRR) is required to document site management activities outlined in the Site Management Plan (SMP). This PRR covers the period through September 30, 2020.

1.1 Summary of Site Contamination and Site History

The NYSDEC issued a Record of Decision (ROD) on January 28, 1994 for Operable Unit 2 that required construction of a final cover over the Landfill waste mass, which was completed in 1995. A second ROD addressing the site as a whole, including any contamination that may have migrated from the waste mass, was issued on March 26, 1998 for Operable Unit 1. The selected remedies for the Landfill include Institutional Controls (IC) through a Declaration of Covenants and Restrictions that restricts disturbance of the Landfill cover and places restrictions on site uses, and Engineering Controls (EC) provided by the Landfill cover and leachate collection systems, air and water quality monitoring, and regular inspections and maintenance activities. Post-closure water and air quality monitoring, leachate removal, and inspections and maintenance at the Landfill have been provided by Orange County since 1996. An SMP was approved by the NYSDEC on August 5, 2014, which incorporates the Institutional/Engineering Control (IC/EC) Plan, the Inspection and Monitoring Plan, and the Operation and Maintenance Plan to provide for the continual post-closure monitoring and maintenance of the Landfill.

1.2 Effectiveness of the Remedial Program and Compliance

The remedial program implemented at the Landfill has been successful in meeting the remedial objectives set forth in the RODs. Leachate generation and contaminant migration through groundwater has been reduced, contaminated surface runoff and direct human/animal contact with waste is eliminated, and Landfill gas migration/buildup is prevented. Groundwater seeps exhibiting some detectable leachate constituents have been occasionally observed along the banks of the Cheechunk Canal, downgradient of the Landfill. The County received NYSDEC approval of the Remedial Action Work Plan (RAWP) on March 20, 2017 to address the observed seeps. Subsequently on May 31, 2017 the County requested that the NYSDEC issue the required Water Quality Certification so that coverage under the United States Army Corps of Engineers (USACE) Nationwide Permit (NWP) No. 38 could be obtained. A revised request was submitted by the County on July 12, 2017 and the County submitted Form 4345 for Pre-Construction Notification (PCN) to the USACE Northern District on September 14, 2017. The Water Quality Certification Permit was reissued in 2019 and extended through end of 2019 as requested by Sterling Environmental Engineering, P.C.'s letter dated December 31, 2018.

Field activities associated with the RAWP were initiated in October 2019, including soil excavation of the seep areas, armoring the excavation areas with stone, and installation of a 320-foot long horizontal directional drill (HDD) groundwater recovery well upgradient of the seeps. The HDD well pump and appurtenances were installed in July 2020 and are undergoing startup testing. On July 9, 2020, the County submitted a Groundwater Recovery System Pilot Program Work Plan, which was approved by the NYSDEC in July 2020. Following completion of startup testing, the pilot program will be initiated in accordance with the approved Work Plan.

1.3 Recommendations

Based on the results of activities performed from August 7, 2019 through September 30, 2020, no additional changes to the approved SMP are recommended. The requirements for discontinuing site management have not been met. As such, continued compliance with the approved SMP and the proposed seep remediation are appropriate.

2.0 SITE OVERVIEW

The Landfill consists of a 75-acre waste mass on a 300-acre rural parcel approximately three (3) miles west of the Village of Goshen on the south side of Route 17M in the Town of Goshen, Orange County, New York (see Figure 1).

The Landfill property is bounded by the Cheechunk Canal to the southeast and by the Old Channel of the Wallkill River to the northwest and southwest. To the northwest of the Landfill, a proposed Landfill expansion of an additional 75-acres was intended. The expansion project was never completed nor used for landfilling. To the northeast edge of the Landfill lies a landfill-to-gas energy system facility. The New Hampton Transfer Station is located on the northeast border of the 300-acre parcel (see Figure 2).

The Orange County Department of Public Works operated the Landfill between 1974 and January 1992. Approximately 7,000,000 cubic yards of predominantly municipal waste was disposed; however, waste oil, septic sludge, industrial waste, and hazardous waste are documented to have also reportedly been disposed at the Landfill.

The Landfill was classified as a “Class 2” Inactive Hazardous Waste Disposal Site by the NYSDEC in March 1992 identified by Site Number 336007. The NYSDEC issued two RODs, dated January 1994 and March 1998, respectively. The January 1994 ROD accelerated the capping of the Landfill and the March 1998 ROD addressed contamination that may have migrated from the waste mass.

The selected remedies for the Landfill include institutional and engineering controls. Institutional control (IC) is provided in the form of a Declaration of Covenants and Restrictions that restricts disturbance of the Landfill cover and places restrictions on site uses. Engineering controls (EC) are provided by the Landfill cover and leachate collection systems, annual air and water quality monitoring, and regular inspections and maintenance activities.

The ongoing post-closure activities are outlined by the approved SMP and are based on the requirements of the Technical Guidance for Site Investigation and Remediation (DER-10), Section 6.2. The June 6, 2014 SMP (approved by the NYSDEC on August 5, 2014) incorporates the IC/EC Plan, the Inspection and Monitoring Plan, and the Operation and Maintenance Plan, which provide for the continual post-closure monitoring and maintenance of the Landfill.

Since January 1996, Orange County has submitted Post-Closure Monitoring and Maintenance (PCMM) reports to the NYSDEC documenting the Landfill inspection, environmental monitoring, and leachate management activities. Since 2014, the NYSDEC has required annual documentation in the form of a PRR. This PRR covers inspection, monitoring, operating and maintenance activities, and compliance for the period from August 7, 2019 through September 30, 2020.

3.0 PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The Landfill has been subject to a PCMM Program since January 1996 (with revisions in January 1999, December 2002 and June 2014) that provides for regular site inspections; groundwater, surface water, and leachate monitoring; leachate collection and management; mowing; and Landfill gas management. Monitoring sample locations are shown on Figure 2.

3.1 Groundwater Quality

Historical results obtained over two decades of monitoring indicate groundwater near the Landfill is characterized by levels of turbidity and concentrations of total dissolved solids (TDS), iron, and manganese, and occasional concentrations of ammonia, bromide, chloride, phenolics, sulfate, arsenic, beryllium, cadmium, chromium, copper, lead, magnesium, nickel, selenium, sodium, and thallium that exceed groundwater standards (NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 (TOGS 1.1.1), Ambient Water Quality Standards and Guidance Values (June 1998)). Historically, leachate indicator parameters such as alkalinity, ammonia, chemical oxygen demand (COD), chloride, sulfate, TDS, TKN, and total organic carbon (TOC) along with inorganic compounds such as iron, magnesium, manganese, potassium, and sodium were evaluated.

In an email dated August 20, 2019, the NYSDEC informed Orange County that the Landfill required additional sampling to include emerging contaminants per- and polyfluoroalkyl substances (PFAS) and 1,4-Dioxane. On behalf of the County, STERLING submitted a Post-Closure Monitoring - Additional Analytes Sampling Plan (per- and polyfluoroalkyl substances (PFAS) & 1,4-Dioxane), dated September 9, 2019. Sampling for PFAS and 1,4-Dioxane was performed concurrently with the 2020 annual post-closure monitoring event on August 11, 2020.

Sampling for emerging contaminants occurred at five (5) monitoring wells (MW-220, MW-233S, MW-233D, MW-245S, and MW-245D). The following quality assurance/quality control (QA/QC) samples were also collected: One (1) duplicate (DUP08112020), one (1) matrix spike (MW-245D-MS), one (1) matrix spike duplicate (MW-245D-MSD), one (1) field reagent blank (FB08112020), and one (1) equipment blank (EB08112020). Samples were analyzed for 1,4-Dioxane using USEPA Modified Method 8270D-SIM and for 21 target PFAS compounds, including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), using USEPA Method 537. A Category B Deliverable data package was prepared by the laboratory and a Data Usability Summary Report (DUSR) was prepared by a certified Data Validator (Donald Anné of Alpha Geoscience) and is provided in Appendix A. Copies of laboratory analytical reports are provided in Appendix B. The Category B data packages for the sampling of the emerging contaminants are provided in Appendix C. The DUSR outlines applicable qualifications and indicates that analytical data were acceptable and usable with no data qualified as rejected.

Field parameters and groundwater elevations for site groundwater are presented in Tables 1 and 2, respectively. A groundwater contour map for the overburden hydrogeologic unit is provided as Figure 3. Groundwater analytical results are summarized in Tables 3 and 3-A and are compared to the NYSDEC TOGS 1.1.1, June 2004.

The 2020 analytical results are consistent with past monitoring results. No VOCs, 1,4-Dioxane or PFAS were detected at any of the overburden or bedrock monitoring wells sampled in 2020.

Emerging contaminants results for the sampling are provided in Table 3-A.

Groundwater quality results in 2020 indicate no exceedances for 1,4-Dioxane, PFAS, alkalinity, biological oxygen demand (BOD), bromide, COD, chloride, hardness, hexavalent chromium, sulfate, TKN, TOC, volatile organic compounds (VOCs), aluminum, antimony, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, mercury, nickel, potassium, selenium, silver, thallium, vanadium, and zinc. A slight exceedance for total lead was observed at the downgradient overburden monitoring well (PZ-4), while dissolved lead was non-detect. Ammonia and phenol in groundwater exceedances were reported for downgradient overburden well MW-245D. TDS in groundwater exceedances were reported at the upgradient monitoring well pair (MW-233S and MW-233D) and all downgradient monitoring wells (MW-220, MW-245S, MW-3B, and PZ-4), except downgradient bedrock well MW-245D which was equal to the groundwater standard (500 mg/L). No significant differences in concentrations were observed for select leachate indicator parameters (ammonia, phenols, and TDS) compared to where exceedances were historically reported.

Slight exceedances for arsenic in groundwater were observed at three (3) downgradient overburden monitoring wells. No significant differences in concentrations or data trends were observed for iron, magnesium, manganese, and sodium in groundwater where exceedances were historically observed.

The following table indicates the highest concentration areas for parameter exceedances:

Parameter	Highest Concentration Areas
Ammonia	MW-245D
Nitrate	MW-233S
Phenols	MW-245D
TDS	PZ-4
Arsenic, Total	MW-220
Arsenic, Dissolved	MW-3B
Iron, Total	MW-220
Iron, Dissolved	MW-245S
Lead, Total	PZ-4
Magnesium, Total	PZ-4
Magnesium, Dissolved	PZ-4
Manganese, Total	PZ-4
Manganese, Dissolved	MW-245S
Sodium, Total	MW-233D
Sodium, Dissolved	MW-233D

A detailed summary of reported parameter exceedances for the 2020 PCM event is provided below.

Parameter Exceeding Water Quality Standard (TOGS 1.1.1)	Monitoring Well Location (Unfiltered Analytical Results)
Turbidity (5 NTU)	Downgradient Overburden MW-220 (43.79 NTU), MW-245S (28.23 NTU), and PZ-4 (18.32 NTU), Downgradient Bedrock MW-245D**** (84.23 NTU), and Upgradient Overburden MW-233S (98.67 NTU)
Ammonia (2.0 mg/L)	Downgradient Bedrock MW-245D (6.4 mg/L)
Phenolics (0.001 mg/L)	Downgradient Bedrock MW-245D (0.007 mg/L)
TDS (500 mg/L)	Downgradient Overburden MW-3B (560 mg/L), MW-220 (680 mg/L), MW-245S (690 mg/L), and PZ-4 (820 mg/L), Upgradient Overburden MW-233S (560 mg/L), and Upgradient Bedrock MW-233D (570 mg/L)
Arsenic, Total (0.025 mg/L)	Downgradient Overburden MW-3B (0.02532 mg/L) , MW-220 (0.07915 mg/L), and PZ-4 (0.04208 mg/L)
Iron, Total (0.3 mg/L**)	Downgradient Overburden MW-3B (0.655 mg/L**) , MW-220 (10.8 mg/L**) , MW-245S (0.822 mg/L**) , PZ-4 (28.5 mg/L**) , and Downgradient Bedrock MW-245D (1.06 mg/L)
Lead, Total (0.025 mg/L)	Downgradient Overburden PZ-4 (0.02817 mg/L)
Magnesium (35 mg/L)	Downgradient Overburden MW-220 (41.6 mg/L) and PZ-4 (54.4 mg/L)
Manganese, Total (0.3 mg/L**)	Upgradient Overburden MW-233S (0.3871 mg/L**), Downgradient Overburden MW-3B (0.5011 mg/L**) , MW-220 (1.311 mg/L**) , MW-245S (1.594 mg/L**) , and PZ-4 (2.54 mg/L**) , and Downgradient Bedrock MW-245D (0.1134 mg/L)
Sodium, Total (20 mg/L)	Upgradient Bedrock MW-233D (107 mg/L) , Downgradient Overburden MW-3B (29.1 mg/L) , and PZ-4 (23.1 mg/L) , Downgradient Overburden MW-245S (38.3 mg/L) and Downgradient Bedrock MW-245D (51.9 mg/L)

* Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

** The standard for the sum of iron and manganese is 0.5 mg/L.

Bolded Total Metals values also or only exceeded NYS TOGS 1.1.1 Water Quality Standards and Guidance Values for Dissolved Metals (Filtered) results.

A summary of current groundwater quality compared to historical results is presented below:

- MW-3B (Downgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for TDS, arsenic, iron, manganese, and sodium were reported. TDS, iron, manganese, and sodium have consistently exceeded their applicable standard at this downgradient monitoring well since 2011. TDS, manganese, and sodium concentrations continue to exhibit consistent trends compared to historical results. Reported concentrations for arsenic and iron have decreased compared to 2014, 2015, 2017, 2018, and 2019 results, and are at the lower end of the published historical range for each analyte. Dissolved arsenic in groundwater concentration exceeded NYS TOGS 1.1.1. Both

the total iron in groundwater concentration and dissolved iron in groundwater concentration exceeded NYS TOGS 1.1.1. Both the total manganese in groundwater concentration and dissolved manganese in groundwater concentration exceeded NYS TOGS 1.1.1. Both the total sodium in groundwater concentration and the dissolved sodium in groundwater concentration exceeded NYS TOGS 1.1.1.

- MW-220 (Downgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, TDS, arsenic, iron, magnesium, and manganese were reported during this sampling event. Turbidity, TDS, iron, magnesium, and manganese have consistently exceeded their applicable standard at this downgradient overburden monitoring well. Values of these parameters are similar to 2014, 2015, 2017, 2018, and 2019 results. The arsenic detection in groundwater was the highest result over the last six (6) monitoring events although well below the historical maximum on February 1989) and near the historical average of 0.04 mg/L. Both the total magnesium in groundwater concentration and dissolved magnesium in groundwater concentration exceeded NYS TOGS 1.1.1. Both the total manganese in groundwater concentration and dissolved manganese in groundwater concentration exceeded NYS TOGS 1.1.1.
- MW-233S (Upgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, nitrate, TDS, and manganese were reported during this sampling event. Turbidity, nitrate, TDS, and manganese exceeded their applicable standard at this upgradient overburden well in 2019. The 2020 values of these parameters are similar to 2019 results.
- MW-233D (Upgradient Bedrock Hydrogeologic Unit) - TOGS 1.1.1 exceedances for TDS, and sodium was reported during this sampling event. Analytical results for this upgradient monitoring well are similar to the reported results for 2015, 2017, 2018, and 2019. The 2020 TDS result is consistent with historical results. Both the total sodium in groundwater concentration and dissolved sodium in groundwater concentration exceeded NYS TOGS 1.1.1.
- MW-245S (Downgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, TDS, iron, manganese, and sodium were reported during this sampling event. TDS, iron, manganese, and sodium have consistently exceeded their applicable standard at this downgradient monitoring well. Values of these parameters, except TDS, have decreased or are similar to 2014, 2015, 2017, 2018, and 2019 results. Sodium concentrations have steadily increased since 2012, and the 2020 sodium results were similar to the 2017, 2018, and 2019 results. Both the total manganese in groundwater concentration and dissolved manganese in groundwater concentration exceeded NYS TOGS 1.1.1. Both the total sodium in groundwater concentration and dissolved sodium in groundwater concentration exceeded NYS TOGS 1.1.1.
- MW-245D (Downgradient Bedrock Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, ammonia, phenolics (estimated), iron, and sodium were reported. Turbidity, ammonia, iron, and sodium consistently exceed their applicable standard. Ammonia levels are similar to 2019 results. Iron concentrations were similar to 2017, 2018, and 2019 results and within the published historical range. Sodium concentrations are also within the published historical range and have steadily decreased since 2014. Both the total sodium in groundwater concentration and the dissolved sodium in groundwater concentration exceeded NYS TOGS 1.1.1.
- PZ-4 (Downgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, TDS, arsenic, iron, lead, magnesium, manganese, and sodium were reported during this sampling

event. TDS, iron, and manganese have consistently exceeded TOGS 1.1.1 standards. Water quality parameter results for turbidity, TDS, magnesium, and manganese were stable and remain at the lower end of the published historical range. Total iron concentrations increased as compared to 2014, 2015, 2017, 2018, and 2019 results. The reported concentration for sodium has steadily increased compared to 2014, 2015, 2017, and 2018 results but is similar to 2019 results. Total iron in groundwater concentration and dissolved iron in groundwater concentration exceeded NYS TOGS 1.1.1. Both the total magnesium in groundwater concentration and dissolved magnesium in groundwater concentration exceeded NYS TOGS 1.1.1. Both the total sodium in groundwater concentration and dissolved sodium in groundwater concentration exceeded NYS TOGS 1.1.1.

3.2 Surface Water Quality

Analytical results for site surface water are presented in Table 4. The surface water samples were collected from downstream surface water monitoring locations SW-5 and SW-8 and from upstream surface water monitoring location SW-13 (see Figure 2).

Reported concentrations for iron exceeded the TOGS 1.1.1 Class C surface water quality standard of 0.3 mg/L at SW-13 (0.72 mg/L), SW-5 (0.69 mg/L), and SW-8 (0.86 mg/L). Review of historical concentrations (1999 - 2019) indicate that 2020 iron in surface water results were similar to 2019 results and near the middle of past reported concentrations at each location. Reported concentrations for aluminum in surface water slightly exceeded the TOGS 1.1.1 Class C surface water quality standard of 0.1 mg/L at SW-13 (0.211 mg/L), SW-5 (0.263 mg/L), and SW-8 (0.194 mg/L). Reported concentrations for aluminum in surface water are consistent with historical concentrations. The estimated result (0.015 mg/L) for phenolics in surface water at the upstream sample location SW-13 slightly exceeded TOGS 1.1.1 standards (0.001 mg/L).

There were no VOCs detected above method detection limits in any of the surface water samples collected. No water quality parameters exceeded standards or guidance values besides phenolics, iron, and aluminum. The 2020 exceedances were consistent with historical results for parameters at each location.

3.3 Leachate Quality

Analytical results for leachate collected from manhole 7 (MH-7) and manhole 15 (MH-15) are summarized in Table 5 and are generally consistent with previous results. Leachate water quality is generally characterized by detectable to elevated concentrations of leachate indicators such as ammonia, bromide, chloride, nitrate, phenolics, sulfate, and TDS and inorganic parameters, including antimony, boron, iron, magnesium, manganese, nickel, and sodium. Inorganic analytes that were not detected include: beryllium, cadmium, hexavalent chromium, lead, mercury, selenium, silver, thallium, vanadium, and zinc.

The VOCs 1,4-Dichlorobenzene (estimated as 1.5 µg/L), benzene (estimated as 0.42 µg/L), and chlorobenzene (estimated as 0.76 µg/L) were detected at manhole MH-15, while no VOCs were detected at manhole MH-7.

3.4 Air Quality

In accordance with the SMP, Landfill gas monitoring consists of measuring explosive gas (percent lower explosive limit, or % LEL) and VOCs in the headspace at each monitoring well/piezometer, leachate manholes MH-7 and MH-15, and along the Landfill perimeter. Explosive gas and VOC measurements were

obtained with a MultiRAE gas monitor. VOCs are also analyzed in post-closure groundwater, surface water, and leachate samples.

Explosive gas was detected at monitoring well MW-303S with a reading of >99% LEL. Explosive gas was detected at manhole MH-7 with a reading of 10% LEL. No VOCs were detected at any of the monitoring wells and was observed to be 0.2 ppm at MH-7. All other air monitoring locations measured no VOCs and 0% LEL.

A perimeter explosive gas survey was performed on August 12, 2020. Gas measurements as % LEL were collected at approximately 100-foot intervals from the subsurface Landfill perimeter from temporary probe holes installed at depths of 12 to 18 inches. No explosive gas or VOCs were detected. The results indicate that explosive gas is not migrating off the Landfill property. The August 2020 air quality monitoring survey for explosive gas and VOCs indicated the Landfill is in full compliance with the requirements set forth in 6 NYCRR 360-2.15(k)(4) and 2.17(f) (effective prior to November 4, 2017).

3.5 Seeps

In accordance with the SMP, observation for leachate outbreaks is the focus of regular inspections performed by Orange County personnel. Conditions indicative of leachate outbreaks, such as wet spots, dead vegetation, surface sloughing, or discoloration are documented, if present. No visible seeps were observed during the August 11 and 12, 2020 sampling and inspection event; therefore, no seep samples were collected.

4.0 INSTITUTIONAL/ENGINEERING CONTROL PLAN COMPLIANCE

The multiple institutional and engineering controls for the Landfill implemented by the RODs and documented in the SMP continue to be in place and performing as designed. These controls were reviewed and evaluated through this PRR.

4.1 Institutional Controls

Institutional controls (IC) include non-physical means of enforcing a restriction on the use of real property that limits human and environmental exposure, restricts the use of groundwater, provides notice to the potential owners, operators, or members of the public, or prevents actions that would interfere with the effectiveness of the remedial program or with the effectiveness and/or integrity of operation, maintenance, or monitoring activities at or pertaining to the Landfill property.

4.1.1 Deed Restrictions

The IC for the Landfill is in the form of a Declaration of Covenants and Restrictions filed with the deed for the Landfill property. The Declaration of Covenants and Restrictions was executed on June 13, 2014 and continues to protect both human health and the integrity of the Landfill. No uses, disturbances, or interferences have been allowed by Orange County. Any future use to the Landfill footprint must be approved by Orange County and NYSDEC. The underlying groundwater is not a source of drinking water for nearby residents.

4.2 Engineering Controls

Engineering controls (EC) include physical barriers or methods employed to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination to ensure the long-term effectiveness of the remedial program, or eliminate potential exposure pathways to contamination. The following sections describe the ECs and their goals as part of the remedy for the Landfill from the ROD dated March 1998.

4.2.1 Part 360 Landfill Cover System

Installation of the standard Part 360 Landfill cover system (completed in November 1995) minimizes infiltration of precipitation to wastes and the resultant generation of leachate and prevents the release of previously disposed wastes. The cover system is regularly inspected by Orange County to evaluate its performance and assess the physical condition of the following Landfill components: settlement and erosion of Landfill cover, vegetative growth, slope stability, damage due to presence of vector populations over or near Landfill cover (e.g., burrow holes), monitoring well and Landfill gas vent integrity, presence or absence of leachate outbreaks, surface water drainage structures, site fencing, gates, and access roads, and evidence of trespassing. A completed Inspection Checklist, Institutional and Engineering Control Form, and select photographs from the annual site inspection and monthly site inspections are provided in Appendix D. The Landfill appears secure and stable, and the Landfill cover is intact with no evidence of stressed vegetation or damage due to settlement or active vectors. No evidence was observed of significant settlement or evidence of erosion of the Landfill cover. There were no observed leachate discharges or iron-stained soils during the Annual Landfill Inspection other than the previously identified and monitored seep. The stormwater drainage system appeared to be functioning as designed.

During the monthly post-closure field inspections conducted between August 2019 and August 2020 the Landfill cover system was observed to be well maintained and remained in good condition. Completed inspection reports are included in Appendix D. No damage to the Landfill cover system was observed. Beyond the regular ongoing post-closure care, no actions or special maintenance is required for the Part 360 Landfill cover system at this time.

4.2.2 Leachate Collection System

The leachate collection system is located along the perimeter of the waste mass. Leachate from the waste mass is collected through underground pipes that flow by gravity to sumps. From these sumps, leachate is pumped into aboveground storage tanks where the leachate is regularly removed for offsite treatment. Modifications to the collection system were introduced with the March 1998 ROD where approximately 950 feet of additional leachate collection piping was installed to contain leachate outbreaks encountered during excavation of a new drainage ditch along the southeastern perimeter road.

The perimeter leachate collection system continues to function as designed. Records regarding leachate removal and treatment are provided in Appendix E. The total leachate removed from the Landfill for treatment at an offsite permitted facility from August 1, 2019 through August 31, 2020 was 548,062.35 gallons.

4.2.3 Groundwater Monitoring Wells

Existing groundwater monitoring wells are located along the upgradient, crossgradient, and downgradient perimeter of the Landfill waste mass. The wells are used to monitor groundwater quality around the Landfill property. Monitoring wells are routinely checked for sediment buildup in the well using depth to bottom measurements, and for the integrity of the outer casing, lid, and lock. These monitoring wells are sampled every fifth quarter for 6 NYCRR Part 360 Baseline Parameters for indication of contamination by the Landfill waste mass.

Overall, the monitoring well network is functioning as designed and Orange County will continue the approved annual monitoring program.

4.2.4 Surface Water Runoff Features

Surface water runoff features are located on and around the Landfill property. Terraces and riprap channels on the Landfill cover system direct stormwater runoff to the Landfill perimeter drainage ditches successfully preventing the occurrence of standing water on the Landfill. The surface water runoff is directed from perimeter drainage ditches into drainage basins to reduce particulates and sediment before ultimately discharging into the Cheechunk Canal. These surface water runoff features are checked monthly for sediment buildup, overgrowth of vegetation, overflow of drainage ditches or basins, improper drainage of terraces and channels, and sloughing of the Landfill cover. Appendix D contains documentation of monthly inspections of the surface water runoff features in 2019 through August 12, 2020. Based on the observed conditions, no corrective measures are needed for the surface water management features. Orange County will continue to perform monthly inspections.

4.3 IC/EC Certification

As required by DER-10, Section 6.3(a), the completed and signed NYSDEC IE/EC Certification Form is provided as Appendix F. All ICs/ECs are in place and functioning as designed. The previously noted seeps between the Landfill and the Canal are the subject of a NYSDEC approved RAWP.

5.0 MONITORING PLAN COMPLIANCE

The Landfill was granted a post-closure monitoring variance by the NYSDEC in December 2002 reducing the monitoring of the Landfill from quarterly to every fifth quarter. The NYSDEC approved further modifications to the monitoring plan on August 5, 2014. Monitoring includes collection of groundwater, surface water, and leachate samples for analysis of 6 NYCRR Part 360 Baseline parameters, as well as water level measurements from select monitoring wells, and air quality monitoring. Monitoring wells and sample locations are shown on Figure 2. The following sections describe the monitoring requirements for groundwater, surface water, leachate, and air quality.

5.1 Groundwater Monitoring

The groundwater monitoring program provides for collection of water quality samples from one piezometer location (PZ-4) and six (6) monitoring wells spread out around the Landfill property. In addition, static water level measurements were measured from additional overburden and bedrock monitoring wells and piezometers around the Landfill perimeter. A groundwater contour map is provided in Figure 3.

Depth to water measurements were obtained at or near the Landfill perimeter to determine groundwater elevations in the overburden and upper bedrock aquifer systems. Groundwater flow direction in the overburden aquifer is to the east-southeast towards the Cheechunk Canal (see Figure 3). Groundwater flow direction in the bedrock aquifer is similar, which is consistent with historical reports. Groundwater gradients are similar in both aquifer systems and upward vertical gradients are noted throughout the Landfill perimeter, consistent with historical trends.

During the 2020 sampling event, groundwater samples were obtained from five (5) downgradient locations and two (2) upgradient locations using low flow methodology and analyzed for 6 NYCRR Part 360 Baseline parameters. An upgradient sample was collected from the overburden hydrogeologic unit (MW-233S) and bedrock hydrogeologic unit (MW-233D) located approximately 1,150 feet east of MW-230 well pair and upgradient of the Landfill.

As described in Section 3.1, results generally show groundwater samples collected upgradient and downgradient of the Landfill waste mass indicate no significant differences in data trends where exceedances were historically observed. Overall, the groundwater monitoring program meets the remedial objectives by providing suitable means to determine the effectiveness of the selected remedy. Orange County will continue groundwater monitoring according to the approved SMP.

5.2 Surface Water Monitoring

The approved surface water monitoring program consists of annual sampling of three (3) locations (SW-13, SW-5, and SW-8) along the Cheechunk Canal adjacent to the Landfill. These locations are located upgradient, crossgradient, and downgradient of the Landfill (see Figure 2).

The three (3) surface water samples were analyzed for 6 NYCRR Part 360 Baseline parameters and compared to TOGS 1.1.1 standards and guidance values. The surface water monitoring program meets the remedial objectives for the site in that it provides direct means to determine the effectiveness of the selected remedy. Orange County will continue surface water monitoring according to the approved SMP.

5.3 Leachate Monitoring

Leachate monitoring consisted of sampling of two (2) manhole locations (MH-7 and MH-15) located on the eastern and western edges of the Landfill footprint, respectively. Leachate samples were analyzed for 6 NYCRR Part 360 Baseline parameters.

Section 4.2.1.1 of the approved SMP requires that if conditions indicative of leachate outbreaks such as wet spots, dead vegetation, surface sloughing, or discoloration are observed near the Landfill, further remediation investigation is warranted to evaluate the condition and determine the appropriate corrective action. The leachate monitoring program is consistent with the approved SMP for the site. Orange County will continue leachate monitoring according to the approved SMP and have implemented the following remedial measures, as detailed in the RAWP approved by the NYSDEC on March 20, 2017:

1. Excavation and removal of impacted soil at the seeps
2. Installation of 320-foot long HDD groundwater recovery well

Visibly stained soil in the immediate vicinity of identified seeps along the northern bank of the Cheechunk Canal was excavated in October 2019. Following the excavation, the excavated areas were stabilized with

nonwoven geotextile fabric and at least 24 inches of medium stone fill. Installation and development of the HDD also occurred in October 2019. The HDD well pump and appurtenances were installed in July 2020 and are undergoing startup testing. On July 9, 2020, the County submitted a Groundwater Recovery System Pilot Program Work Plan, which was approved by the NYSDEC in July 2020. Following completion of startup testing, the pilot program will be initiated in accordance with the approved Work Plan.

5.4 Air Quality Monitoring

Air quality monitoring includes field measurements of explosive gas and VOC levels in the headspaces of the manholes, piezometers, and monitoring wells sampled during each monitoring event. VOC analyses are also performed on collected groundwater, surface water, and leachate samples. Results of the air quality monitoring are described in Section 3.4.

The air quality monitoring program meets the remedial objectives to evaluate the effectiveness of the selected remedy in that it provides a direct means to determine if Landfill gases are prevented from migration and buildup. Orange County will continue air quality monitoring according to the approved SMP.

6.0 OPERATION AND MAINTENANCE PLAN COMPLIANCE

The Operation and Maintenance (O&M) Plan for the Landfill, outlined in the approved SMP, consists of the following components:

- Repair, if necessary, of the Landfill cover system in accordance with approved specification materials and methods;
- Annual mowing of the vegetated cover system;
- Annual or more frequent mowing of grass-lined ditches;
- Addition, if necessary, of soil amendments (fertilizer, lime) to the cover system;
- Annual or more frequent clearing of drainage swales, ditches and channels;
- Investigation of stressed vegetation and gas odors;
- Vector control;
- Snow plowing and upkeep of the perimeter access road;
- Collection, removal, and disposal of leachate;
- Preventative maintenance of leachate pumps; and,
- Repair or replacement, if necessary, of monitoring wells and piezometers.

During this reporting period, the following O&M activities were performed:

- Monthly inspections of the Landfill cap and cover materials, surface water drainage features, monitoring wells, leachate collection system, and the Landfill property (Appendix D);
- Mowing of the Landfill cover system on July 14, 2020 and August 12, 2020;
- Regular leachate removal from aboveground storage tanks for treatment at permitted facilities (see Appendix E);
- Groundwater, surface water, leachate, and air quality monitoring performed on August 11, 2020 and August 12, 2020; and,
- Regular inspection of seeps.

Operational issues were addressed by Landfill staff, including:

- The Orange County inspector noted in the August 15, 2019 Monthly Inspection Report (Appendix D) that the transformer at leachate collection tank L-1 was repaired. TAM Enterprises, Inc. (TAM), Orange County's contractor, was awarded the contract to maintain and remove all leachate from onsite tanks and manholes during the remainder of the reporting period (Appendix D).

Operation and maintenance of the property continues to protect human health and the overall integrity of the Landfill. There were no deficiencies in complying with the O&M Plan during this reporting period. The components of the remedy subject to O&M requirements (Landfill cover, gas venting and leachate collection systems, and surface water runoff features) are functioning as designed. The integrity of the monitoring network remains intact. Regular inspections performed by Orange County personnel continue to show compliance with the March 1998 remedy determined for the Landfill, with the exception of the seeps.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The Landfill continues to comply with the required activities set forth in the SMP for the subject reporting period. The ICs and ECs implemented at the Site continue to function as designed. The environmental monitoring plan for the Landfill is ongoing and remains in accordance with the approved variance granted by the NYSDEC in August 2014. Orange County will continue to perform regular inspections to maintain the integrity of the Landfill and surrounding property and protect human health and the environment.

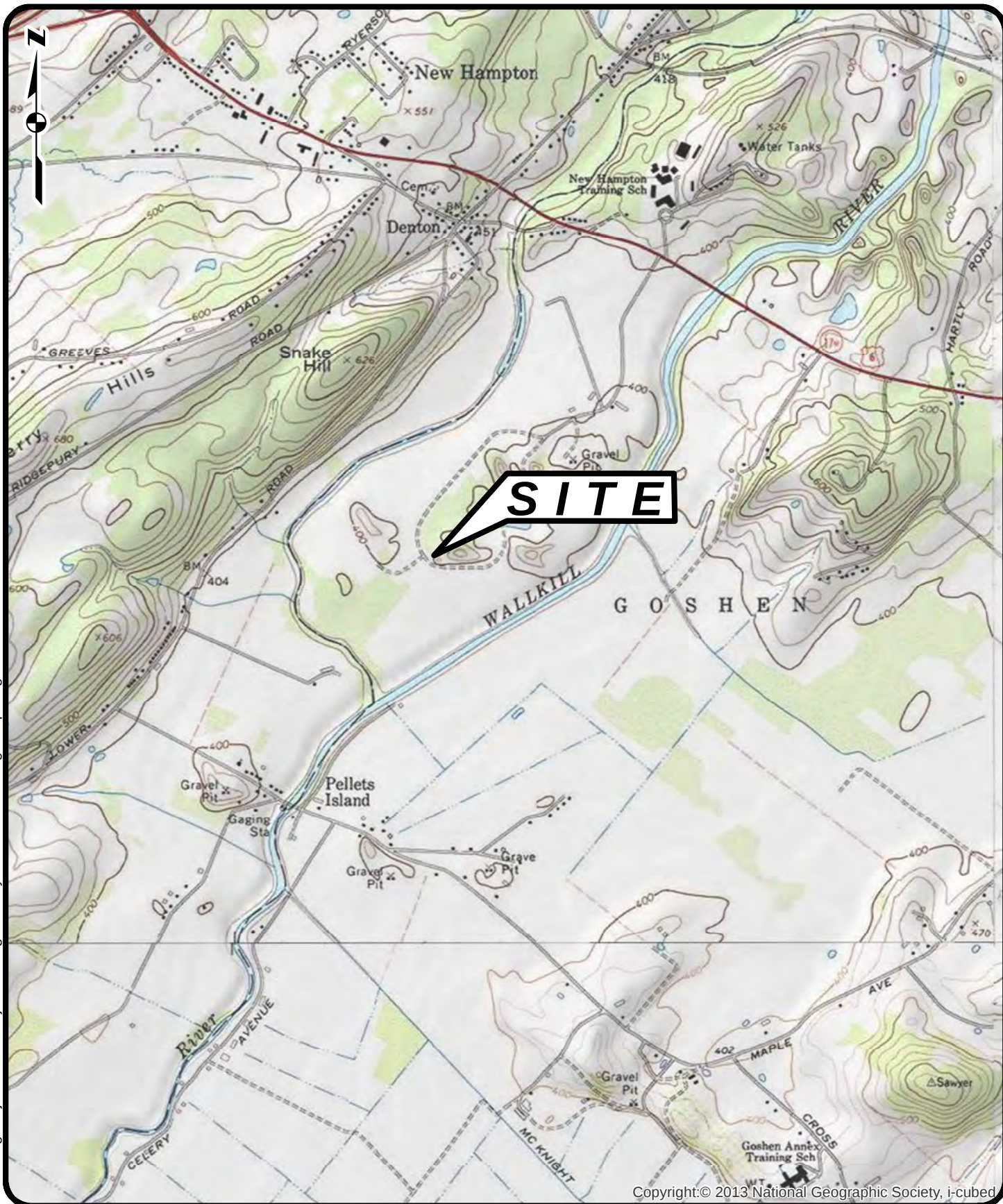
The following conclusions are made based on observations and analytical results collected during this reporting period:

- Groundwater flow direction in the overburden and bedrock aquifer systems is to the east-southeast towards the Cheechunk Canal. Groundwater gradients are similar in both aquifer systems and upward vertical gradients are noted throughout the Landfill perimeter.
- No site-related VOCs were detected at or above the respective laboratory method detection limits in groundwater or surface water samples.
- Applicable TOGS 1.1.1 groundwater standards were exceeded for ammonia, nitrate, phenolics, TDS, arsenic, iron, lead, magnesium, manganese, and sodium, as described in Section 3.1.
- Groundwater quality results indicate no significant differences in data trends where exceedances were historically observed.
- Applicable TOGS 1.1.1 Class C surface water standard was exceeded for iron and aluminum at all surface water sampling locations (SW-5, SW-8, and SW-13) and phenolics only at SW-13. A comparison of upstream (background conditions) to downstream surface water quality indicates that the farthest downstream surface water results were lower than the reported upstream conditions, including water quality parameters historically tracked such as chloride, hardness, phenolics, TKN, iron, magnesium, manganese, and sodium.

- The 2020 analytical results for leachate collected from onsite manholes are consistent with previous results.
- The August 2020 air quality monitoring survey for explosive gas and VOCs indicated the Landfill is in full compliance with the requirements set forth in 6 NYCRR 360-2.15(k)(4) and 2.17 (Effective prior to November 4, 2017).
- The Landfill appears secure and stable, and the Landfill cover is intact with no evidence of stressed vegetation, damage due to settlement, erosion or active vectors.
- The stormwater drainage system appears to be functioning as designed.
- In support of the ongoing seep issue, Orange County will continue to pursue implementation of the approved RAWP.

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FIGURES

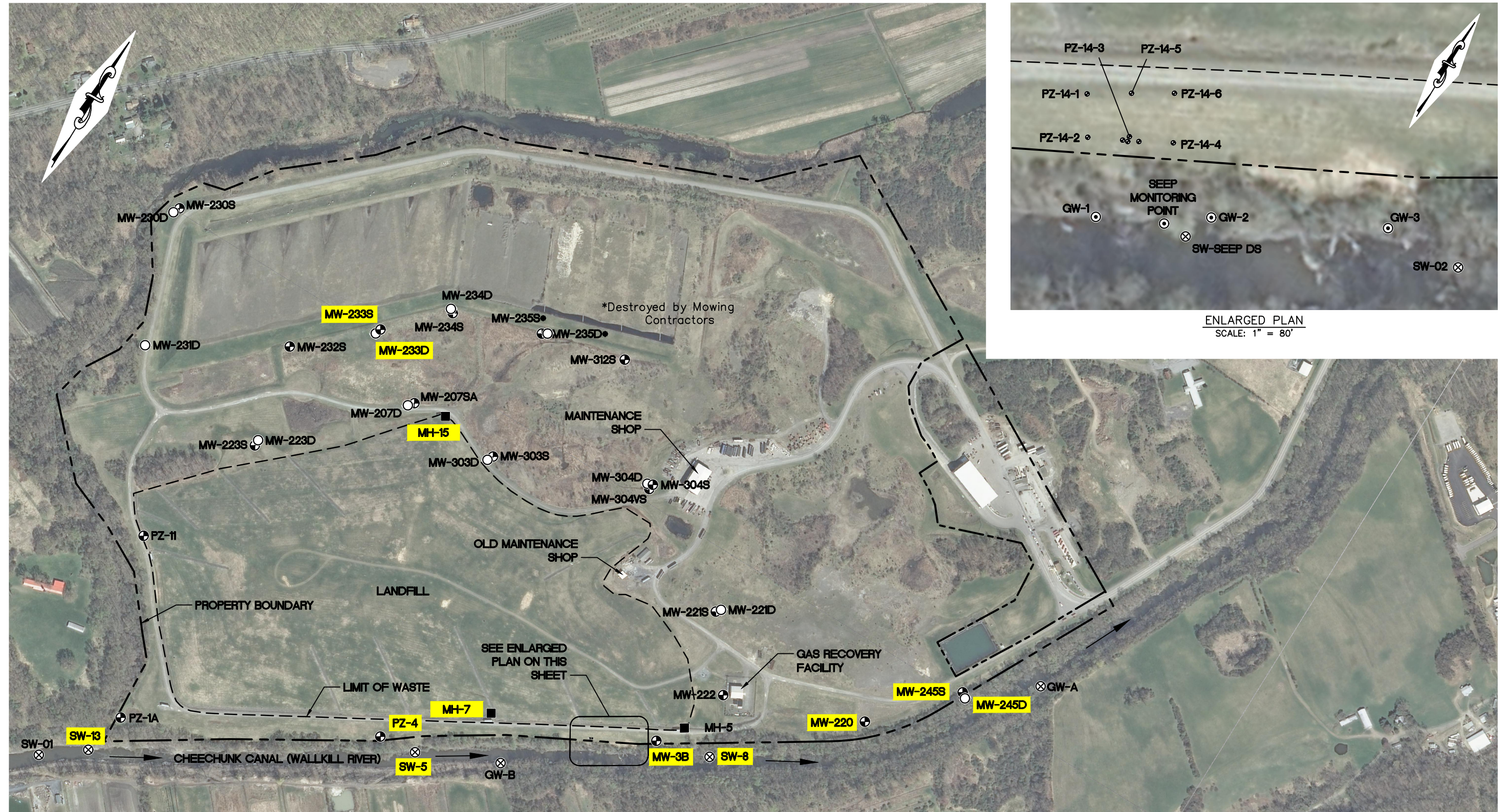


Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

SITE LOCATION MAP
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL
TOWN OF GOSHEN ORANGE CO., NY

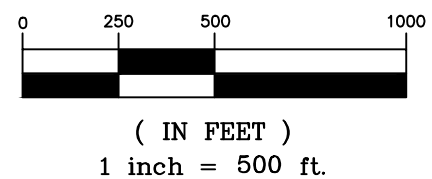
PROJ.NO. 2010-15	DATE: 5/19/2020	SCALE: 1" = 2,000'	DWG.NO. 2015-1001G	FIGURE 1
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LEGEND:

- MW-245S OVERBURDEN MONITORING WELL AND PIEZOMETER LOCATION
- MW-245D BEDROCK MONITORING WELL LOCATION
- MH-7 LEACHATE SAMPLING LOCATION
- ⊙ GW-1 SEEP MONITORING LOCATION
- ⊗ SW-5 SURFACE WATER SAMPLE LOCATION
- MW-245S AS PER 2014 SMP, SAMPLED FOR CHARACTERIZATION OF GROUNDWATER, SURFACE WATER OR LEACHATE QUALITY
- LIMIT OF WASTE
- - - - - PROPERTY BOUNDARY



MAP REFERENCES:

1. PROPERTY BOUNDARY AND LIMIT OF WASTE FROM DRAWINGS ENTITLED "OVERALL PLAN AND RESTRICTED PARCEL," BY THOMAS J. BARRY, DATED FEBRUARY 14, 2013.
2. AERIAL PHOTOGRAPHY FROM NEW YORK STATWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013.

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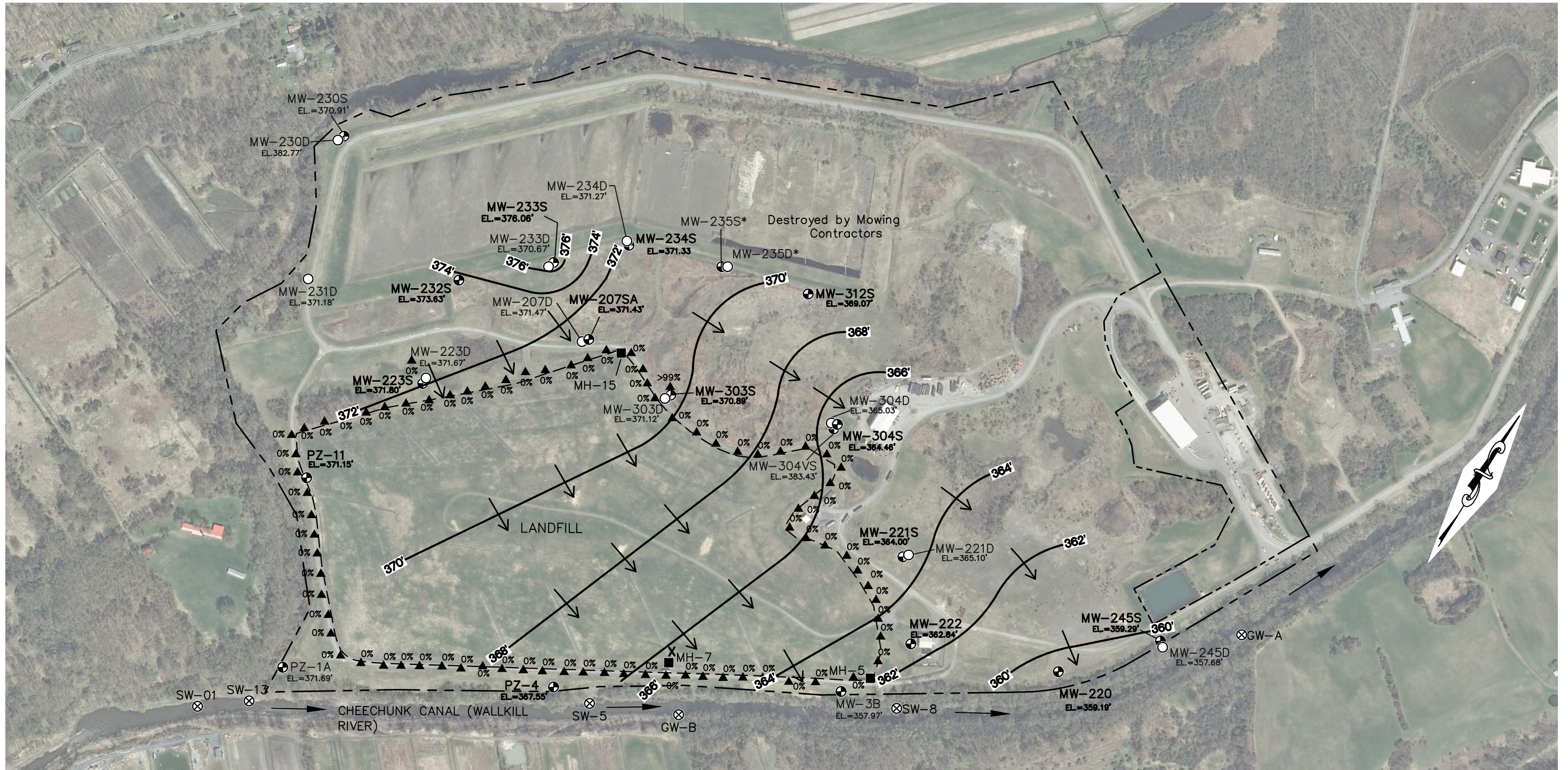
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SAMPLE LOCATION MAP
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL

TOWN OF GOSHEN

ORANGE CO., N.Y.

PROJ. No.: 2010-15 | DATE: 9/16/2019 | SCALE: 1"=500' | DWG. NO. 2010-15039 | FIGURE 2

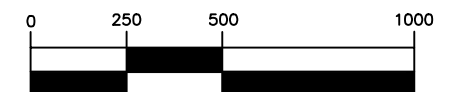


LEGEND:

- GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION
- MW-245S
EL = 359.29'
OVERBURDEN MONITORING WELL AND PIEZOMETER LOCATION WITH AUGUST 11-12, 2020 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL (AMSL))
- MW-245D
EL = 357.68'
BEDROCK MONITORING WELL LOCATION WITH AUGUST 11-12, 2020 GROUNDWATER ELEVATION (FEET AMSL)
- MH-7
LEACHATE SAMPLING LOCATION
- SW-5
SURFACE WATER SAMPLE LOCATION
- LIMIT OF WASTE
- - -
PROPERTY BOUNDARY
- 0% ▲
EXPLOSIVE GAS MONITORING POINT

MAP REFERENCES:

1. PROPERTY BOUNDARY AND LIMIT OF WASTE FROM DRAWINGS ENTITLED "OVERALL PLAN AND RESTRICTED PARCEL," BY THOMAS J. BARRY, DATED FEBRUARY 14, 2013.
2. AERIAL PHOTOGRAPHY FROM NEW YORK STATWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013.



(IN FEET)
1 inch = 500 ft.

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GROUNDWATER CONTOUR MAP (OVERBURDEN
HYDROGEOLOGIC UNIT) AND EXPLOSIVE GAS SURVEY
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL

TOWN OF GOSHEN

ORANGE CO., N.Y.

PROJ. No.: 2010-15 | DATE: 9/28/2020 | SCALE: 1"=500' | DWG. NO. 2010-15114 | FIGURE 3

TABLES

TABLE 1

**Summary of Field Parameter Measurements
August 11-12, 2020
Orange County Landfill, Goshen, New York**

Parameter	Title 6 Part 703.3 Standards	Units	Groundwater Sample Locations								Surface Water Locations			Manhole Leachate	
			MW-3B	MW-220	MW-233S	MW-233D	MW-245S	MW-245D*	MW-245D**	PZ-4	SW-5	SW-8	SW-13	MH-7	MH-15
Static Water Level [1]	---	feet	28.46	19.75	12.20	18.34	31.84	33.40	51.79	14.79	---	---	---	---	---
Specific Conductivity	---	mS/cm	0.696	0.973	0.826	0.950	1.077	0.816	0.890	1.218	0.498	0.497	0.499	18.924	2.173
Temperature	---	degrees C	15.3	12.5	12.7	13.2	13.9	18.0	16.1	14.0	26.9	26.4	27.1	26.2	18.0
pH [2]	6.5<pH< 8.5	pH Units	7.24	6.73	7.03	7.52	6.70	7.19	7.21	6.75	7.63	7.53	7.55	7.49	6.98
ORP	--	mV	-120.2	-5.2	113.2	235.1	-21.6	-147.6	-40.6	169.1	149	144.6	188.9	142.4	9.9
Dissolved Oxygen [3]	> 6.0	mg/L	0.62	0.63	2.2	5.08	0.66	0.63	0.74	2.46	6.87	6.59	7.03	4.31	5.59
Turbidity [4]	5.0	NTU	2.84	43.79	98.67	26.36	28.23	84.23	3.3	18.32	9.28	8.47	7.83	15.55	140.23

NOTES :

Values in **BOLD** indicate an exceedance of applicable water quality standard.

^[1] Measured from the top of the PVC well to water surface.

^[2] pH standard does not apply to collected leachate

^[3] DO standard applies to surface water samples only.

^[4] Applies to groundwater only.

--- No standard or not measured.

* Water quality parameters collected on 8/11/2020 prior to sample collection of PFAS and 1,4 - Dioxane.

** Water quality parameters collected on 8/12/2020 prior to sample collection of Part 360 Baseline and Dissolved Metals.

Table 2
Summary of Groundwater Elevation Measurements
August 11-12, 2020
Orange County Landfill, Goshen New York

Well I.D.	Measuring Point Elevation (ft)	Static Water Level (ft)	Groundwater Elevation (ft)
PZ-14-1	389.33	28.21	361.12
PZ-14-2	381.19	20.72	360.47
PZ-14-3	382.51	22.05	360.46
PZ-14-4	380.81	20.24	360.57
PZ-14-5	391.25	30.00	361.25
PZ-14-6	390.13	29.79	360.34
PZ-4	382.34	14.79	367.55
MW-233S	388.26	12.20	376.06
MW-233D	389.01	18.34	370.67
MW-3B	386.43	28.46	357.97
MW-245S	391.13	31.84	359.29
MW-245D	391.08	33.40	357.68
MW-220	378.94	19.75	359.19
PZ-17-1	381.27	20.70	360.57
PZ-17-2	379.80	19.31	360.49
PZ-1A	385.28	13.59	371.69
PZ-11	390.41	19.26	371.15
MW-222	382.49	19.65	362.84
MW-221S	381.44	17.44	364.00
MW-221D	381.29	16.19	365.10
MW-304VS	390.72	7.29	383.43
MW-304S	390.92	26.46	364.46
MW-304D	390.08	25.05	365.03
MW-312S	387.06	17.99	369.07
MW-303S	389.85	18.96	370.89
MW-303D	389.83	18.71	371.12
MW-207SA	389.74	18.31	371.43
MW-207D	390.92	19.45	371.47
MW-234S	390.63	19.30	371.33
MW-234D	390.10	18.83	371.27
MW-223S	389.25	17.45	371.80
MW-223D	389.36	17.69	371.67
MW-232S	388.64	15.01	373.63
MW-231D	387.67	16.49	371.18
MW-230S	384.46	13.55	370.91
MW-230D	385.51	2.74	382.77

PZ-4 in table twice...

Notes:

¹ = Measuring point elevation obtained by Sterling Environmental Engineering, P.C. on August 4, 2020 with sub-inch GPS.

* = Measuring point elevation obtained from Table 3-2 of the Remedial Investigation Report for the Orange County Landfill - DRAFT, prepared by Stearns & Wheler, dated March 1995.

TABLE 3
Summary of Groundwater Analytical Results
August 11-12, 2020
Orange County Landfill, Goshen, New York

ANALYTE	NY-AWQS	MW-3B 8/11/2020	MW-220 8/11/2020	MW-233S 8/11/2020	MW-233D 8/11/2020	MW-245S 8/11/2020	MW-245D 8/12/2020	DUP08122020 8/12/2020	PZ-4 8/12/2020
LEACHATE INDICATOR PARAMETERS, mg/L									
Alkalinity, Total	---	357	433	309	180	382	285	294	710
BOD, 5 day	---	5.4	ND	ND	ND	ND	7.1	5	ND
Bromide	2	0.704	0.079	0.035 J	1.34	0.094	0.136	0.121	0.403
Chemical Oxygen Demand	---	5.2 J	5.2 J	7.5 J	2.7 U	2.7 U	9.8 J	7.5 J	160
Chloride	250	60.8	20.9	1.55	126	59.8	36.7	34	53.8
Chromium, Hexavalent	0.05	0.003 U	0.003 U	0.003 J	0.003 U	0.003 U	0.003 U	0.003 U	0.003 J
Color (Color Units)	---	44	580	18	17	42	32	28	1,800
Cyanide, Total	0.2	0.001 U	0.002 J	0.001 U	0.001 U	0.002 J	0.001 U	0.001 U	0.001 U
Hardness, Total	---	303	524	445	203	535	283	285	821
Nitrogen, Ammonia	2	0.624	0.104	0.097	0.049 J	0.14	6.4	1.87	0.308
Nitrogen, Nitrate	10	0.049 J	0.091 J	12	0.023 U	0.026 J	0.038 J	0.097 J	0.06 J
Nitrogen, Total Kjeldahl	---	0.864	0.559	0.767	0.385	0.414	6.6	2.43	2.58
Phenolics, Total	0.001	0.006 ^(B) U	0.006 ^(B) U	0.006 ^(B) U	0.006 ^(B) U	0.006 ^(B) U	0.007 J	0.006 ^(B) U	0.006 ^(B) U
Sulfate	250	41.3	138	119	131	160	107	111	85.3
Total Dissolved Solids	500	560	680	560	570	690	500	530	820
Total Organic Carbon	---	1.52	3.22	3.61	1.2	1.99	2.2	1.84	1.33
VOLATILE ORGANIC COMPOUNDS, µg/L									
1,1,1,2-Tetrachloroethane	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,1,1-Trichloroethane	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,1,2-Trichloroethane	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,1-Dichloroethene	5	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2-Dichlorobenzene	3	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,2-Dichloroethane	0.6	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichloropropane	1	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-Dichlorobenzene	3	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,4-Dichlorobenzene	3	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
2-Chloroethylvinyl ether	---	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	1	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Bromodichloromethane	50	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Bromoform	50	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Bromomethane	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Carbon tetrachloride	5	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Chloroethane	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Chloroform	7	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Chloromethane	---	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
cis-1,3-Dichloropropene	0.4	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Dibromochloromethane	50	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Methylene chloride	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
o-Xylene	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
p/m-Xylene	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Tetrachloroethene	5	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Toluene	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,3-Dichloropropene	0.4	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Trichloroethene	5	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Trichlorofluoromethane	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Vinyl chloride	2	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
Total VOCs	---	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.

U or ND = Not Detected (ND). The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

^(A) = NY TOGs 1.1.1: Water Quality Stds & Guidance Values : GA Water Class for Standard and Guidance Values; Eff. June 2004

^(B) = The sample specific reporting limit does not support the applicable groundwater standard.

⁽¹⁾ = The sum of iron and manganese concentrations must not exceede 0.5 mg/L.

TABLE 3
Summary of Groundwater Analytical Results
August 11-12, 2020
Orange County Landfill, Goshen, New York

ANALYTE	NY-AWQS	MW-3B 8/11/2020	MW-220 8/11/2020	MW-233S 8/11/2020	MW-233D 8/11/2020	MW-245S 8/11/2020	MW-245D 8/12/2020	DUP08122020 8/12/2020	PZ-4 8/12/2020
DISSOLVED HARDNESS BY SM 2340B, mg/L									
Hardness	---	350	524	445	203	535	284	272	637
DISSOLVED METALS, mg/L									
Aluminum, Dissolved	---	0.00402 J	0.0094 J	0.00327 U	0.00843 J	0.0138 J	0.00327 U	0.00327 U	0.0139
Antimony, Dissolved	0.003	0.00042 U	0.00061 J	0.00042 U	0.00219 J	0.00042 U	0.00143 J	0.00059 J	0.0007 J
Arsenic, Dissolved	0.025	0.02532	0.00378	0.0006	0.00068	0.0132	0.00308	0.00293	0.00664
Barium, Dissolved	1	0.1528	0.06028	0.04775	0.03681	0.06956	0.08288	0.08157	0.07062
Beryllium, Dissolved	0.003	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Boron, Dissolved	1	0.108	0.026 J	0.016 J	0.087	0.026 J	0.048	0.047	0.097
Cadmium, Dissolved	0.005	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00005 U
Calcium, Dissolved	---	106	150	127	51.2	158	71.2	67.9	182
Chromium, Dissolved	0.05	0.00017 U	0.00017 U	0.00017 U	0.00036 J	0.00017 U	0.00017 U	0.00017 U	0.00017 U
Cobalt, Dissolved	---	0.00016 J	0.00055	0.00016 U	0.00016 U	0.00038 J	0.00016 U	0.00016 U	0.00041 J
Copper, Dissolved	0.2	0.00038 J	0.00038 U	0.00098 J	0.00076 J	0.00038 U	0.00049 J	0.00038 U	0.0012
Iron, Dissolved	0.3 ⁽¹⁾	0.147	0.28	0.0191 U	0.031 J	0.296	0.0485 J	0.0316 J	0.0785
Lead, Dissolved	0.025	0.00034 U	0.00034 U	0.00034 U	0.00035 J	0.00034 U	0.00034 U	0.00034 U	0.00034 U
Magnesium, Dissolved	35	20.8	36.4	31.2	18.1	33.7	25.8	24.9	44.5
Manganese, Dissolved	0.3 ⁽¹⁾	0.6776	0.8644	0.07167	0.00398	1.636	0.1103	0.09594	0.9687
Mercury, Dissolved	0.00077	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U
Nickel, Dissolved	0.1	0.00277	0.00071 J	0.00058 J	0.00055 U	0.00055 U	0.00055 U	0.00055 U	0.00416
Potassium, Dissolved	---	1.9	2.94	2.38	1.86	2.36	4.54	4.15	3.39
Selenium, Dissolved	0.01	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U
Silver, Dissolved	0.05	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U
Sodium, Dissolved	20	40.8	11.5	1.42	108	29.9	54.7	49.4	22.8
Thallium, Dissolved	0.0005	0.00014 U	0.00018 J	0.00014 U	0.00048 J	0.00014 U	0.00025 J	0.00017 J	0.00017 J
Vanadium, Dissolved	---	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U
Zinc, Dissolved	2	0.00379 J	0.00447 J	0.00341 U	0.01223	0.00541 J	0.0103	0.00341 U	0.00708 J
TOTAL METALS, mg/L									
Aluminum, Total	---	0.00938 J	0.0819	0.0059 J	0.00684 J	0.0408	0.0211	0.0162	10.5
Antimony, Total	0.003	0.00042 U	0.00092 J	0.00042 U	0.00249 J	0.00042 U	0.00069 J	0.00042 U	0.00042 U
Arsenic, Total	0.025	0.01957	0.07915	0.00061	0.00076	0.01769	0.00385	0.00379	0.04208
Barium, Total	1	0.1216	0.07807	0.05406	0.03636	0.06911	0.09108	0.09157	0.1507
Beryllium, Total	0.003	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.00064
Boron, Total	1	0.057	0.027 J	0.015 J	0.088	0.024 J	0.048	0.051	0.108
Cadmium, Total	0.005	0.00005 U	0.00005 U	0.00006 J	0.00005 U	0.00005 U	0.00014 J	0.0001 J	0.00027
Calcium, Total	---	96.2	152	126	50	148	71.6	72.3	239
Chromium, Total	0.05	0.00017 U	0.00033 J	0.00017 U	0.00034 J	0.00017 U	0.00055 J	0.00037 J	0.01594
Cobalt, Total	---	0.00016 U	0.00104	0.00016 J	0.00016 U	0.00036 J	0.00016 U	0.00016 U	0.01321
Copper, Total	0.2	0.00038 U	0.00065 J	0.00146	0.00046 J	0.00038 U	0.00095 J	0.00038 U	0.04997
Iron, Total	0.3 ⁽¹⁾	0.655	10.8	0.0357 J	0.0472 J	0.822	1.06	1.12	28.5
Lead, Total	0.025	0.00034 U	0.00313	0.00034 U	0.00117	0.00043 J	0.00159	0.00146	0.02817
Magnesium, Total	35	15.2	41.6	33.2	19.1	34.1	25.3	25.4	54.4
Manganese, Total	0.3 ⁽¹⁾	0.5011	1.311	0.3871	0.01554	1.594	0.1134	0.1144	2.54
Mercury, Total	0.00077	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U	0.00009 U
Nickel, Total	0.1	0.00111 J	0.00089 J	0.00136 J	0.00055 U	0.00055 U	0.00067 J	0.00055 U	0.02973
Potassium, Total	---	1.19	3.34	2.3	1.79	2.45	4.34	4.28	4.88
Selenium, Total	0.01	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00173 U	0.00644
Silver, Total	0.05	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U	0.00016 U
Sodium, Total	20	29.1	12	1.41	107	38.3	51.9	52.1	23.1
Thallium, Total	0.0005	0.00014 U	0.00014 U	0.00014 U	0.00036 J	0.00014 U	0.00014 U	0.00014 U	0.00015 J
Vanadium, Total	---	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.01923
Zinc, Total	2	0.00341 U	0.0061 J	0.00341 U	0.00774 J	0.00341 U	0.01236	0.01092	0.1044

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.

U or ND = Not Detected (ND). The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

ND = Not Detected and No available Method Detection Limit (MDL) for this analyte.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

^(A) = NY TOGs 1.1.1: Water Quality Stds & *Guidance Values* : GA Water Class for Standard and Guidance Values; Eff. June 2004

^(B) = The sample specific reporting limit does not support the applicable groundwater standard.

⁽¹⁾ = The standard for the sum of iron and manganese is 0.5 mg/L.

TABLE 3-A
Summary of Groundwater Analytical Results
August 11, 2020
Orange County Landfill, Goshen, New York

ANALYTE	STANDARD	MW-220 8/11/2020	MW-233S 8/11/2020	MW-233D 8/11/2020	MW-245S 8/11/2020	MW-245D 8/11/2020	DUP08112020 8/11/2020	EB08112020 8/11/2020	FB08112020 8/11/2020
1,4 DIOXANE, µg/L									
1,4-Dioxane	35 ^(A)	1.01	0.0339 U	0.0314 U	0.658	0.0339 U	0.0339 U	NS	NS
PERFLUORINATED ALKYL ACIDS, ng/L									
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	---	1.06 U	1.1 U	1.08 U	1.11 U	1.05 U	1.12 U	1.08 U	1.18 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	---	1.16 U	1.21 U	1.19 U	1.22 U	7.63 F,J	7.55 J	1.18 U	1.3 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	---	0.702 U	0.732 U	0.716 U	0.735 U	0.699 U	0.745 U	0.715 U	0.784 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	---	0.565 U	0.59 U	0.577 U	0.592 U	0.564 U	0.6 U	0.576 U	0.632 U
Perfluorobutanesulfonic Acid (PFBS)	---	0.208 U	0.217 U	0.212 U	0.218 U	0.207 U	0.22 U	0.212 U	0.232 U
Perfluorobutanoic Acid (PFBA)	---	2.23	0.922 J	1.55 J	2.17	0.922 J	0.93 J	0.363 U	0.398 U
Perfluorodecanesulfonic Acid (PFDS)	---	0.855 U	0.892 U	0.873 U	0.896 U	0.852 U	0.908 U	0.872 U	0.956 U
Perfluorodecanoic Acid (PFDA)	---	0.265 U	0.277 U	0.271 U	0.278 U	0.282 J	0.308 J	0.27 U	0.296 U
Perfluorododecanoic Acid (PFDoA)	---	0.324 U	0.339 U	0.332 U	0.34 U	0.324 U	0.344 U	0.331 U	0.363 U
Perfluoroheptanesulfonic Acid (PFHpS)	---	0.6 U	0.627 U	0.613 U	0.629 U	0.598 U	0.637 U	0.612 U	0.671 U
Perfluoroheptanoic Acid (PFHpA)	---	0.196 U	0.273 J	1.98	0.206 U	0.685 J	0.645 J	0.2 U	0.22 U
Perfluorohexanesulfonic Acid (PFHxS)	---	0.328 U	0.342 U	0.335 U	0.344 U	0.327 U	0.348 U	0.334 U	0.367 U
Perfluorohexanoic Acid (PFHxA)	---	0.468 J,U	1.04 J,U	4.45	0.592 J,U	2.78 J+	2.74 J+	0.345 J,U	0.394 J,U
Perfluorononanoic Acid (PFNA)	---	0.272 U	0.284 U	0.278 U	0.285 U	0.271 U	0.289 U	0.278 U	0.304 U
Perfluorooctanesulfonamide (FOSA)	---	0.506 U	0.528 U	0.517 U	0.53 U	0.504 U	0.537 U	0.516 U	0.566 U
Perfluorooctanesulfonic Acid (PFOS)	---	0.44 U	0.459 U	2.91	0.461 U	2.13	2.06	0.448 U	0.491 U
Perfluorooctanoic Acid (PFOA)	---	0.269 J	0.546 J	1.32 J	0.23 J	1.3 J	1.29 J	0.21 U	0.23 U
Perfluoropentanoic Acid (PFPeA)	---	0.841 J,U	0.816 J,U	3.56 J+	1.24 J,U	2.71 J+	2.66 J+	0.416 J	0.386 U
Perfluorotetradecanoic Acid (PFTA)	---	0.216 U	0.226 U	0.221 U	0.227 U	0.216 U	0.23 U	0.221 U	0.242 U
Perfluorotridecanoic Acid (PFTrDA)	---	0.285 U	0.298 U	0.292 U	0.299 U	0.284 U	0.303 U	0.291 U	0.319 U
Perfluoroundecanoic Acid (PFUnA)	---	0.227 U	0.237 U	0.232 U	0.238 U	0.226 U	0.241 U	0.231 U	0.254 U
PFOA and PFOS, Total	70 ^(B)	0.269 J	0.546 J	4.23 J	0.23 J	3.43 J	3.35 J	ND	ND

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.

U or ND = Not Detected (ND). The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

NS = Not Sampled

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

J+ = Analyte is present, Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.

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.

^(A) = USEPA Health Advisory Level (HAL) for 1,4 Dioxane in drinking water (35 µg/L).

^(B) = EPA PFOS and PFAS Drinking Water Health Advisories Fact Sheet, November 2016.

--- = No applicable standard or guidance value available.

Qualifiers in **Red** were modified based on Data Validation Review performed by Alpha Geoscience.

Table 4
Summary of Surface Water Analytical Results
August 11-12, 2020
Orange County Landfill, Goshen, New York

ANALYTE	Surface Water Standard ^(A)	SW-5	SW-8	SW-13
		8/12/2020	8/12/2020	8/12/2020
LEACHATE INDICATOR PARAMETERS, mg/L				
Alkalinity, Total	---	120	122	121
Ammonia	⁽¹⁾	0.148	0.148	0.143
BOD, 5 day	---	ND	ND	ND
Bromide	---	0.26	0.257	0.255
Chemical Oxygen Demand	---	22	19	24
Chloride	---	60.2	60.9	61
Chromium, Hexavalent	0.011 ⁽⁴⁾	0.003 J	0.003 J	0.003 J
Color, Apparent	---	130	160	110
Cyanide, Total	0.0052 ⁽³⁾	0.002 J	0.001 J	0.001 U
Hardness	---	152	147	150
Nitrogen, Nitrate	---	0.86	0.86	0.86
Phenolics, Total	0.001	0.006 ^(B) U	0.006 ^(B) U	0.015 J
Sulfate	---	24.6	24.6	24.1
Solids, Total Dissolved	500	300	320	320
Nitrogen, Total Kjeldahl	---	0.978	0.855	0.865
Total Organic Carbon	---	8.14	8.42	8.16
VOLATILE ORGANIC COMPOUNDS (VOCs), µg/L				
1,1,1,2-Tetrachloroethane	---	0.7 U	0.7 U	0.7 U
1,1,1-Trichloroethane	---	0.7 U	0.7 U	0.7 U
1,1,2-Trichloroethane	---	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	---	0.7 U	0.7 U	0.7 U
1,1-Dichloroethene	---	0.17 U	0.17 U	0.17 U
1,2-Dichlorobenzene	5 ⁽³⁾	0.7 U	0.7 U	0.7 U
1,2-Dichloroethane	---	0.13 U	0.13 U	0.13 U
1,2-Dichloropropane	---	0.14 U	0.14 U	0.14 U
1,3-Dichlorobenzene	5 ⁽³⁾	0.7 U	0.7 U	0.7 U
1,4-Dichlorobenzene	5 ⁽³⁾	0.7 U	0.7 U	0.7 U
2-Chloroethylvinyl ether	---	0.7 U	0.7 U	0.7 U
Benzene	10 ^{H(FC)}	0.16 U	0.16 U	0.16 U
Bromodichloromethane	---	0.19 U	0.19 U	0.19 U
Bromoform	---	0.65 U	0.65 U	0.65 U
Bromomethane	---	0.7 U	0.7 U	0.7 U
Carbon tetrachloride	---	0.13 U	0.13 U	0.13 U
Chlorobenzene	5	0.7 U	0.7 U	0.7 U
Chloroethane	---	0.7 U	0.7 U	0.7 U
Chloroform	---	0.7 U	0.7 U	0.7 U
Chloromethane	---	0.7 U	0.7 U	0.7 U
cis-1,3-Dichloropropene	---	0.14 U	0.14 U	0.14 U
Dibromochloromethane	---	0.15 U	0.15 U	0.15 U
Dichlorodifluoromethane	---	1 U	1 U	1 U
Ethylbenzene	17	0.7 U	0.7 U	0.7 U
Methylene chloride	200 ^{H(FC)}	0.7 U	0.7 U	0.7 U
o-Xylene	65 ⁽³⁾	0.7 U	0.7 U	0.7 U
p/m-Xylene	65 ⁽³⁾	0.7 U	0.7 U	0.7 U
Tetrachloroethene	1 ^{H(FC)}	0.18 U	0.18 U	0.18 U
Toluene	100	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	---	0.7 U	0.7 U	0.7 U
trans-1,3-Dichloropropene	---	0.16 U	0.16 U	0.16 U
Trichloroethene	40 ^{H(FC)}	0.18 U	0.18 U	0.18 U
Trichlorofluoromethane	---	0.7 U	0.7 U	0.7 U
Vinyl chloride	---	0.07 U	0.07 U	0.07 U
Total VOCs	---	ND	ND	ND
TOTAL METALS, mg/L				
Aluminum, Total	0.1 ⁽⁶⁾	0.263	0.194	0.211
Antimony, Total	---	0.00042 U	0.00042 U	0.00042 U
Arsenic, Total	0.15 ⁽⁴⁾	0.00221	0.00188	0.00208
Barium, Total	---	0.0272	0.02554	0.02634
Beryllium, Total	1.1	0.0001 U	0.0001 U	0.0001 U
Boron, Total	10	0.025 J	0.025 J	0.025 J
Cadmium, Total	⁽⁵⁾	0.00005 U	0.00005 U	0.00005 U
Calcium, Total	---	40.9	39.6	40.5
Chromium, Total	⁽⁵⁾	0.00042 J	0.00022 J	0.00028 J
Cobalt, Total	0.005	0.0004 J	0.00037 J	0.00033 J
Copper, Total	⁽⁵⁾	0.00248	0.00223	0.00228
Iron, Total	0.3	0.864	0.686	0.72
Lead, Total	⁽⁵⁾	0.00088 J	0.00074 J	0.00074 J
Magnesium, Total	---	12.2	11.8	12
Manganese, Total	---	0.1534	0.134	0.141
Mercury, Total	0.0007 ⁽⁴⁾	0.00009 U	0.00009 U	0.00009 U
Nickel, Total	⁽⁵⁾	0.00144 J	0.00118 J	0.00108 J
Potassium, Total	---	2.49	2.36	2.36
Selenium, Total	0.0046	0.00173 U	0.00173 U	0.00173 U
Silver, Total	0.0001 ⁽⁶⁾	0.00016 ^(B) U	0.00016 ^(B) U	0.00016 ^(B) U
Sodium, Total	---	37.1	34.8	35.6
Thallium, Total	0.008	0.00018 J	0.00014 U	0.00014 U
Vanadium, Total	0.014	0.00157 U	0.00157 U	0.00157 U
Zinc, Total	⁽⁵⁾	0.00582 J	0.00341 U	0.00341 U

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.

Values in *ITALIC* indicate the guidance value where no surface water standard is available.

U or ND = Not Detected (ND). The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

^(A) = T.O.G.S. 1.1.1 Ambient Water Quality Standards for Class C Surface Water, A(C): Fish Propagation (fresh waters)

^(B) = The sample specific reporting limit does not support the applicable groundwater standard.

^{H(FC)} = T.O.G.S. 1.1.1 Ambient Water Quality Standards for Class C Surface Water, H(FC): Human Consumption of Fish (fresh waters)

⁽¹⁾ = Surface water standard for ammonia (mg/L) is interpolated using the temperatures and pH of the individual samples. SW-5 = 1.30, SW-8 = 1.38, SW-13 = 1.31.

⁽²⁾ = Laboratory Method Detection Limit is greater than or equal to the applicable water quality standard.

⁽³⁾ = Applies to the sum of 1,2-1,3-1,4-Dichlorobenzene, or applies to each individual isomer, or applies to the sum of m-, o-, and p-xylenes, or applies to the sum of cis-trans 1,3-Dichloropropene,

or applies to the sum of HCN and CN- expressed as CN (cyanide), or applies to ionic silver.

⁽⁴⁾ = Standard applies to the dissolved form, not total recoverable.

⁽⁵⁾ = Surface Water Standard for Cadmium, Chromium, Copper, Lead, Nickel, and Zinc are based on the individual sample's hardness.

Cadmium (mg/L): SW-5 = 0.00291; SW-8 = 0.00283; SW-13 = 0.00288

Chromium: (mg/L): SW-5 =0.10443; and SW-8 = 0.10161; SW-13 = 0.10331

Copper (mg/L): SW-5 = 0.01281; SW-8 = 0.01245; SW-13 = 0.01266

Lead (mg/L): SW-5 = 0.00595; SW-8 = 0.00574; SW-13 = 0.00587

Nickel (mg/L): SW-5 = 0.07411; SW-8 = 0.07205; SW-13 = 0.07329

Zinc (mg/L): SW-5 = 0.11795; SW-8 = 0.11465; SW-13 = 0.11663

⁽⁶⁾ = Standard applies to ionic aluminum or silver.

Table 5

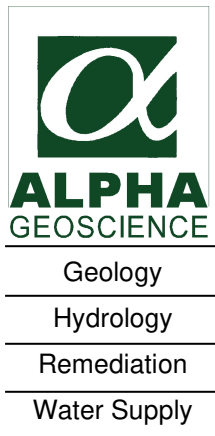
Summary of Leachate Analytical Results
August 11-12, 2020
Orange County Landfill, Goshen, New York

ANALYTE	NY-AWQS ^(A)	MH-7 8/12/2020	MH-15 8/12/2020
LEACHATE INDICATOR PARAMETERS, mg/L			
Alkalinity, Total	---	450	718
BOD, 5 day	---	ND	6.4
Bromide	2	46.6	3.53
Chemical Oxygen Demand	---	1,200	96
Chloride	250	3,890	186
Chromium, Hexavalent	0.05	0.003 U	0.003 U
Color (Color Units)	---	920	1,100
Cyanide, Total	0.2	0.053	0.002 J
Hardness, Total	---	2,680	558
Nitrogen, Ammonia	2	91.6	41.6
Nitrogen, Nitrate	10	360	0.28
Phenolics, Total	0.001	0.046	0.014 J
Sulfate	250	2,500	11
Total Dissolved Solids	500	13,000	1,000
Total Kjeldahl Nitrogen	---	103	49.5
Total Organic Carbon	---	264	32.2
VOLATILE ORGANIC COMPOUNDS, µg/L			
1,1,1,2-Tetrachloroethane	5	7 ^(B) U	0.7 U
1,1,1-Trichloroethane	5	7 ^(B) U	0.7 U
1,1,2-Trichloroethane	1	5 ^(B) U	0.5 U
1,1-Dichloroethane	5	7 ^(B) U	0.7 U
1,1-Dichloroethene	5	1.7 U	0.17 U
1,2-Dichlorobenzene	5	7 ^(B) U	0.7 U
1,2-Dichloroethane	0.6	1.3 ^(B) U	0.13 U
1,2-Dichloropropane	1	1.4 ^(B) U	0.14 U
1,3-Dichlorobenzene	3	7 ^(B) U	0.7 U
1,4-Dichlorobenzene	3	7 ^(B) U	1.5 J
2-Chloroethylvinyl ether	---	7 U	0.7 U
Benzene	1	1.6 ^(B) U	0.42 J
Bromodichloromethane	50	1.9 U	0.19 U
Bromoform	50	6.5 U	0.65 U
Bromomethane	5	7 ^(B) U	0.7 U
Carbon tetrachloride	5	1.3 U	0.13 U
Chlorobenzene	5	7 ^(B) U	0.76 J
Chloroethane	5	7 ^(B) U	0.7 U
Chloroform	7	7 ^(B) U	0.7 U
Chloromethane	---	7 U	0.7 U
cis-1,3-Dichloropropene	0.4	1.4 ^(B) U	0.14 U
Dibromochloromethane	50	1.5 U	0.15 U
Dichlorodifluoromethane	5	10 ^(B) U	1 U
Ethylbenzene	5	7 ^(B) U	0.7 U
Methylene chloride	5	7 ^(B) U	0.7 U
o-Xylene	5	7 ^(B) U	0.7 U
p/m-Xylene	5	7 ^(B) U	0.7 U
Tetrachloroethene	5	1.8 U	0.18 U
Toluene	5	7 ^(B) U	0.7 U
trans-1,2-Dichloroethene	5	7 ^(B) U	0.7 U
trans-1,3-Dichloropropene	0.4	1.6 ^(B) U	0.16 U
Trichloroethene	5	1.8 U	0.18 U
Trichlorofluoromethane	5	7 ^(B) U	0.7 U
Vinyl chloride	2	0.71 U	0.07 U
Total VOCs	---	ND	2.68
TOTAL METALS, mg/L			
Aluminum, Total	---	0.0616	0.0193
Antimony, Total	0.003	0.01542 J	0.00042 U
Arsenic, Total	0.025	0.01613	0.00349
Barium, Total	1	0.2462	0.1743
Beryllium, Total	0.003	0.00107 U	0.0001 U
Boron, Total	1	9.22	0.58
Cadmium, Total	0.005	0.00059 U	0.00005 U
Calcium, Total	---	754	168
Chromium, Total	0.05	0.01046	0.00161
Cobalt, Total	---	0.04741	0.00304
Copper, Total	0.2	0.05014	0.00038 U
Iron, Total	0.3 ⁽¹⁾	2.86	16.8
Lead, Total	0.025	0.00343 U	0.00034 U
Magnesium, Total	35	193	34
Manganese, Total	0.3 ⁽¹⁾	0.7771	1.522
Mercury, Total	0.0007	0.00009 U	0.00009 U
Nickel, Total	0.1	0.2646	0.01246
Potassium, Total	---	706	32.6
Selenium, Total	0.01	0.0173 ^(B) U	0.0173 ^(B) U
Silver, Total	0.05	0.00163 U	0.00016 U
Sodium, Total	20	2,700	143
Thallium, Total	0.0005	0.00143 ^(B) U	0.00014 U
Vanadium, Total	---	0.0157 U	0.00157 U
Zinc, Total	2	0.0341 U	0.00341 U

Notes:
Values in **BOLD** indicate an exceedance of applicable water quality standard.
U or ND = Analyte was not detected at or above reported concentration.
J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
^(A) = NY TOGs 1.1.1: Water Quality Stds & Guidance Values: GA Water Class for Standard and Guidance Values; Eff. June 2004
^(B) = The sample specific reporting limit does not support the applicable groundwater standard.
⁽¹⁾ = The standard for the sum of iron and manganese is 0.5 mg/L.

APPENDIX A

DATA VALIDATION REPORTS AND DATA USABILITY SUMMARY REPORTS (DUSR)



September 11, 2020

Ms. Amanda Castignetti, EIT
Environmental Engineer
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
Orange County Landfill, Project # 2010-15
August 2020 Ground Water Samples

Dear Ms. Castignetti:

The data usability summary report (DUSR) and QA/QC reviews are attached to this letter for the above referenced project sampling event. The data for Alpha Analytical Labs, SDG L2032661 were acceptable with some minor issues that are identified and discussed in the validation summaries. There were no data that were flagged as rejected, unusable (R) in the data pack.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Sterling Environmental Engineering, P.C.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTrDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate



**Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2032661**

**5 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, and 1 Equipment Blank
Collected August 11, 2020**

Prepared by: Donald Anné
September 11, 2020

Geology

Hydrology

Remediation

Water Supply

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of PFAS analyses for 5 ground water samples, 1 field duplicate, 1 field blank, and 1 equipment blank, and results for 1,4-dioxane analyses for 5 ground water samples and 1 field duplicate.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical method.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive PFAS results for PFHxA were qualified as “not detected” (U) at the reporting limits for sample MW-233S, FB08112020, EB08112020, MW-220, and MW-245S because the sample was associated with the method blank containing PFHxA and reported concentration for PFHxA was below the reporting limits.
- The positive PFAS results for PFPeA were qualified as “not detected” (U) at the reporting limits for sample MW-233S, MW-220, and MW-245S because the sample was associated with the equipment blank containing PFPeA and reported concentration for PFPeA was below the reporting limits.
- The positive PFAS results for PFHxA were qualified as “estimated, biased high” (J+) for samples MW-245D and DUP08112020 because the concentration reported in the samples were above the reporting limit but were not significantly greater than (more than 10 times) the highest associated blank level.
- The positive PFAS results for PFPeA were qualified as “estimated, biased high” (J+) for samples MW-233D, MW-245D, and DUP08112020 because the concentrations reported in the samples were above the reporting limit but were not significantly greater than (more than 10 times) the highest associated blank level.

- The positive PFAS results for 6:2FTS were qualified as “estimated” (J) for samples MW-245D and DUP08112020 because the surrogate used to quantitate 6:2FTS was above QC limits in the samples.

All data are considered usable with estimated (J or J+) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



**QA/QC Review of Method 537 (Modified) PFAS Data
for Alpha Analytical Labs SDG Number: L2032661**

**5 Ground Water Samples, 1 Field Duplicate,
1 Field Blank, and 1 Equipment Blank
Collected August 11, 2020**

Geology

Hydrology

Remediation

Water Supply

Prepared by: Donald Anné
September 11, 2020

Holding Times: The samples were analyzed within USEPA holding times.

Initial Calibration: The %RSDs for applicable PFASs were below the method maximum (20%) or the R or R squared were above the method minimums, as required.

Continuing Calibration: The percent recoveries for 8:2FTS and PFNS were outside QC limits on 08-15-20 (I24052). Positive results for 8:2FTS and PFNS should be considered estimated (J) in associated samples.

Blanks: Method blank WG1398828-1BLANK contained a trace of PFHxA (0.384 ng/L). Equipment blank EB08112020 contained a trace of PFPeA (0.416 ng/L). Positive results for PFHxA and PFPeA that are below the reporting limit (RL) should be reported as not detected (U) at the reporting limit in associated samples. Positive results for PFHxA that are above the RL and less than ten times the highest blank level should be considered estimated, biased high (J+) in associated samples.

Surrogate Recovery: One of eighteen surrogate recoveries (M2-6:2FTS) for samples MW-233D, MW-245D, and DUP08112020 was above QC limits. Positive results associated with this surrogate should be considered estimated (J) in these samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target PFAS were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-245D.

Laboratory Control Sample: The relative percent differences for target PFAS were below the allowable maximum and the percent recoveries were within QC limits for aqueous samples WG1398828-2 and WG1398828-3.

Field Duplicates: The relative percent differences for applicable PFAS were below the allowable maximum (20%) for aqueous field duplicate pair MW-245D/DUP08112020 (attached table), as required.

Compound ID: Checked compounds were within LC quantitation limits.

EPA Method 537 PFC

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. L2032661

S1= MW-245D

S2= DUP08112020

<u>Analyte</u>	<u>S1</u>	<u>S2</u>	<u>RPD (%)</u>
Perfluorobutanoic Acid (PFBA)	0.922	0.930	NC
Perfluoropentanoic Acid (PFPeA)	2.71	2.66	2%
Perfluorohexanoic Acid (PFHxA)	2.78	2.74	1%
Perfluoroheptanoic Acid (PFHpA)	0.685	0.645	NC
Perfluorooctanoic Acid (PFOA)	1.30	1.29	NC
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2 FTS)	7.63	7.55	1%
Perfluorooctanesulfonic Acid (PFOS)	2.13	2.06	3%
Perfluorodecanoic Acid (PFDA)	0.282	0.308	NC
PFOA/PFOS, Total	3.43	3.35	NC

* RPD is above the allowable maximum (20%).

All results are in ng/L.

Bold numbers were values that are below the CRQL or above the high standard.

ND - Not detected.

NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Surrogate (Extracted Internal Standard) Recovery Summary

Form 2

Semivolatiles

Client: Sterling Environmental Engineering
Project Name: GOSHEN, NY

Lab Number: L2032661
Project Number: 2010-15
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 ()	S2 ()	S3 ()	S4 ()	S5 ()	S6 ()	S7 ()
MW-233S (L2032661-01)	64	46	74	49	63	85	61
MW-233D (L2032661-02)	73	70	81	55	56	76	72
FB08112020 (L2032661-03)	70	70	85	62	72	89	72
EB08112020 (L2032661-04)	71	81	84	58	60	82	71
MW-220 (L2032661-05)	66	61	84	51	56	89	66
MW-245S (L2032661-06)	72	61	82	57	56	85	68
MW-245D (L2032661-07)	72	64	81	59	60	77	72
DUP08112020 (L2032661-08)	74	69	81	60	52	81	72
WG1398828-1BLANK	86	73	89	72	81	91	77
WG1398828-2LCS	83	71	90	69	78	92	75
WG1398828-3LCSD	84	71	86	71	80	90	76
MW-245DMS	73	66	84	60	52	86	71
MW-245DMSD	74	70	82	61	52	84	72

QC LIMITS

(2-156) S1 = PERFLUORO[13C4]BUTANOIC ACID (MPFBA)
 (16-173) S2 = PERFLUORO[13C5]PENTANOIC ACID (M5PFPEA)
 (31-159) S3 = PERFLUORO[2,3,4-13C3]BUTANESULFONIC ACID (M3PFBS)
 (21-145) S4 = PERFLUORO[1,2,3,4,6-13C5]HEXANOIC ACID (M5PFHXA)
 (30-139) S5 = PERFLUORO[1,2,3,4-13C4]HEPTANOIC ACID (M4PFHPA)
 (47-153) S6 = PERFLUORO[1,2,3-13C3]HEXANESULFONIC ACID (M3PFHXS)
 (47-153) S7 = PERFLUORO[13C8]OCTANOIC ACID (M8PFOA)

* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE



Surrogate (Extracted Internal Standard) Recovery Summary

Form 2

Semivolatiles

Client: Sterling Environmental Engineering
Project Name: GOSHEN, NY

Lab Number: L2032661
Project Number: 2010-15
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S8 ()	S9 ()	S10 ()	S11 ()	S12 ()	S13 ()	S14 ()
MW-233S (L2032661-01)	94	53	78	62	76	63	66
MW-233D (L2032661-02)	248*	60	82	75	113	65	79
FB08112020 (L2032661-03)	59	68	84	76	57	78	85
EB08112020 (L2032661-04)	62	66	81	72	58	76	82
MW-220 (L2032661-05)	107	58	85	72	78	65	77
MW-245S (L2032661-06)	88	60	88	72	69	65	79
MW-245D (L2032661-07)	251*	60	84	74	114	60	77
DUP08112020 (L2032661-08)	272*	64	86	76	121	76	79
WG1398828-1BLANK	81	73	90	83	78	77	91
WG1398828-2LCS	82	70	87	79	80	89	85
WG1398828-3LCSD	83	72	84	79	81	90	88
MW-245DMS	284*	62	88	78	123	72	83
MW-245DMSD	270*	62	82	73	115	71	76

QC LIMITS

- (1-244) S8 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]OCTANESULFONIC ACID (M2-6:2FTS)
 (34-146) S9 = PERFLUORO[13C9]NONANOIC ACID (M9PFNA)
 (42-146) S10 = PERFLUORO[13C8]OCTANESULFONIC ACID (M8PFOS)
 (38-144) S11 = PERFLUORO[1,2,3,4,5,6-13C6]DECANOIC ACID (M6PFDA)
 (7-170) S12 = 1H,1H,2H,2H-PERFLUORO[1,2-13C2]DECANESULFONIC ACID (M2-8:2FTS)
 (1-181) S13 = N-DEUTERIOMETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D3-NMEFOSAA)
 (1-181) S14 = PERFLUORO[1,2,3,4,5,6,7-13C7]UNDECANOIC ACID (M7-PFUDA)

* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)



Surrogate (Extracted Internal Standard) Recovery Summary

Form 2

Semivolatiles

Client: Sterling Environmental Engineering
Project Name: GOSHEN, NY

Lab Number: L2032661
Project Number: 2010-15
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S15 ()	S16 ()	S17 ()	S18 ()	S19 ()	S20 ()	S21 ()	TOT OUT
MW-233S (L2032661-01)	36	62	61	64	--	--	--	0
MW-233D (L2032661-02)	28	92	72	70	--	--	--	1
FB08112020 (L2032661-03)	30	79	77	73	--	--	--	0
EB08112020 (L2032661-04)	32	82	75	56	--	--	--	0
MW-220 (L2032661-05)	8	90	76	71	--	--	--	0
MW-245S (L2032661-06)	22	81	71	69	--	--	--	0
MW-245D (L2032661-07)	20	83	70	66	--	--	--	1
DUP08112020 (L2032661-08)	25	87	72	67	--	--	--	1
WG1398828-1BLANK	54	89	80	74	--	--	--	0
WG1398828-2LCS	54	91	75	73	--	--	--	0
WG1398828-3LCSD	54	84	79	74	--	--	--	0
MW-245DMS	28	91	76	70	--	--	--	1
MW-245DMSD	28	89	73	69	--	--	--	1

QC LIMITS

(1-87) S15 = PERFLUORO[13C8]OCTANESULFONAMIDE (M8FOSA)
 (23-146) S16 = N-DEUTERIOETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (D5-NETFOSAA)
 (24-161) S17 = PERFLUORO[1,2-13C2]DODECANOIC ACID (MPFDOA)
 (33-143) S18 = PERFLUORO[1,2-13C2]TETRADECANOIC ACID (M2PFTEDA)

* Values outside of QC limits

FORM II A2-NY-537-ISOTOPE (Continued)



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : WG1398828-1
 Client ID : WG1398828-1BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27185
 Sample Amount : 250 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 08/15/20 13:01
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	2.00	0.408	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	2.00	0.396	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	2.00	0.238	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	0.384	2.00	0.328	J
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	2.00	0.225	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	2.00	0.376	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	2.00	0.236	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	2.00	1.33	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	2.00	0.688	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	2.00	0.312	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	2.00	0.504	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	2.00	0.304	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	2.00	1.21	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	2.00	0.648	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	2.00	0.260	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	2.00	0.980	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	2.00	0.580	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	2.00	0.804	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : WG1398828-1
 Client ID : WG1398828-1BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27185
 Sample Amount : 250 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 08/15/20 13:01
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	2.00	0.372	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	2.00	0.327	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	2.00	0.248	U
NONE	PFOA/PFOS, Total	ND	2.00	0.236	U

Calibration Verification Summary

Form 7

Semivolatiles

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Instrument ID : LCMS02
 Lab File ID : I27184
 Sample No : WG1399181-2
 Channel :

Lab Number : L2032661
 Project Number : 2010-15
 Calibration Date : 08/15/20 12:45
 Init. Calib. Date(s) : 07/13/20 07/13/20
 Init. Calib. Times : 15:49 17:28

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluorobutanoic Acid (PFBA)	11.534	10.000	115.3	70-130
Perfluoropentanoic Acid (PFPeA)	11.048	10.000	110.5	70-130
Perfluorobutanesulfonic Acid (PFBS)	9.974	8.850	112.7	70-130
Perfluorohexanoic Acid (PFHxA)	11.274	10.000	112.7	70-130
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	9.856	9.350	105.4	70-130
Perfluoropentanesulfonic Acid (PFPeS)	9.654	9.400	102.7	70-130
Perfluoroheptanoic Acid (PFHpA)	11.303	10.000	113	70-130
Perfluorohexanesulfonic Acid-Branched (br-PFHxS)	1.903	1.720	112	70-130
Perfluorohexanesulfonic Acid-Linear (L-PFHxS)	8.522	7.400	115.2	70-130
Perfluorohexanesulfonic Acid (PFHxS)	10.425	9.120	-	70-130
Perfluorooctanoic Acid-Branched (br-PFOA)			-	70-130
Perfluorooctanoic Acid-Linear (L-PFOA)	12.399	10.000	124	70-130
Perfluorooctanoic Acid (PFOA)	12.399	10.000	-	70-130
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	11.926	9.500	125.5	70-130
Perfluoroheptanesulfonic Acid (PFHpS)	10.716	9.500	112.8	70-130
Perfluorononanoic Acid (PFNA)	11.627	10.000	116.3	70-130
Perfluorooctanesulfonic Acid-Branched (br-PFOS)	2.172	1.960	108.6	70-130
Perfluorooctanesulfonic Acid-Linear (L-PFOS)	8.363	7.300	114.6	70-130
Perfluorooctanesulfonic Acid (PFOS)	10.536	9.260	-	70-130
Perfluorodecanoic Acid (PFDA)	11.436	10.000	114.4	70-130
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	13.372	9.600	139.3*	70-130
Perfluorononanesulfonic Acid (PFNS)	12.842	9.600	133.8*	70-130
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	11.390	10.000	-	70-130
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NMeFOSAA)	2.963		123.5	70-130
N-Methyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NMeFOSAA)	8.426	10.000	110.9	70-130
Perfluoroundecanoic Acid (PFUnA)	10.655	10.000	106.6	70-130
Perfluorodecanesulfonic Acid (PFDS)	13.062	9.650	135.4*	70-130
Perfluorooctanesulfonamide (FOSA)	11.424	10.000	114.2	70-130
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	11.253	10.000	-	70-130
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Branched (br-NEtFOSAA)	2.594		115.3	70-130
N-Ethyl Perfluorooctanesulfonamidoacetic Acid-Linear (L-NEtFOSAA)	8.659	10.000	111.7	70-130
Perfluorododecanoic Acid (PFDoA)	13.000	10.000	130	70-130
Perfluorotridecanoic Acid (PFTTrDA)	12.976	10.000	129.8	70-130
Perfluorotetradecanoic Acid (PFTA)	9.264	10.000	92.6	70-130
Perfluoro[13C4]Butanoic Acid (MPFBA)	9.441	10.000	94.4	50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	6.983	10.000	69.8	50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	8.769	10.000	87.7	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	6.639	10.000	66.4	50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	8.143	10.000	81.4	50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	9.276	10.000	92.8	50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	9.187	10.000	91.9	50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	8.608	10.000	86.1	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	7.415	10.000	74.2	50-150

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : Sterling Environmental Engineering
Project Name : GOSHEN, NY
Instrument ID : LCMS02
Lab File ID : I27184
Sample No : WG1399181-2
Channel :

Lab Number : L2032661
Project Number : 2010-15
Calibration Date : 08/15/20 12:45
Init. Calib. Date(s) : 07/13/20 07/13/20
Init. Calib. Times : 15:49 17:28

Compound	Concentration (ng/ml)	True Value (ng/ml)	% Recovery	QC Limits
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	7.944	10.000	79.4	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	9.160	10.000	91.6	50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	9.538	10.000	95.4	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	7.208	10.000	72.1	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	11.323	10.000	113.2	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	10.629	10.000	106.3	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12.375	10.000	123.8	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	11.075	10.000	110.7	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	9.211	10.000	92.1	50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	9.356	10.000	93.6	50-150
M4PFOS	9.701		97	
M2PFDA	8.595		85.9	
M2PFOA	9.486		94.9	
M3PFBA	10.114		101.1	

* Value outside of QC limits.



Results Summary

Form 1

1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2032661
Project Name	: GOSHEN, NY	Project Number	: 2010-15
Lab ID	: L2032661-01	Date Collected	: 08/11/20 13:15
Client ID	: MW-233S	Date Received	: 08/11/20
Sample Location	: ORANGE COUNTY LF	Date Analyzed	: 08/14/20 12:26
Sample Matrix	: WATER	Date Extracted	: 08/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2208142012	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	ND	150	33.9	U

Results Summary

Form 1

1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2032661
Project Name	: GOSHEN, NY	Project Number	: 2010-15
Lab ID	: L2032661-02	Date Collected	: 08/11/20 10:10
Client ID	: MW-233D	Date Received	: 08/11/20
Sample Location	: ORANGE COUNTY LF	Date Analyzed	: 08/14/20 12:47
Sample Matrix	: WATER	Date Extracted	: 08/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2208142013	Analyst	: PS
Sample Amount	: 270 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	ND	139	31.4	U

Results Summary

Form 1

1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2032661
Project Name	: GOSHEN, NY	Project Number	: 2010-15
Lab ID	: L2032661-05	Date Collected	: 08/11/20 18:30
Client ID	: MW-220	Date Received	: 08/11/20
Sample Location	: ORANGE COUNTY LF	Date Analyzed	: 08/14/20 13:09
Sample Matrix	: WATER	Date Extracted	: 08/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2208142014	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	1010	150	33.9	

Results Summary

Form 1

1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2032661
Project Name	: GOSHEN, NY	Project Number	: 2010-15
Lab ID	: L2032661-06	Date Collected	: 08/11/20 14:35
Client ID	: MW-245S	Date Received	: 08/11/20
Sample Location	: ORANGE COUNTY LF	Date Analyzed	: 08/14/20 13:30
Sample Matrix	: WATER	Date Extracted	: 08/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2208142015	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	658.	150	33.9	

Results Summary

Form 1

1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2032661
Project Name	: GOSHEN, NY	Project Number	: 2010-15
Lab ID	: L2032661-07	Date Collected	: 08/11/20 15:55
Client ID	: MW-245D	Date Received	: 08/11/20
Sample Location	: ORANGE COUNTY LF	Date Analyzed	: 08/14/20 13:52
Sample Matrix	: WATER	Date Extracted	: 08/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2208142016	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	ND	150	33.9	U

Results Summary

Form 1

1,4 Dioxane by 8270D-SIM

Client	: Sterling Environmental Engineering	Lab Number	: L2032661
Project Name	: GOSHEN, NY	Project Number	: 2010-15
Lab ID	: L2032661-08	Date Collected	: 08/11/20 00:00
Client ID	: DUP08112020	Date Received	: 08/11/20
Sample Location	: ORANGE COUNTY LF	Date Analyzed	: 08/14/20 14:56
Sample Matrix	: WATER	Date Extracted	: 08/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F2208142019	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: PAH22
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
123-91-1	1,4-Dioxane	ND	150	33.9	U

Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-01
 Client ID : MW-233S
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27188
 Sample Amount : 274.49 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 13:15
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 13:51
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	0.922	1.82	0.372	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.82	0.361	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.82	0.217	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.82	0.299	u
375-85-9	Perfluoroheptanoic Acid (PFHpA)	0.273	1.82	0.205	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.82	0.342	U
335-67-1	Perfluorooctanoic Acid (PFOA)	0.546	1.82	0.215	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.82	1.21	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.82	0.627	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.82	0.284	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.82	0.459	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.82	0.277	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.82	1.10	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.82	0.590	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.82	0.237	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.82	0.892	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.82	0.528	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.82	0.732	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-01
 Client ID : MW-233S
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27188
 Sample Amount : 274.49 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 13:15
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 13:51
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.82	0.339	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.82	0.298	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.82	0.226	U
NONE	PFOA/PFOS, Total	0.546	1.82	0.215	J

Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-02
 Client ID : MW-233D
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27189
 Sample Amount : 280.52 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 10:10
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:08
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	1.55	1.78	0.364	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	3.56	1.78	0.353	j+
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.78	0.212	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	4.45	1.78	0.292	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	1.98	1.78	0.201	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.78	0.335	U
335-67-1	Perfluorooctanoic Acid (PFOA)	1.32	1.78	0.210	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.78	1.19	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.78	0.613	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.78	0.278	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	2.91	1.78	0.449	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.78	0.271	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.78	1.08	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.78	0.577	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.78	0.232	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.78	0.873	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.78	0.517	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.78	0.716	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-02
 Client ID : MW-233D
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27189
 Sample Amount : 280.52 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 10:10
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:08
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.78	0.332	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.78	0.292	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.78	0.221	U
NONE	PFOA/PFOS, Total	4.23	1.78	0.210	J



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-03
 Client ID : FB08112020
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27190
 Sample Amount : 256.4 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 09:20
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:24
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.95	0.398	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.95	0.386	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.95	0.232	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.95	0.320	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.95	0.220	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.95	0.367	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.95	0.230	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.95	1.30	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.95	0.671	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.95	0.304	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.95	0.491	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.95	0.296	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.95	1.18	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.95	0.632	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.95	0.254	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.95	0.956	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.95	0.566	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.95	0.784	U

Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-03
 Client ID : FB08112020
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27190
 Sample Amount : 256.4 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 09:20
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:24
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.95	0.363	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.95	0.319	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.95	0.242	U
NONE	PFOA/PFOS, Total	ND	1.95	0.230	U

Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-04
 Client ID : EB08112020
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27191
 Sample Amount : 281.03 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 09:30
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:41
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.78	0.363	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	0.416	1.78	0.352	J
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.78	0.212	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.78	0.292	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.78	0.200	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.78	0.334	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.78	0.210	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.78	1.18	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.78	0.612	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.78	0.278	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.78	0.448	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.78	0.270	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.78	1.08	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.78	0.576	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.78	0.231	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.78	0.872	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.78	0.516	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.78	0.715	U

Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-04
 Client ID : EB08112020
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27191
 Sample Amount : 281.03 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 09:30
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:41
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.78	0.331	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.78	0.291	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.78	0.221	U
NONE	PFOA/PFOS, Total	ND	1.78	0.210	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-05
 Client ID : MW-220
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27192
 Sample Amount : 286.52 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 18:30
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:58
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	2.23	1.74	0.356	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.74	0.346	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.74	0.208	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.74	0.286	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.74	0.196	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.74	0.328	U
335-67-1	Perfluorooctanoic Acid (PFOA)	0.269	1.74	0.206	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.74	1.16	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.74	0.600	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.74	0.272	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.74	0.440	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.74	0.265	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.74	1.06	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.74	0.565	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.74	0.227	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.74	0.855	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.74	0.506	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.74	0.702	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-05
 Client ID : MW-220
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27192
 Sample Amount : 286.52 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 18:30
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 14:58
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.74	0.324	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.74	0.285	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.74	0.216	U
NONE	PFOA/PFOS, Total	0.269	1.74	0.206	J



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-06
 Client ID : MW-245S
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27193
 Sample Amount : 273.41 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 14:35
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 15:14
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	2.17	1.83	0.373	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.83	0.362	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.83	0.218	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.83	0.300	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.83	0.206	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.83	0.344	U
335-67-1	Perfluorooctanoic Acid (PFOA)	0.230	1.83	0.216	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.83	1.22	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.83	0.629	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.83	0.285	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.83	0.461	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.83	0.278	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.83	1.11	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.83	0.592	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.83	0.238	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.83	0.896	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.83	0.530	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.83	0.735	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-06
 Client ID : MW-245S
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27193
 Sample Amount : 273.41 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 14:35
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 15:14
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.83	0.340	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.83	0.299	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.83	0.227	U
NONE	PFOA/PFOS, Total	0.230	1.83	0.216	J



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-07
 Client ID : MW-245D
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27194
 Sample Amount : 287.44 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 15:55
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 15:31
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	0.922	1.74	0.355	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	2.71	1.74	0.344	J+
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.74	0.207	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	2.78	1.74	0.285	J+
375-85-9	Perfluoroheptanoic Acid (PFHpA)	0.685	1.74	0.196	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.74	0.327	U
335-67-1	Perfluorooctanoic Acid (PFOA)	1.30	1.74	0.205	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	7.63	1.74	1.16	J
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.74	0.598	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.74	0.271	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	2.13	1.74	0.438	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.282	1.74	0.264	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.74	1.05	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.74	0.564	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.74	0.226	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.74	0.852	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.74	0.504	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.74	0.699	U



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-07
 Client ID : MW-245D
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27194
 Sample Amount : 287.44 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 15:55
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 15:31
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.74	0.324	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.74	0.284	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.74	0.216	U
NONE	PFOA/PFOS, Total	3.43	1.74	0.205	J



Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-08
 Client ID : DUP08112020
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27197
 Sample Amount : 269.89 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 00:00
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 16:21
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	0.930	1.85	0.378	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	2.66	1.85	0.367	J+
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.85	0.220	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	2.74	1.85	0.304	J+
375-85-9	Perfluoroheptanoic Acid (PFHpA)	0.645	1.85	0.209	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.85	0.348	U
335-67-1	Perfluorooctanoic Acid (PFOA)	1.29	1.85	0.219	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	7.55	1.85	1.23	J
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.85	0.637	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.85	0.289	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	2.06	1.85	0.467	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.308	1.85	0.282	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.85	1.12	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.85	0.600	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.85	0.241	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.85	0.908	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.85	0.537	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.85	0.745	U

Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : Sterling Environmental Engineering
 Project Name : GOSHEN, NY
 Lab ID : L2032661-08
 Client ID : DUP08112020
 Sample Location : ORANGE COUNTY LF
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I27197
 Sample Amount : 269.89 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2032661
 Project Number : 2010-15
 Date Collected : 08/11/20 00:00
 Date Received : 08/11/20
 Date Analyzed : 08/15/20 16:21
 Date Extracted : 08/14/20
 Dilution Factor : 1
 Analyst : SG
 Instrument ID : LCMS02
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.85	0.344	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.85	0.303	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.85	0.230	U
NONE	PFOA/PFOS, Total	3.35	1.85	0.219	J

APPENDIX B

ANALYTICAL REPORTS



ANALYTICAL REPORT

Lab Number:	L2032544
Client:	Sterling Environmental Engineering 24 Wade Road Latham, NY 12110
ATTN:	Mark Williams
Phone:	(518) 456-4900
Project Name:	ORANGE COUNTY LF
Project Number:	2010-15 (TASK 500)
Report Date:	08/18/20

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2032544-01	MW-223S	WATER	GOSHEN, NY	08/11/20 13:15	08/11/20
L2032544-02	MW-223D	WATER	GOSHEN, NY	08/11/20 10:10	08/11/20
L2032544-03	MW-220	WATER	GOSHEN, NY	08/11/20 18:30	08/11/20
L2032544-04	MW-245S	WATER	GOSHEN, NY	08/11/20 14:35	08/11/20
L2032544-05	TB08112020	WATER	GOSHEN, NY	08/11/20 00:00	08/11/20

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

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.

Volatile Organics

L2032544-01 through -05: The pH of the sample was less than two. It should be noted that 2-chloroethylvinyl ether breaks down under acidic conditions.

Nitrogen, Total Kjeldahl

The WG1398000-4 MS recovery, performed on L2032544-01, is outside the acceptance criteria for nitrogen, total kjeldahl (69%); however, the associated LCS recovery is within criteria. No further action was taken.

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

Authorized Signature:



Cristin Walker

Title: Technical Director/Representative

Date: 08/18/20

ORGANICS

VOLATILES

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-01
Client ID: MW-223S
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 13:15
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/12/20 23:20
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-01
Client ID: MW-223S
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 13:15
Date Received: 08/11/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-02
Client ID: MW-223D
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 10:10
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/12/20 23:42
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-02
Client ID: MW-223D
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 10:10
Date Received: 08/11/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-03
Client ID: MW-220
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 18:30
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/13/20 00:03
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-03
Client ID: MW-220
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 18:30
Date Received: 08/11/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	102		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-04
Client ID: MW-245S
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 14:35
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/13/20 00:25
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-04
Client ID: MW-245S
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 14:35
Date Received: 08/11/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	99		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-05
Client ID: TB08112020
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 00:00
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/12/20 12:14
Analyst: PD

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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-05
Client ID: TB08112020
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 00:00
Date Received: 08/11/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/12/20 09:15
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1398123-5					
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/12/20 09:15
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1398123-5					
1,4-Dichlorobenzene	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
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/12/20 19:03
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1398469-5					
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/12/20 19:03
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1398469-5					
1,4-Dichlorobenzene	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
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1398123-3 WG1398123-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
2-Chloroethylvinyl ether	140	Q	140	Q	70-130	0		20
Carbon tetrachloride	93		93		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	95		97		63-130	2		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	98		97		70-130	1		20
Chlorobenzene	97		99		75-130	2		20
Trichlorofluoromethane	88		90		62-150	2		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	98		99		67-130	1		20
Bromodichloromethane	98		100		67-130	2		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
Bromoform	93		98		54-136	5		20
Benzene	110		110		70-130	0		20
Toluene	98		99		70-130	1		20
Ethylbenzene	96		97		70-130	1		20
Chloromethane	110		120		64-130	9		20
Bromomethane	62		73		39-139	16		20
Vinyl chloride	94		91		55-140	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1398123-3 WG1398123-4								
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	99		100		61-145	1		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	94		99		70-130	5		20
1,3-Dichlorobenzene	96		98		70-130	2		20
1,4-Dichlorobenzene	94		99		70-130	5		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Dichlorodifluoromethane	100		100		36-147	0		20
1,1,1,2-Tetrachloroethane	94		97		64-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		94		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	96		101		70-130
Dibromofluoromethane	99		99		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1398469-3 WG1398469-4								
Methylene chloride	98		99		70-130	1		20
1,1-Dichloroethane	95		100		70-130	5		20
Chloroform	95		97		70-130	2		20
2-Chloroethylvinyl ether	81		100		70-130	21	Q	20
Carbon tetrachloride	93		98		63-132	5		20
1,2-Dichloropropane	100		98		70-130	2		20
Dibromochloromethane	91		94		63-130	3		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	92		93		70-130	1		20
Chlorobenzene	96		92		75-130	4		20
Trichlorofluoromethane	94		98		62-150	4		20
1,2-Dichloroethane	94		99		70-130	5		20
1,1,1-Trichloroethane	90		94		67-130	4		20
Bromodichloromethane	90		97		67-130	7		20
trans-1,3-Dichloropropene	97		100		70-130	3		20
cis-1,3-Dichloropropene	95		96		70-130	1		20
Bromoform	87		93		54-136	7		20
Benzene	95		100		70-130	5		20
Toluene	98		97		70-130	1		20
Ethylbenzene	96		96		70-130	0		20
Chloromethane	130		120		64-130	8		20
Bromomethane	120		120		39-139	0		20
Vinyl chloride	110		110		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1398469-3 WG1398469-4								
Chloroethane	85		83		55-138	2		20
1,1-Dichloroethene	94		94		61-145	0		20
trans-1,2-Dichloroethene	94		94		70-130	0		20
Trichloroethene	94		100		70-130	6		20
1,2-Dichlorobenzene	98		98		70-130	0		20
1,3-Dichlorobenzene	98		95		70-130	3		20
1,4-Dichlorobenzene	98		96		70-130	2		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
Dichlorodifluoromethane	120		120		36-147	0		20
1,1,1,2-Tetrachloroethane	90		95		64-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		102		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	108		107		70-130
Dibromofluoromethane	96		100		70-130

METALS

Project Name: ORANGE COUNTY LF**Lab Number:** L2032544**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/18/20**SAMPLE RESULTS**

Lab ID: L2032544-01

Date Collected: 08/11/20 13:15

Client ID: MW-223S

Date Received: 08/11/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00590	J	mg/l	0.0100	0.00327	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00061		mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Barium, Total	0.05406		mg/l	0.00050	0.00017	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Boron, Total	0.015	J	mg/l	0.030	0.002	1	08/12/20 12:28	08/12/20 19:28	EPA 3005A	1,6010D	BV
Cadmium, Total	0.00006	J	mg/l	0.00020	0.00005	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Calcium, Total	126		mg/l	0.100	0.035	1	08/12/20 12:28	08/12/20 19:28	EPA 3005A	1,6010D	BV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00016	J	mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Copper, Total	0.00146		mg/l	0.00100	0.00038	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Iron, Total	0.0357	J	mg/l	0.0500	0.0191	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Magnesium, Total	33.2		mg/l	0.100	0.015	1	08/12/20 12:28	08/12/20 19:28	EPA 3005A	1,6010D	BV
Manganese, Total	0.3871		mg/l	0.00100	0.00044	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/12/20 12:34	08/12/20 16:57	EPA 7470A	1,7470A	AL
Nickel, Total	0.00136	J	mg/l	0.00200	0.00055	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Potassium, Total	2.30		mg/l	0.100	0.0309	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Sodium, Total	1.41		mg/l	0.100	0.0293	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/12/20 19:46	08/13/20 09:12	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	452		mg/l	0.660	NA	1	08/12/20 12:28	08/12/20 19:28	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-01
 Client ID: MW-223S
 Sample Location: GOSHEN, NY

Date Collected: 08/11/20 13:15
 Date Received: 08/11/20
 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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0200	0.00327	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00060		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.04775		mg/l	0.00050	0.00017	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.016	J	mg/l	0.030	0.002	1	08/12/20 15:21	08/13/20 08:43	EPA 3005A	1,6010D	PE
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Calcium, Dissolved	127		mg/l	0.100	0.035	1	08/12/20 15:21	08/13/20 08:43	EPA 3005A	1,6010D	PE
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00098	J	mg/l	0.00100	0.00038	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	31.2		mg/l	0.100	0.015	1	08/12/20 15:21	08/13/20 08:43	EPA 3005A	1,6010D	PE
Manganese, Dissolved	0.07167		mg/l	0.00100	0.00044	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/12/20 15:35	08/12/20 19:43	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00058	J	mg/l	0.00200	0.00055	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.38		mg/l	0.100	0.0309	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Sodium, Dissolved	1.42		mg/l	0.100	0.0293	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/12/20 15:21	08/13/20 11:22	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	445		mg/l	0.660	NA	1	08/12/20 15:21	08/13/20 08:43	EPA 3005A	1,6010D	PE



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-02
 Client ID: MW-223D
 Sample Location: GOSHEN, NY

Date Collected: 08/11/20 10:10
 Date Received: 08/11/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00684	J	mg/l	0.0100	0.00327	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Antimony, Total	0.00249	J	mg/l	0.00400	0.00042	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00076		mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Barium, Total	0.03636		mg/l	0.00050	0.00017	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Boron, Total	0.088		mg/l	0.030	0.002	1	08/12/20 12:28	08/12/20 19:33	EPA 3005A	1,6010D	BV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Calcium, Total	50.0		mg/l	0.100	0.035	1	08/12/20 12:28	08/12/20 19:33	EPA 3005A	1,6010D	BV
Chromium, Total	0.00034	J	mg/l	0.00100	0.00017	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Copper, Total	0.00046	J	mg/l	0.00100	0.00038	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Iron, Total	0.0472	J	mg/l	0.0500	0.0191	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Lead, Total	0.00117		mg/l	0.00100	0.00034	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Magnesium, Total	19.1		mg/l	0.100	0.015	1	08/12/20 12:28	08/12/20 19:33	EPA 3005A	1,6010D	BV
Manganese, Total	0.01554		mg/l	0.00100	0.00044	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/12/20 12:34	08/12/20 17:00	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.00200	0.00055	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Potassium, Total	1.79		mg/l	0.100	0.0309	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Sodium, Total	107.		mg/l	0.100	0.0293	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Thallium, Total	0.00036	J	mg/l	0.00050	0.00014	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Zinc, Total	0.00774	J	mg/l	0.01000	0.00341	1	08/12/20 19:46	08/13/20 10:02	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	204		mg/l	0.660	NA	1	08/12/20 12:28	08/12/20 19:33	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF**Lab Number:** L2032544**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/18/20**SAMPLE RESULTS**

Lab ID: L2032544-02

Date Collected: 08/11/20 10:10

Client ID: MW-223D

Date Received: 08/11/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00843	J	mg/l	0.0200	0.00327	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00219	J	mg/l	0.00400	0.00042	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00068		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.03681		mg/l	0.00050	0.00017	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.087		mg/l	0.030	0.002	1	08/12/20 15:21	08/13/20 09:23	EPA 3005A	1,6010D	PE
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Calcium, Dissolved	51.2		mg/l	0.100	0.035	1	08/12/20 15:21	08/13/20 09:23	EPA 3005A	1,6010D	PE
Chromium, Dissolved	0.00036	J	mg/l	0.00100	0.00017	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00076	J	mg/l	0.00100	0.00038	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0310	J	mg/l	0.0500	0.0191	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00035	J	mg/l	0.00100	0.00034	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	18.1		mg/l	0.100	0.015	1	08/12/20 15:21	08/13/20 09:23	EPA 3005A	1,6010D	PE
Manganese, Dissolved	0.00398		mg/l	0.00100	0.00044	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/12/20 15:35	08/12/20 19:53	EPA 7470A	1,7470A	AL
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Potassium, Dissolved	1.86		mg/l	0.100	0.0309	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Sodium, Dissolved	108.		mg/l	0.100	0.0293	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00048	J	mg/l	0.00050	0.00014	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01223		mg/l	0.01000	0.00341	1	08/12/20 15:21	08/13/20 12:07	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	203		mg/l	0.660	NA	1	08/12/20 15:21	08/13/20 09:23	EPA 3005A	1,6010D	PE



Project Name: ORANGE COUNTY LF**Lab Number:** L2032544**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/18/20**SAMPLE RESULTS**

Lab ID: L2032544-03

Date Collected: 08/11/20 18:30

Client ID: MW-220

Date Received: 08/11/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0819		mg/l	0.0100	0.00327	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Antimony, Total	0.00092	J	mg/l	0.00400	0.00042	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Arsenic, Total	0.07915		mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Barium, Total	0.07807		mg/l	0.00050	0.00017	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Boron, Total	0.027	J	mg/l	0.030	0.002	1	08/12/20 12:28	08/12/20 19:37	EPA 3005A	1,6010D	BV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Calcium, Total	152		mg/l	0.100	0.035	1	08/12/20 12:28	08/12/20 19:37	EPA 3005A	1,6010D	BV
Chromium, Total	0.00033	J	mg/l	0.00100	0.00017	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00104		mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Copper, Total	0.00065	J	mg/l	0.00100	0.00038	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Iron, Total	10.8		mg/l	0.0500	0.0191	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Lead, Total	0.00313		mg/l	0.00100	0.00034	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Magnesium, Total	41.6		mg/l	0.100	0.015	1	08/12/20 12:28	08/12/20 19:37	EPA 3005A	1,6010D	BV
Manganese, Total	1.311		mg/l	0.00100	0.00044	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/12/20 12:34	08/12/20 17:10	EPA 7470A	1,7470A	AL
Nickel, Total	0.00089	J	mg/l	0.00200	0.00055	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Potassium, Total	3.34		mg/l	0.100	0.0309	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Sodium, Total	12.0		mg/l	0.100	0.0293	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Zinc, Total	0.00610	J	mg/l	0.01000	0.00341	1	08/12/20 19:46	08/13/20 10:06	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	552		mg/l	0.660	NA	1	08/12/20 12:28	08/12/20 19:37	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF**Lab Number:** L2032544**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/18/20**SAMPLE RESULTS**

Lab ID: L2032544-03

Date Collected: 08/11/20 18:30

Client ID: MW-220

Date Received: 08/11/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00940	J	mg/l	0.0200	0.00327	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00061	J	mg/l	0.00400	0.00042	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00378		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06028		mg/l	0.00050	0.00017	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.026	J	mg/l	0.030	0.002	1	08/12/20 15:21	08/13/20 09:28	EPA 3005A	1,6010D	PE
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Calcium, Dissolved	150		mg/l	0.100	0.035	1	08/12/20 15:21	08/13/20 09:28	EPA 3005A	1,6010D	PE
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00055		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.280		mg/l	0.0500	0.0191	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	36.4		mg/l	0.100	0.015	1	08/12/20 15:21	08/13/20 09:28	EPA 3005A	1,6010D	PE
Manganese, Dissolved	0.8644		mg/l	0.00100	0.00044	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/12/20 15:35	08/12/20 20:03	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00071	J	mg/l	0.00200	0.00055	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.94		mg/l	0.100	0.0309	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Sodium, Dissolved	11.5		mg/l	0.100	0.0293	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00018	J	mg/l	0.00050	0.00014	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00447	J	mg/l	0.01000	0.00341	1	08/12/20 15:21	08/13/20 12:12	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	524		mg/l	0.660	NA	1	08/12/20 15:21	08/13/20 09:28	EPA 3005A	1,6010D	PE



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-04
 Client ID: MW-245S
 Sample Location: GOSHEN, NY

Date Collected: 08/11/20 14:35
 Date Received: 08/11/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0408		mg/l	0.0100	0.00327	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01769		mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Barium, Total	0.06911		mg/l	0.00050	0.00017	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Boron, Total	0.024	J	mg/l	0.030	0.002	1	08/12/20 12:28	08/12/20 19:42	EPA 3005A	1,6010D	BV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Calcium, Total	148		mg/l	0.100	0.035	1	08/12/20 12:28	08/12/20 19:42	EPA 3005A	1,6010D	BV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00036	J	mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Iron, Total	0.822		mg/l	0.0500	0.0191	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Lead, Total	0.00043	J	mg/l	0.00100	0.00034	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Magnesium, Total	34.1		mg/l	0.100	0.015	1	08/12/20 12:28	08/12/20 19:42	EPA 3005A	1,6010D	BV
Manganese, Total	1.594		mg/l	0.00100	0.00044	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/12/20 12:34	08/12/20 17:14	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.00200	0.00055	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Potassium, Total	2.45		mg/l	0.100	0.0309	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Sodium, Total	38.3		mg/l	0.100	0.0293	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/12/20 19:46	08/13/20 10:11	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	510		mg/l	0.660	NA	1	08/12/20 12:28	08/12/20 19:42	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-04
 Client ID: MW-245S
 Sample Location: GOSHEN, NY

Date Collected: 08/11/20 14:35
 Date Received: 08/11/20
 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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0138	J	mg/l	0.0200	0.00327	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01320		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06956		mg/l	0.00050	0.00017	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.026	J	mg/l	0.030	0.002	1	08/12/20 15:21	08/13/20 09:32	EPA 3005A	1,6010D	PE
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Calcium, Dissolved	158		mg/l	0.100	0.035	1	08/12/20 15:21	08/13/20 09:32	EPA 3005A	1,6010D	PE
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00038	J	mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.296		mg/l	0.0500	0.0191	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	33.7		mg/l	0.100	0.015	1	08/12/20 15:21	08/13/20 09:32	EPA 3005A	1,6010D	PE
Manganese, Dissolved	1.636		mg/l	0.00100	0.00044	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/12/20 15:35	08/12/20 20:06	EPA 7470A	1,7470A	AL
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.36		mg/l	0.100	0.0309	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Sodium, Dissolved	29.9		mg/l	0.100	0.0293	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00541	J	mg/l	0.01000	0.00341	1	08/12/20 15:21	08/13/20 12:17	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	535		mg/l	0.660	NA	1	08/12/20 15:21	08/13/20 09:32	EPA 3005A	1,6010D	PE



Project Name: ORANGE COUNTY LF

Lab Number: L2032544

Project Number: 2010-15 (TASK 500)

Report Date: 08/18/20

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): 01-04 Batch: WG1398017-1										
Boron, Total	ND		mg/l	0.030	0.002	1	08/12/20 12:28	08/12/20 17:30	1,6010D	BV
Calcium, Total	ND		mg/l	0.100	0.035	1	08/12/20 12:28	08/12/20 17:30	1,6010D	BV
Magnesium, Total	ND		mg/l	0.100	0.015	1	08/12/20 12:28	08/12/20 17:30	1,6010D	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01-04 Batch: WG1398017-1										
Hardness	ND		mg/l	0.660	NA	1	08/12/20 12:28	08/12/20 17:30	1,6010D	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1398021-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/12/20 12:34	08/12/20 16:41	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1398036-1										
Boron, Dissolved	ND		mg/l	0.030	0.002	1	08/12/20 15:21	08/13/20 08:29	1,6010D	PE
Calcium, Dissolved	0.050	J	mg/l	0.100	0.035	1	08/12/20 15:21	08/13/20 08:29	1,6010D	PE
Magnesium, Dissolved	ND		mg/l	0.100	0.015	1	08/12/20 15:21	08/13/20 08:29	1,6010D	PE



Project Name: ORANGE COUNTY LF

Lab Number: L2032544

Project Number: 2010-15 (TASK 500)

Report Date: 08/18/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Hardness by SM 2340B - Mansfield Lab for sample(s): 01-04 Batch: WG1398036-1									
Hardness	ND	mg/l	0.660	NA	1	08/12/20 15:21	08/13/20 08:29	1,6010D	PE

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): 01-04 Batch: WG1398037-1									
Mercury, Dissolved	ND	mg/l	0.00020	0.00009	1	08/12/20 15:35	08/12/20 19:37	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1398039-1									
Aluminum, Total	ND	mg/l	0.0100	0.00327	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Antimony, Total	ND	mg/l	0.00400	0.00042	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Barium, Total	ND	mg/l	0.00050	0.00017	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Chromium, Total	ND	mg/l	0.00100	0.00017	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Cobalt, Total	ND	mg/l	0.00050	0.00016	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Copper, Total	ND	mg/l	0.00100	0.00038	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Iron, Total	ND	mg/l	0.0500	0.0191	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Method Blank Analysis Batch Quality Control

Lead, Total	ND	mg/l	0.00100	0.00034	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Manganese, Total	ND	mg/l	0.00100	0.00044	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Nickel, Total	ND	mg/l	0.00200	0.00055	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Potassium, Total	ND	mg/l	0.100	0.0309	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Selenium, Total	ND	mg/l	0.00500	0.00173	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Silver, Total	ND	mg/l	0.00040	0.00016	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Sodium, Total	ND	mg/l	0.100	0.0293	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Thallium, Total	ND	mg/l	0.00050	0.00014	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM
Zinc, Total	ND	mg/l	0.01000	0.00341	1	08/12/20 19:46	08/13/20 08:38	1,6020B	AM

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): 01-04 Batch: WG1398040-1										
Aluminum, Dissolved	0.0134	J	mg/l	0.0200	0.00327	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Barium, Dissolved	0.00032	J	mg/l	0.00050	0.00017	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Iron, Dissolved	0.0217	J	mg/l	0.0500	0.0191	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Sodium, Dissolved	0.0795	J	mg/l	0.100	0.0293	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Thallium, Dissolved	0.00017	J	mg/l	0.00050	0.00014	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM



Project Name: ORANGE COUNTY LF**Lab Number:** L2032544**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/18/20

Method Blank Analysis Batch Quality Control

Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	08/12/20 15:21	08/13/20 10:43	1,6020B	AM
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Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398017-2								
Boron, Total	111		-		80-120	-		
Calcium, Total	101		-		80-120	-		
Magnesium, Total	113		-		80-120	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398017-2								
Hardness	109		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398021-2								
Mercury, Total	103		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398036-2								
Boron, Dissolved	102		-		80-120	-		
Calcium, Dissolved	105		-		80-120	-		
Magnesium, Dissolved	100		-		80-120	-		
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398036-2								
Hardness	102		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398037-2								
Mercury, Dissolved	97		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398039-2					
Aluminum, Total	100	-	80-120	-	
Antimony, Total	95	-	80-120	-	
Arsenic, Total	103	-	80-120	-	
Barium, Total	99	-	80-120	-	
Beryllium, Total	97	-	80-120	-	
Cadmium, Total	104	-	80-120	-	
Chromium, Total	95	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	94	-	80-120	-	
Iron, Total	100	-	80-120	-	
Lead, Total	101	-	80-120	-	
Manganese, Total	94	-	80-120	-	
Nickel, Total	93	-	80-120	-	
Potassium, Total	103	-	80-120	-	
Selenium, Total	99	-	80-120	-	
Silver, Total	103	-	80-120	-	
Sodium, Total	102	-	80-120	-	
Thallium, Total	100	-	80-120	-	
Vanadium, Total	94	-	80-120	-	
Zinc, Total	104	-	80-120	-	

Lab Control Sample Analysis Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398040-2					
Aluminum, Dissolved	106	-	80-120	-	
Antimony, Dissolved	94	-	80-120	-	
Arsenic, Dissolved	107	-	80-120	-	
Barium, Dissolved	103	-	80-120	-	
Beryllium, Dissolved	109	-	80-120	-	
Cadmium, Dissolved	110	-	80-120	-	
Chromium, Dissolved	101	-	80-120	-	
Cobalt, Dissolved	99	-	80-120	-	
Copper, Dissolved	99	-	80-120	-	
Iron, Dissolved	97	-	80-120	-	
Lead, Dissolved	104	-	80-120	-	
Manganese, Dissolved	100	-	80-120	-	
Nickel, Dissolved	96	-	80-120	-	
Potassium, Dissolved	106	-	80-120	-	
Selenium, Dissolved	106	-	80-120	-	
Silver, Dissolved	105	-	80-120	-	
Sodium, Dissolved	105	-	80-120	-	
Thallium, Dissolved	103	-	80-120	-	
Vanadium, Dissolved	99	-	80-120	-	
Zinc, Dissolved	110	-	80-120	-	

Matrix Spike Analysis **Batch Quality Control**

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398017-3 QC Sample: L2032437-01 Client ID: MS Sample												
Boron, Total	0.267	1	1.38	111		-	-		75-125	-		20
Calcium, Total	79.7	10	88.6	89		-	-		75-125	-		20
Magnesium, Total	26.9	10	36.8	99		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398017-3 QC Sample: L2032437-01 Client ID: MS Sample												
Hardness	310	66.2	373	95		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398021-3 QC Sample: L2032437-01 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00505	101		-	-		75-125	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398036-3 QC Sample: L2032544-01 Client ID: MW-223S												
Boron, Dissolved	0.016J	1	1.07	107		-	-		75-125	-		20
Calcium, Dissolved	127	10	139	120		-	-		75-125	-		20
Magnesium, Dissolved	31.2	10	41.4	102		-	-		75-125	-		20
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398036-3 QC Sample: L2032544-01 Client ID: MW-223S												
Hardness	445	66.2	518	110		-	-		75-125	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398037-3 QC Sample: L2032544-01 Client ID: MW-223S												
Mercury, Dissolved	ND	0.005	0.00489	98		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04			QC Batch ID: WG1398039-3		QC Sample: L2032544-01		Client ID: MW-223S		
Aluminum, Total	0.00590J	2	2.11	106	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.4578	92	-	-	75-125	-	20
Arsenic, Total	0.00061	0.12	0.1289	107	-	-	75-125	-	20
Barium, Total	0.05406	2	2.110	103	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.04897	98	-	-	75-125	-	20
Cadmium, Total	0.00006J	0.051	0.05491	108	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.2001	100	-	-	75-125	-	20
Cobalt, Total	0.00016J	0.5	0.4992	100	-	-	75-125	-	20
Copper, Total	0.00146	0.25	0.2517	100	-	-	75-125	-	20
Iron, Total	0.0357J	1	1.20	120	-	-	75-125	-	20
Lead, Total	ND	0.51	0.5477	107	-	-	75-125	-	20
Manganese, Total	0.3871	0.5	0.8933	101	-	-	75-125	-	20
Nickel, Total	0.00136J	0.5	0.4876	98	-	-	75-125	-	20
Potassium, Total	2.30	10	13.1	108	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.142	118	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05218	104	-	-	75-125	-	20
Sodium, Total	1.41	10	12.0	106	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.1271	106	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.4924	98	-	-	75-125	-	20
Zinc, Total	ND	0.5	0.5251	105	-	-	75-125	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398040-3 QC Sample: L2032544-01 Client ID: MW-223S									
Aluminum, Dissolved	ND	2	2.10	105	-	-	75-125	-	20
Antimony, Dissolved	ND	0.5	0.4668	93	-	-	75-125	-	20
Arsenic, Dissolved	0.00060	0.12	0.1295	107	-	-	75-125	-	20
Barium, Dissolved	0.04775	2	2.114	103	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05558	111	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05411	106	-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.2012	101	-	-	75-125	-	20
Cobalt, Dissolved	ND	0.5	0.4827	96	-	-	75-125	-	20
Copper, Dissolved	0.00098J	0.25	0.2459	98	-	-	75-125	-	20
Iron, Dissolved	ND	1	1.23	123	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5458	107	-	-	75-125	-	20
Manganese, Dissolved	0.07167	0.5	0.5792	102	-	-	75-125	-	20
Nickel, Dissolved	0.00058J	0.5	0.4743	95	-	-	75-125	-	20
Potassium, Dissolved	2.38	10	13.2	108	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.136	113	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05210	104	-	-	75-125	-	20
Sodium, Dissolved	1.42	10	11.8	104	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1289	107	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4972	99	-	-	75-125	-	20
Zinc, Dissolved	ND	0.5	0.5291	106	-	-	75-125	-	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398021-4 QC Sample: L2032437-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398036-4 QC Sample: L2032544-01 Client ID: MW-223S						
Boron, Dissolved	0.016J	0.016J	mg/l	NC		20
Calcium, Dissolved	127	126	mg/l	1		20
Magnesium, Dissolved	31.2	31.1	mg/l	0		20
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398036-4 QC Sample: L2032544-01 Client ID: MW-223S						
Hardness	445	443	mg/l	0		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398037-4 QC Sample: L2032544-01 Client ID: MW-223S						
Mercury, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398039-4 QC Sample: L2032544-01 Client ID: MW-223S					
Aluminum, Total	0.00590J	0.00698J	mg/l	NC	20
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	0.00061	0.00075	mg/l	20	20
Barium, Total	0.05406	0.05670	mg/l	5	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	0.00006J	0.00007J	mg/l	NC	20
Chromium, Total	ND	0.00018J	mg/l	NC	20
Cobalt, Total	0.00016J	0.00022J	mg/l	NC	20
Copper, Total	0.00146	0.00163	mg/l	11	20
Iron, Total	0.0357J	0.0331J	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Manganese, Total	0.3871	0.4308	mg/l	11	20
Nickel, Total	0.00136J	0.00118J	mg/l	NC	20
Potassium, Total	2.30	2.36	mg/l	3	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	1.41	1.40	mg/l	1	20
Thallium, Total	ND	ND	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** ORANGE COUNTY LF**Project Number:** 2010-15 (TASK 500)**Lab Number:** L2032544**Report Date:** 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398039-4 QC Sample: L2032544-01 Client ID: MW-223S					
Zinc, Total	ND	ND	mg/l	NC	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398040-4 QC Sample: L2032544-01 Client ID: MW-223S					
Aluminum, Dissolved	ND	ND	mg/l	NC	20
Antimony, Dissolved	ND	0.00048J	mg/l	NC	20
Arsenic, Dissolved	0.00060	0.00055	mg/l	10	20
Barium, Dissolved	0.04775	0.04880	mg/l	2	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Cobalt, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	0.00098J	0.00308	mg/l	NC	20
Iron, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Manganese, Dissolved	0.07167	0.07233	mg/l	1	20
Nickel, Dissolved	0.00058J	ND	mg/l	NC	20
Potassium, Dissolved	2.38	2.34	mg/l	2	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	1.42	1.42	mg/l	0	20
Thallium, Dissolved	ND	ND	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** ORANGE COUNTY LF**Project Number:** 2010-15 (TASK 500)**Lab Number:** L2032544**Report Date:** 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398040-4 QC Sample: L2032544-01 Client ID: MW-223S					
Zinc, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-01
Client ID: MW-223S
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 13:15
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	18		A.P.C.U.	5.0	5.0	1	-	08/12/20 10:40	121,2120B	JA
Alkalinity, Total	309.		mg CaCO ₃ /L	2.00	NA	1	-	08/12/20 11:31	121,2320B	BR
Solids, Total Dissolved	560		mg/l	10	3.1	1	-	08/13/20 12:20	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/12/20 15:40	08/13/20 10:46	1,9010C/9012B	AG
Nitrogen, Ammonia	0.097		mg/l	0.075	0.024	1	08/12/20 14:40	08/12/20 20:58	44,350.1	AT
Nitrogen, Nitrate	12.		mg/l	0.50	0.11	5	-	08/12/20 09:23	44,353.2	MR
Nitrogen, Total Kjeldahl	0.767		mg/l	0.600	0.132	2	08/12/20 15:10	08/13/20 19:12	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	7.5	J	mg/l	10	2.7	1	08/13/20 18:00	08/13/20 20:51	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 05:35	08/18/20 07:05	121,5210B	TE
Total Organic Carbon	3.61		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/12/20 10:00	08/13/20 08:04	4,420.1	MV
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	08/12/20 08:00	08/12/20 08:54	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.035	J	mg/l	0.050	0.013	1	-	08/12/20 17:43	44,300.0	AT
Chloride	1.55		mg/l	0.500	0.083	1	-	08/12/20 17:43	44,300.0	AT
Sulfate	119.		mg/l	10.0	4.54	10	-	08/12/20 20:15	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-02
Client ID: MW-223D
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 10:10
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	17		A.P.C.U.	5.0	5.0	1	-	08/12/20 10:40	121,2120B	JA
Alkalinity, Total	180.		mg CaCO3/L	2.00	NA	1	-	08/12/20 11:31	121,2320B	BR
Solids, Total Dissolved	570		mg/l	10	3.1	1	-	08/13/20 12:20	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/12/20 15:40	08/13/20 10:51	1,9010C/9012B	AG
Nitrogen, Ammonia	0.049	J	mg/l	0.075	0.024	1	08/12/20 14:40	08/12/20 20:58	44,350.1	AT
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	08/12/20 09:24	44,353.2	MR
Nitrogen, Total Kjeldahl	0.385		mg/l	0.300	0.066	1	08/12/20 15:10	08/13/20 19:15	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/13/20 18:00	08/13/20 20:51	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 05:35	08/18/20 07:05	121,5210B	TE
Total Organic Carbon	1.20		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/12/20 10:00	08/13/20 08:06	4,420.1	MV
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/12/20 08:00	08/12/20 08:55	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	1.34		mg/l	0.050	0.013	1	-	08/12/20 17:53	44,300.0	AT
Chloride	126.		mg/l	5.00	0.839	10	-	08/12/20 20:26	44,300.0	AT
Sulfate	131.		mg/l	10.0	4.54	10	-	08/12/20 20:26	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-03
Client ID: MW-220
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 18:30
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	580		A.P.C.U.	120	120	25	-	08/12/20 10:40	121,2120B	JA
Alkalinity, Total	433.		mg CaCO ₃ /L	2.00	NA	1	-	08/12/20 11:31	121,2320B	BR
Solids, Total Dissolved	680		mg/l	10	3.1	1	-	08/13/20 12:20	121,2540C	DW
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	08/12/20 15:40	08/13/20 10:52	1,9010C/9012B	AG
Nitrogen, Ammonia	0.104		mg/l	0.075	0.024	1	08/12/20 14:40	08/12/20 20:59	44,350.1	AT
Nitrogen, Nitrate	0.091	J	mg/l	0.10	0.023	1	-	08/12/20 08:38	44,353.2	MR
Nitrogen, Total Kjeldahl	0.559		mg/l	0.300	0.066	1	08/12/20 15:10	08/13/20 19:16	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	5.2	J	mg/l	10	2.7	1	08/13/20 18:00	08/13/20 20:51	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 05:35	08/18/20 07:05	121,5210B	TE
Total Organic Carbon	3.22		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/12/20 10:00	08/13/20 08:07	4,420.1	MV
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/12/20 08:00	08/12/20 08:55	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.079		mg/l	0.050	0.013	1	-	08/12/20 18:04	44,300.0	AT
Chloride	20.9		mg/l	0.500	0.083	1	-	08/12/20 18:04	44,300.0	AT
Sulfate	138.		mg/l	10.0	4.54	10	-	08/12/20 20:37	44,300.0	AT

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

SAMPLE RESULTS

Lab ID: L2032544-04
Client ID: MW-245S
Sample Location: GOSHEN, NY

Date Collected: 08/11/20 14:35
Date Received: 08/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	42		A.P.C.U.	10	10.	2	-	08/12/20 10:40	121,2120B	JA
Alkalinity, Total	382.		mg CaCO3/L	2.00	NA	1	-	08/12/20 11:31	121,2320B	BR
Solids, Total Dissolved	690		mg/l	10	3.1	1	-	08/13/20 12:20	121,2540C	DW
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	08/12/20 15:40	08/13/20 10:53	1,9010C/9012B	AG
Nitrogen, Ammonia	0.140		mg/l	0.075	0.024	1	08/12/20 14:40	08/12/20 21:00	44,350.1	AT
Nitrogen, Nitrate	0.026	J	mg/l	0.10	0.023	1	-	08/12/20 08:41	44,353.2	MR
Nitrogen, Total Kjeldahl	0.414		mg/l	0.300	0.066	1	08/12/20 15:10	08/13/20 19:17	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/13/20 18:00	08/13/20 20:51	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 05:35	08/18/20 07:05	121,5210B	TE
Total Organic Carbon	1.99		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/12/20 10:00	08/13/20 08:08	4,420.1	MV
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/12/20 08:00	08/12/20 08:56	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.094		mg/l	0.050	0.013	1	-	08/12/20 18:15	44,300.0	AT
Chloride	59.8		mg/l	5.00	0.839	10	-	08/12/20 20:48	44,300.0	AT
Sulfate	160.		mg/l	10.0	4.54	10	-	08/12/20 20:48	44,300.0	AT



Project Name: ORANGE COUNTY LF

Lab Number: L2032544

Project Number: 2010-15 (TASK 500)

Report Date: 08/18/20

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1397880-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	08/12/20 08:23	44,353.2	MR
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1397939-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/12/20 08:00	08/12/20 08:51	1,7196A	JA
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398000-1										
Nitrogen, Total Kjeldahl	0.138	J	mg/l	0.300	0.022	1	08/12/20 15:10	08/13/20 18:50	4,351.3/1 (M)	AT
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398003-1										
Nitrogen, Ammonia	0.049	J	mg/l	0.075	0.024	1	08/12/20 14:40	08/12/20 20:44	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398100-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/12/20 15:40	08/13/20 10:30	1,9010C/9012B	AG
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398119-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	08/12/20 11:31	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398124-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/12/20 10:00	08/13/20 08:37	4,420.1	MV
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398293-1										
Solids, Total Dissolved	4.0	J	mg/l	10	3.1	1	-	08/13/20 12:20	121,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398366-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 05:35	08/18/20 07:05	121,5210B	TE
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398627-1										
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/13/20 18:00	08/13/20 20:49	44,410.4	TL
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-04 Batch: WG1398652-1										
Bromide	ND		mg/l	0.050	0.013	1	-	08/12/20 16:58	44,300.0	AT
Chloride	ND		mg/l	0.500	0.083	1	-	08/12/20 16:58	44,300.0	AT
Sulfate	ND		mg/l	1.00	0.454	1	-	08/12/20 16:58	44,300.0	AT
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1398753-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1397880-2								
Nitrogen, Nitrate	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1397939-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398000-2								
Nitrogen, Total Kjeldahl	94		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398003-2								
Nitrogen, Ammonia	98		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398100-2 WG1398100-3								
Cyanide, Total	103		90		85-115	13		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398119-2								
Alkalinity, Total	104		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398124-2								
Phenolics, Total	81		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398293-2					
Solids, Total Dissolved	91	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398366-2					
BOD, 5 day	102	-	85-115	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398627-2					
Chemical Oxygen Demand	100	-	90-110	-	
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 Batch: WG1398652-2					
Bromide	101	-	90-110	-	
Chloride	104	-	90-110	-	
Sulfate	104	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1398753-2					
Total Organic Carbon	96	-	90-110	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1397880-4			QC Sample: L2032544-03			Client ID: MW-220		
Nitrogen, Nitrate	0.091J	4	4.0	100		-	-		83-113	-		6
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1397939-4			QC Sample: L2032544-04			Client ID: MW-245S		
Chromium, Hexavalent	ND	0.1	0.086	86		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398000-4			QC Sample: L2032544-01			Client ID: MW-223S		
Nitrogen, Total Kjeldahl	0.767	16	11.8	69	Q	-	-		77-111	-		24
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398003-4			QC Sample: L2030880-05			Client ID: MS Sample		
Nitrogen, Ammonia	0.965	4	4.64	92		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398100-4			WG1398100-5			QC Sample: L2032544-01		
MW-223S										Client ID:		
Cyanide, Total	ND	0.2	0.190	95		0.189	94		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398119-4			QC Sample: L2032513-04			Client ID: MS Sample		
Alkalinity, Total	8.00	100	112	104		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398124-4			QC Sample: L2031513-132			Client ID: MS Sample		
Phenolics, Total	ND	0.4	0.27	68	Q	-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398366-4			QC Sample: L2032544-01			Client ID: MW-223S		
BOD, 5 day	ND	100	66	66		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01-04				QC Batch ID: WG1398627-3			QC Sample: L2032155-01			Client ID: MS Sample		
Chemical Oxygen Demand	26.	47.6	73	99		-	-		90-110	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1398652-3 QC Sample: L2032552-02 Client ID: MS Sample									
Bromide	ND	0.4	0.365	91	-	-	90-110	-	20
Chloride	ND	4	4.16	102	-	-	90-110	-	18
Sulfate	ND	8	8.43	105	-	-	90-110	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1398753-4 QC Sample: L2032781-01 Client ID: MS Sample									
Total Organic Carbon	2.20	4	6.24	101	-	-	80-120	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032544

Report Date: 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1397880-3	QC Sample: L2032544-03	Client ID: MW-220		
Nitrogen, Nitrate	0.091J	0.081J	mg/l	NC		6
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1397939-3	QC Sample: L2032544-04	Client ID: MW-245S		
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398000-3	QC Sample: L2032544-01	Client ID: MW-223S		
Nitrogen, Total Kjeldahl	0.767	0.344J	mg/l	NC		24
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398003-3	QC Sample: L2030880-05	Client ID: DUP Sample		
Nitrogen, Ammonia	0.965	0.977	mg/l	1		20
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398006-1	QC Sample: L2032544-01	Client ID: MW-223S		
Color, Apparent	18	18	A.P.C.U.	0		
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398119-3	QC Sample: L2032513-04	Client ID: DUP Sample		
Alkalinity, Total	8.00	9.00	mg CaCO3/L	12	Q	10
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398124-3	QC Sample: L2031513-132	Client ID: DUP Sample		
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398293-3	QC Sample: L2032513-04	Client ID: DUP Sample		
Solids, Total Dissolved	69.	58	mg/l	17	Q	10
General Chemistry - Westborough Lab	Associated sample(s): 01-04	QC Batch ID: WG1398366-3	QC Sample: L2032544-01	Client ID: MW-223S		
BOD, 5 day	ND	ND	mg/l	NC		35

Lab Duplicate Analysis *Batch Quality Control*

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1398627-4 QC Sample: L2032155-01 Client ID: DUP Sample					
Chemical Oxygen Demand	26.	31	mg/l	18	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1398652-4 QC Sample: L2032552-02 Client ID: DUP Sample					
Bromide	ND	ND	mg/l	NC	20
Chloride	ND	0.103J	mg/l	NC	18
Sulfate	ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1398753-3 QC Sample: L2032781-01 Client ID: DUP Sample					
Total Organic Carbon	2.20	1.50	mg/l	38 Q	20

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No:08182012:06
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Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032544-01A	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-01B	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-01C	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-01D	Vial H2SO4 preserved	A	NA		3.4	Y	Absent		TOC-5310(28)
L2032544-01E	Vial H2SO4 preserved	A	NA		3.4	Y	Absent		TOC-5310(28)
L2032544-01F	Plastic 250ml unpreserved/No Headspace	A	NA		3.4	Y	Absent		ALK-T-2320(14)
L2032544-01G	Plastic 250ml unpreserved	A	7	7	3.4	Y	Absent		-
L2032544-01H	Plastic 250ml unpreserved	A	7	7	3.4	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BR-300(28),BOD-5210(2),NO3-353(2),TDS-2540(7)
L2032544-01I	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),HG-T(28),MG-TI(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HARDT(180),CO-6020T(180),CA-TI(180)
L2032544-01J	Plastic 250ml NaOH preserved	A	>12	>12	3.4	Y	Absent		TCN-9010(14)
L2032544-01K	Amber 250ml unpreserved	A	7	7	3.4	Y	Absent		COLOR-A-2120(2)
L2032544-01L	Plastic 500ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032544-01M	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		SO4-300(28),CL-300(28),BR-300(28),BOD-5210(2),NO3-353(2),TDS-2540(7)
L2032544-01N	Amber 1000ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		NY-TPHENOL-420(28)

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No: 08182012:06
Lab Number: L2032544
Report Date: 08/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032544-01W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.4	Y	Absent		K-6020S(180),V-6020S(180),SE-6020S(180),B-SI(180),CU-6020S(180),MN-6020S(180),BE-6020S(180),ZN-6020S(180),CO-6020S(180),FE-6020S(180),CR-6020S(180),HARDS(180),PB-6020S(180),TL-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),CD-6020S(180),HG-S(28),AL-6020S(180),CA-SI(180)
L2032544-02A	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-02B	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-02C	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-02D	Vial H2SO4 preserved	A	NA		3.4	Y	Absent		TOC-5310(28)
L2032544-02E	Vial H2SO4 preserved	A	NA		3.4	Y	Absent		TOC-5310(28)
L2032544-02F	Plastic 250ml unpreserved/No Headspace	A	NA		3.4	Y	Absent		ALK-T-2320(14)
L2032544-02G	Plastic 250ml unpreserved	A	7	7	3.4	Y	Absent		-
L2032544-02H	Plastic 250ml unpreserved	A	7	7	3.4	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),TDS-2540(7),BR-300(28),BOD-5210(2),NO3-353(2)
L2032544-02I	Plastic 250ml HNO3 preserved	A	<2	<2	3.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),K-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),B-TI(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),MG-TI(180),CD-6020T(180),HG-T(28),AL-6020T(180),AG-6020T(180),CO-6020T(180),CA-TI(180),HARDT(180)
L2032544-02J	Plastic 250ml NaOH preserved	A	>12	>12	3.4	Y	Absent		TCN-9010(14)
L2032544-02K	Amber 250ml unpreserved	A	7	7	3.4	Y	Absent		COLOR-A-2120(2)
L2032544-02L	Plastic 500ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032544-02M	Plastic 950ml unpreserved	A	7	7	3.4	Y	Absent		SO4-300(28),CL-300(28),TDS-2540(7),BR-300(28),BOD-5210(2),NO3-353(2)
L2032544-02N	Amber 1000ml H2SO4 preserved	A	<2	<2	3.4	Y	Absent		NY-TPHENOL-420(28)

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No: 08182012:06
Lab Number: L2032544
Report Date: 08/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032544-02W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.4	Y	Absent		V-6020S(180),B-SI(180),K-6020S(180),SE-6020S(180),CU-6020S(180),MN-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),CR-6020S(180),FE-6020S(180),NI-6020S(180),TL-6020S(180),BA-6020S(180),HARDS(180),PB-6020S(180),NA-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),HG-S(28),CA-SI(180),CD-6020S(180)
L2032544-03A	Vial HCl preserved	B	NA		5.8	Y	Absent		NYTCL-8260(14)
L2032544-03B	Vial HCl preserved	B	NA		5.8	Y	Absent		NYTCL-8260(14)
L2032544-03C	Vial HCl preserved	B	NA		5.8	Y	Absent		NYTCL-8260(14)
L2032544-03D	Vial H2SO4 preserved	B	NA		5.8	Y	Absent		TOC-5310(28)
L2032544-03E	Vial H2SO4 preserved	B	NA		5.8	Y	Absent		TOC-5310(28)
L2032544-03F	Plastic 250ml unpreserved/No Headspace	B	NA		5.8	Y	Absent		ALK-T-2320(14)
L2032544-03G	Plastic 250ml unpreserved	B	7	7	5.8	Y	Absent		-
L2032544-03H	Plastic 250ml unpreserved	B	7	7	5.8	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),TDS-2540(7),BR-300(28),NO3-353(2),BOD-5210(2)
L2032544-03I	Plastic 250ml HNO3 preserved	B	<2	<2	5.8	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),AG-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),MG-TI(180),CO-6020T(180),CA-TI(180),HARDT(180)
L2032544-03J	Plastic 250ml NaOH preserved	B	>12	>12	5.8	Y	Absent		TCN-9010(14)
L2032544-03K	Amber 250ml unpreserved	B	7	7	5.8	Y	Absent		COLOR-A-2120(2)
L2032544-03L	Plastic 500ml H2SO4 preserved	B	<2	<2	5.8	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032544-03M	Plastic 950ml unpreserved	B	7	7	5.8	Y	Absent		SO4-300(28),CL-300(28),TDS-2540(7),BR-300(28),NO3-353(2),BOD-5210(2)
L2032544-03N	Amber 1000ml H2SO4 preserved	B	<2	<2	5.8	Y	Absent		NY-TPHENOL-420(28)

Project Name: ORANGE COUNTY LF
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032544-03W	Plastic 120ml HNO3 preserved Filtrates	B	NA		5.8	Y	Absent		V-6020S(180),K-6020S(180),SE-6020S(180),B-SI(180),CU-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),FE-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),HARDS(180),TL-6020S(180),BA-6020S(180),NA-6020S(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),MG-SI(180),AL-6020S(180),HG-S(28),CD-6020S(180),CA-SI(180)
L2032544-04A	Vial HCl preserved	B	NA		5.8	Y	Absent		NYTCL-8260(14)
L2032544-04B	Vial HCl preserved	B	NA		5.8	Y	Absent		NYTCL-8260(14)
L2032544-04C	Vial HCl preserved	B	NA		5.8	Y	Absent		NYTCL-8260(14)
L2032544-04D	Vial H2SO4 preserved	B	NA		5.8	Y	Absent		TOC-5310(28)
L2032544-04E	Vial H2SO4 preserved	B	NA		5.8	Y	Absent		TOC-5310(28)
L2032544-04F	Plastic 250ml unpreserved/No Headspace	B	NA		5.8	Y	Absent		ALK-T-2320(14)
L2032544-04G	Plastic 250ml unpreserved	B	7	7	5.8	Y	Absent		-
L2032544-04H	Plastic 250ml unpreserved	B	7	7	5.8	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),TDS-2540(7),BR-300(28),NO3-353(2)
L2032544-04I	Plastic 250ml HNO3 preserved	B	<2	<2	5.8	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),NI-6020T(180),K-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AL-6020T(180),CD-6020T(180),MG-TI(180),HG-T(28),AG-6020T(180),CA-TI(180),HARDT(180),CO-6020T(180)
L2032544-04J	Plastic 250ml NaOH preserved	B	>12	>12	5.8	Y	Absent		TCN-9010(14)
L2032544-04K	Amber 250ml unpreserved	B	7	7	5.8	Y	Absent		COLOR-A-2120(2)
L2032544-04L	Plastic 500ml H2SO4 preserved	B	<2	<2	5.8	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032544-04M	Plastic 950ml unpreserved	B	7	7	5.8	Y	Absent		SO4-300(28),CL-300(28),BOD-5210(2),TDS-2540(7),BR-300(28),NO3-353(2)
L2032544-04N	Amber 1000ml H2SO4 preserved	B	<2	<2	5.8	Y	Absent		NY-TPHENOL-420(28)

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032544-04W	Plastic 120ml HNO3 preserved Filtrates	B	NA		5.8	Y	Absent		B-SI(180),CU-6020S(180),V-6020S(180),SE-6020S(180),K-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),NA-6020S(180),BA-6020S(180),PB-6020S(180),NI-6020S(180),HARDS(180),TL-6020S(180),SB-6020S(180),MG-SI(180),AS-6020S(180),AG-6020S(180),HG-S(28),AL-6020S(180),CA-SI(180),CD-6020S(180)
L2032544-05A	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L2032544-05B	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- 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.
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.

Footnotes

Report Format: DU Report with 'J' Qualifiers



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- 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. 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. (DoD and NYSDEC Part 375 PFAS only.)
- 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.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

Data Qualifiers

- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032544
Report Date: 08/18/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 17

Published Date: 4/28/2020 9:42:21 AM

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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 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; 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.**EPA TO-12** Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan 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.****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.****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.

Service Centers

Page 1

of 2

8/2/21

ALPHA Job #

L203254H

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

Email: mar.wilams@sterlingenvironment.com

Rush (only if pre approved) ☐

Please specify Metals or TAL.

Sampler's

Initials

rw

rw



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plw

Q124

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Preservative

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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.

 NEW YORK CHAIN OF CUSTODY 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		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 <u>2</u> of <u>2</u>		Date Rec'd in Lab <u>8/12/20</u>		ALPHA Job # <u>L203254H</u>					
		Project Information Project Name: <u>Orange County LF</u> Project Location: <u>Goshen, NY</u> Project # <u>2010-15</u> (Use Project name as Project #) ☐		Deliverables ☒ ASP-A ☐ ASP-B ☐ EQulS (1 File) ☐ EQulS (4 File) ☐ Other		Billing Information ☒ Same as Client Info PO #							
Client Information Client: <u>Sterling Environmental Engineerir</u> Address: <u>24 Wade Rd</u> <u>Latham, NY 12110</u> Phone: <u>518-456-4900</u> Fax: <u>518-456-3532</u> Email: <u>mark.williams@sterlingenviromen</u>		Project Manager: <u>Mark Williams</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Regulatory Requirement ☒ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other: <u>NA</u>							
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments: <u>mark.williams@sterlingenviromental.com *Baseline-88 Regs*</u> <u>*Dissolved Metals (Regs 88*)</u> Please specify Metals or TAL.						ANALYSIS TPHEVOL-420 Diss. Metals (88 regs) <u>✓</u> <u>Hard Color</u>		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)					
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials		TPHEVOL-420 Diss. Metals (88 regs) <u>✓</u> <u>Hard Color</u>		Sample Specific Comments	
✓ 32541-01		MW-233S		8-11-2020 1315		GW PWS		PWS		X X X			
✓ 02		MW-233D		8-11-2020 1010		GW PWS		PWS		X X X			
		PZ-4				PWS		PWS		X X X			
		MW-3B				PWS		PWS		X X X			
✓ 03		MW-220		8-11-2020 1830		GW PWS		PWS		X X X		3	
✓ 04		MW-245S		8-11-2020 1435		GW PWS		PWS		X X X		3	
		MW-245D				PWS		PWS		X X X			
		MS				PWS		PWS		X X X			
		MSD				PWS		PWS		X X X			
		DUP				PWS		PWS		X X X			
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 Preservative		A P P D A 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.			
Relinquished By: <u>[Signature]</u>		Date/Time: <u>8/11/2020 2140</u>		Received By: <u>[Signature]</u>		Date/Time: <u>8/11/2020 2200</u>		Relinquished By: <u>[Signature]</u>		Date/Time: <u>8/12/2020 0140</u>			



ANALYTICAL REPORT

Lab Number:	L2032781
Client:	Sterling Environmental Engineering 24 Wade Road Latham, NY 12110
ATTN:	Mark Williams
Phone:	(518) 456-4900
Project Name:	ORANGE COUNTY LF
Project Number:	2010-15 (TASK 500)
Report Date:	08/19/20

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2032781-01	MW-245D	WATER	GOSHEN, NY	08/12/20 11:25	08/12/20
L2032781-02	DUP08122020	WATER	GOSHEN, NY	08/12/20 00:00	08/12/20
L2032781-03	PZ-4	WATER	GOSHEN, NY	08/12/20 14:05	08/12/20
L2032781-04	MW-3B	WATER	GOSHEN, NY	08/12/20 13:10	08/12/20
L2032781-05	TB08122020	WATER	GOSHEN, NY	08/12/20 00:00	08/12/20
L2032781-06	SW-5	WATER	GOSHEN, NY	08/12/20 14:40	08/12/20
L2032781-07	SW-8	WATER	GOSHEN, NY	08/12/20 13:20	08/12/20
L2032781-08	SW-13	WATER	GOSHEN, NY	08/12/20 15:00	08/12/20
L2032781-09	MH-7	WATER	GOSHEN, NY	08/12/20 15:40	08/12/20
L2032781-10	MH-15	WATER	GOSHEN, NY	08/12/20 16:30	08/12/20

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

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.

Volatile Organics

L2032781-01 through -10: The pH of the sample was less than two. It should be noted that 2-chloroethylvinyl ether breaks down under acidic conditions.

L2032781-09: The sample has elevated detection limits due to the dilution required by the sample matrix (foam).

The WG1399724-6/-7 MS/MSD recoveries, performed on L2032781-01, are below the acceptance criteria for 2-chloroethylvinyl ether (0%/0%) due to the concentration of this compound in the MS/MSD falling below the reported detection limit.

Total Metals

L2032781-04: The dissolved result is greater than the total result for calcium, magnesium, and boron. The sample containers were verified as being labeled correctly by the laboratory, and aliquots were analyzed from each bottle, confirming the original results.

L2032781-09: The sample has elevated detection limits for all elements, with the exception of aluminum, boron, calcium, magnesium, and mercury, due to the dilution required by the high concentrations of target elements.

The WG1398488-3/-4 MS/MSD recoveries, performed on L2032781-01, are outside the acceptance criteria for selenium (69%/71%). A post digestion spike was performed and was within acceptance criteria.

Dissolved Metals

The WG1398825-3/-4 MS/MSD recoveries, performed on L2032781-01, are outside the acceptance criteria for aluminum (128%/128%). A post digestion spike was performed and yielded an unacceptable recovery for aluminum (180%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Case Narrative (continued)

and the result reported in the native sample should be considered estimated.

The WG1398825-3/-4 MS/MSD recoveries, performed on L2032781-01, are outside the acceptance criteria for iron (162%/127%). A post digestion spike was performed and was within acceptance criteria.

The WG1398825-3/-4 MS/MSD RPD for iron (24%), performed on L2032781-01, is above the acceptance criteria.

The WG1398826-4 MSD recovery for calcium (69%), performed on L2032781-01, does not apply because the sample concentration is greater than four times the spike amount added.

BOD, 5 day

L2032781-03 and -09 were set at the correct dilution for BOD analysis according to prep screening; however, not enough depletion occurred. Therefore, the sample result is reported as "non-detect" at an elevated detection limit. Due to the expiration of the method required holding time, re-analysis could not be performed.

Anions by Ion Chromatography

The WG1398682-3/-4 MS/MSD recoveries, performed on L2032781-01, are outside the acceptance criteria for chloride (76%/83%) and bromide (87%/89%); however, the associated LCS recoveries are within criteria. No further action was taken.

Chemical Oxygen Demand

The WG1399029-3 MS recovery, performed on L2032781-01, is outside the acceptance criteria for chemical oxygen demand (120%); however, the associated LCS recovery is within criteria. No further action was taken.

Total Organic Carbon

The WG1398753-3 Laboratory Duplicate RPD for total organic carbon (38%), performed on L2032781-01, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

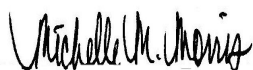
Case Narrative (continued)

Phenolics, Total

WG1398288: A Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however, the native sample was not available for reporting; therefore, the results could not be reported.

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

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 08/19/20

ORGANICS

VOLATILES

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-01
Client ID: MW-245D
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 11:25
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 13:17
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-01
Client ID: MW-245D
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 11:25
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	99		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-02
Client ID: DUP08122020
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 00:00
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 13:39
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-02
Client ID: DUP08122020
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 00:00
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-03
Client ID: PZ-4
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:05
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 14:00
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-03
Client ID: PZ-4
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:05
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-04
Client ID: MW-3B
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 13:10
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 14:22
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-04
Client ID: MW-3B
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 13:10
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-05
Client ID: TB08122020
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 00:00
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 12:56
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-05
Client ID: TB08122020
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 00:00
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-06
Client ID: SW-5
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:40
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 14:44
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-06
Client ID: SW-5
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:40
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	101		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-07
Client ID: SW-8
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 13:20
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 15:06
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-07
Client ID: SW-8
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 13:20
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-08
Client ID: SW-13
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:00
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 15:27
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-08
Client ID: SW-13
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:00
Date Received: 08/12/20
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
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-09 D
Client ID: MH-7
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:40
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 15:49
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
2-Chloroethylvinyl ether	ND		ug/l	100	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-09 D
Client ID: MH-7
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:40
Date Received: 08/12/20
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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
1,1,1,2-Tetrachloroethane	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-10
Client ID: MH-15
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 16:30
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/20 16:11
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
2-Chloroethylvinyl ether	ND		ug/l	10	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	0.76	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
Benzene	0.42	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-10
Client ID: MH-15
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 16:30
Date Received: 08/12/20
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	1.5	J	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
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	99		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/16/20 12:35
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG1399724-5					
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
2-Chloroethylvinyl ether	ND		ug/l	10	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
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: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/16/20 12:35
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG1399724-5					
1,4-Dichlorobenzene	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
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG1399724-3 WG1399724-4								
Methylene chloride	97		92		70-130	5		20
1,1-Dichloroethane	93		94		70-130	1		20
Chloroform	92		88		70-130	4		20
2-Chloroethylvinyl ether	80		91		70-130	13		20
Carbon tetrachloride	88		88		63-132	0		20
1,2-Dichloropropane	97		91		70-130	6		20
Dibromochloromethane	78		84		63-130	7		20
1,1,2-Trichloroethane	87		88		70-130	1		20
Tetrachloroethene	85		89		70-130	5		20
Chlorobenzene	88		89		75-130	1		20
Trichlorofluoromethane	80		79		62-150	1		20
1,2-Dichloroethane	84		84		70-130	0		20
1,1,1-Trichloroethane	85		86		67-130	1		20
Bromodichloromethane	86		85		67-130	1		20
trans-1,3-Dichloropropene	88		90		70-130	2		20
cis-1,3-Dichloropropene	88		86		70-130	2		20
Bromoform	79		83		54-136	5		20
Benzene	94		94		70-130	0		20
Toluene	91		91		70-130	0		20
Ethylbenzene	91		92		70-130	1		20
Chloromethane	110		100		64-130	10		20
Bromomethane	71		72		39-139	1		20
Vinyl chloride	99		95		55-140	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG1399724-3 WG1399724-4								
Chloroethane	77		69		55-138	11		20
1,1-Dichloroethene	87		86		61-145	1		20
trans-1,2-Dichloroethene	89		89		70-130	0		20
Trichloroethene	91		86		70-130	6		20
1,2-Dichlorobenzene	89		93		70-130	4		20
1,3-Dichlorobenzene	92		92		70-130	0		20
1,4-Dichlorobenzene	90		95		70-130	5		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
Dichlorodifluoromethane	98		93		36-147	5		20
1,1,1,2-Tetrachloroethane	84		87		64-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		92		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	110		109		70-130
Dibromofluoromethane	94		92		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

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): 01-10 QC Batch ID: WG1399724-6 WG1399724-7 QC Sample: L2032781-01 Client ID: MW-245D												
Methylene chloride	ND	10	10	100		10	100		70-130	0		20
1,1-Dichloroethane	ND	10	11	110		10	100		70-130	10		20
Chloroform	ND	10	9.8	98		9.7	97		70-130	1		20
2-Chloroethylvinyl ether	ND	10	ND	0	Q	ND	0	Q	70-130	NC		20
Carbon tetrachloride	ND	10	10	100		9.6	96		63-132	4		20
1,2-Dichloropropane	ND	10	11	110		11	110		70-130	0		20
Dibromochloromethane	ND	10	9.0	90		9.4	94		63-130	4		20
1,1,2-Trichloroethane	ND	10	9.7	97		9.8	98		70-130	1		20
Tetrachloroethene	ND	10	9.4	94		9.3	93		70-130	1		20
Chlorobenzene	ND	10	9.3	93		9.7	97		75-130	4		20
Trichlorofluoromethane	ND	10	8.9	89		8.7	87		62-150	2		20
1,2-Dichloroethane	ND	10	9.4	94		9.6	96		70-130	2		20
1,1,1-Trichloroethane	ND	10	10	100		9.4	94		67-130	6		20
Bromodichloromethane	ND	10	9.4	94		9.4	94		67-130	0		20
trans-1,3-Dichloropropene	ND	10	9.2	92		9.5	95		70-130	3		20
cis-1,3-Dichloropropene	ND	10	9.4	94		9.1	91		70-130	3		20
Bromoform	ND	10	9.3	93		9.2	92		54-136	1		20
Benzene	ND	10	10	100		10	100		70-130	0		20
Toluene	ND	10	9.7	97		9.9	99		70-130	2		20
Ethylbenzene	ND	10	9.8	98		10	100		70-130	2		20
Chloromethane	ND	10	12	120		12	120		64-130	0		20
Bromomethane	ND	10	5.6	56		5.9	59		39-139	5		20
Vinyl chloride	ND	10	11	110		12	120		55-140	9		20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

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): 01-10 QC Batch ID: WG1399724-6 WG1399724-7 QC Sample: L2032781-01 Client ID: MW-245D												
Chloroethane	ND	10	7.6	76		7.6	76		55-138	0		20
1,1-Dichloroethene	ND	10	10	100		10	100		61-145	0		20
trans-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Trichloroethene	ND	10	10	100		10	100		70-130	0		20
1,2-Dichlorobenzene	ND	10	9.6	96		9.8	98		70-130	2		20
1,3-Dichlorobenzene	ND	10	9.7	97		9.6	96		70-130	1		20
1,4-Dichlorobenzene	ND	10	9.6	96		9.7	97		70-130	1		20
p/m-Xylene	ND	20	19	95		20	100		70-130	5		20
o-Xylene	ND	20	19	95		20	100		70-130	5		20
Dichlorodifluoromethane	ND	10	11	110		11	110		36-147	0		20
1,1,1,2-Tetrachloroethane	ND	10	8.8	88		9.4	94		64-130	7		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	96		93		70-130
4-Bromofluorobenzene	109		108		70-130
Dibromofluoromethane	99		96		70-130
Toluene-d8	99		100		70-130

METALS

Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-01

Date Collected: 08/12/20 11:25

Client ID: MW-245D

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0211		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 10:26	EPA 3005A	1,6020B	AM
Antimony, Total	0.00069	J	mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00385		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Barium, Total	0.09108		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Boron, Total	0.048		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 14:07	EPA 3005A	1,6010D	GD
Cadmium, Total	0.00014	J	mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Calcium, Total	71.6		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 14:07	EPA 3005A	1,6010D	GD
Chromium, Total	0.00055	J	mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Copper, Total	0.00095	J	mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Iron, Total	1.06		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Lead, Total	0.00159		mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Magnesium, Total	25.3		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 14:07	EPA 3005A	1,6010D	GD
Manganese, Total	0.1134		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:33	EPA 7470A	1,7470A	AL
Nickel, Total	0.00067	J	mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Potassium, Total	4.34		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Sodium, Total	51.9		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Zinc, Total	0.01236		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 20:03	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	283		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 14:07	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-01

Date Collected: 08/12/20 11:25

Client ID: MW-245D

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00143	J	mg/l	0.00400	0.00042	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00308		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.08288		mg/l	0.00050	0.00017	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.048		mg/l	0.030	0.002	1	08/14/20 09:34	08/14/20 17:25	EPA 3005A	1,6010D	BV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Calcium, Dissolved	71.2		mg/l	0.100	0.035	1	08/14/20 09:34	08/14/20 17:25	EPA 3005A	1,6010D	BV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00049	J	mg/l	0.00100	0.00038	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0485	J	mg/l	0.0500	0.0191	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	25.8		mg/l	0.100	0.015	1	08/14/20 09:34	08/14/20 17:25	EPA 3005A	1,6010D	BV
Manganese, Dissolved	0.1103		mg/l	0.00100	0.00044	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/14/20 09:40	08/14/20 12:12	EPA 7470A	1,7470A	EW
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Potassium, Dissolved	4.54		mg/l	0.100	0.0309	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Sodium, Dissolved	54.7		mg/l	0.100	0.0293	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00025	J	mg/l	0.00100	0.00014	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01030		mg/l	0.01000	0.00341	1	08/14/20 09:34	08/17/20 13:01	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	284		mg/l	0.660	NA	1	08/14/20 09:34	08/14/20 17:25	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-02

Date Collected: 08/12/20 00:00

Client ID: DUP08122020

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0162		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 10:31	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00379		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Barium, Total	0.09157		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Boron, Total	0.051		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 14:53	EPA 3005A	1,6010D	GD
Cadmium, Total	0.00010	J	mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Calcium, Total	72.3		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 14:53	EPA 3005A	1,6010D	GD
Chromium, Total	0.00037	J	mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Iron, Total	1.12		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Lead, Total	0.00146		mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Magnesium, Total	25.4		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 14:53	EPA 3005A	1,6010D	GD
Manganese, Total	0.1144		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:42	EPA 7470A	1,7470A	AL
Nickel, Total	ND		mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Potassium, Total	4.28		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Sodium, Total	52.1		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Zinc, Total	0.01092		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 20:33	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	285		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 14:53	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-02
 Client ID: DUP08122020
 Sample Location: GOSHEN, NY

Date Collected: 08/12/20 00:00
 Date Received: 08/12/20
 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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00059	J	mg/l	0.00400	0.00042	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00293		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.08157		mg/l	0.00050	0.00017	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.047		mg/l	0.030	0.002	1	08/14/20 09:34	08/14/20 17:43	EPA 3005A	1,6010D	BV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Calcium, Dissolved	67.9		mg/l	0.100	0.035	1	08/14/20 09:34	08/14/20 17:43	EPA 3005A	1,6010D	BV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0316	J	mg/l	0.0500	0.0191	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	24.9		mg/l	0.100	0.015	1	08/14/20 09:34	08/14/20 17:43	EPA 3005A	1,6010D	BV
Manganese, Dissolved	0.09594		mg/l	0.00100	0.00044	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/14/20 09:40	08/14/20 12:24	EPA 7470A	1,7470A	EW
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Potassium, Dissolved	4.15		mg/l	0.100	0.0309	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Sodium, Dissolved	49.4		mg/l	0.100	0.0293	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00017	J	mg/l	0.00100	0.00014	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/14/20 09:34	08/17/20 13:06	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	272		mg/l	0.660	NA	1	08/14/20 09:34	08/14/20 17:43	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-03
 Client ID: PZ-4
 Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:05
 Date Received: 08/12/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10.5		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 10:36	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Arsenic, Total	0.04208		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Barium, Total	0.1507		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00064		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Boron, Total	0.108		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 14:58	EPA 3005A	1,6010D	GD
Cadmium, Total	0.00027		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Calcium, Total	239		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 14:58	EPA 3005A	1,6010D	GD
Chromium, Total	0.01594		mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Cobalt, Total	0.01321		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Copper, Total	0.04997		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Iron, Total	28.5		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Lead, Total	0.02817		mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Magnesium, Total	54.4		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 14:58	EPA 3005A	1,6010D	GD
Manganese, Total	2.540		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:43	EPA 7470A	1,7470A	AL
Nickel, Total	0.02973		mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Potassium, Total	4.88		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Selenium, Total	0.00644		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Sodium, Total	23.1		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Thallium, Total	0.00015	J	mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Vanadium, Total	0.01923		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Zinc, Total	0.1044		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 20:37	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	821		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 14:58	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-03
 Client ID: PZ-4
 Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:05
 Date Received: 08/12/20
 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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0139		mg/l	0.0100	0.00327	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00070	J	mg/l	0.00400	0.00042	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00664		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.07062		mg/l	0.00050	0.00017	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.097		mg/l	0.030	0.002	1	08/14/20 09:34	08/14/20 17:48	EPA 3005A	1,6010D	BV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Calcium, Dissolved	182		mg/l	0.100	0.035	1	08/14/20 09:34	08/14/20 17:48	EPA 3005A	1,6010D	BV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00041	J	mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00120		mg/l	0.00100	0.00038	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0785		mg/l	0.0500	0.0191	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	44.5		mg/l	0.100	0.015	1	08/14/20 09:34	08/14/20 17:48	EPA 3005A	1,6010D	BV
Manganese, Dissolved	0.9687		mg/l	0.00100	0.00044	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/14/20 09:40	08/14/20 12:26	EPA 7470A	1,7470A	EW
Nickel, Dissolved	0.00416		mg/l	0.00200	0.00055	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Potassium, Dissolved	3.39		mg/l	0.100	0.0309	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Sodium, Dissolved	22.8		mg/l	0.100	0.0293	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00017	J	mg/l	0.00100	0.00014	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00708	J	mg/l	0.01000	0.00341	1	08/14/20 09:34	08/17/20 13:11	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	637		mg/l	0.660	NA	1	08/14/20 09:34	08/14/20 17:48	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-04

Date Collected: 08/12/20 13:10

Client ID: MW-3B

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00938	J	mg/l	0.0100	0.00327	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01957		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Barium, Total	0.1216		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Boron, Total	0.057		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 15:02	EPA 3005A	1,6010D	GD
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Calcium, Total	96.2		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 15:02	EPA 3005A	1,6010D	GD
Chromium, Total	ND		mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Iron, Total	0.655		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Magnesium, Total	15.2		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 15:02	EPA 3005A	1,6010D	GD
Manganese, Total	0.5011		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:45	EPA 7470A	1,7470A	AL
Nickel, Total	0.00111	J	mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Potassium, Total	1.19		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Sodium, Total	29.1		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 20:42	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	303		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 15:02	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-04

Date Collected: 08/12/20 13:10

Client ID: MW-3B

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00402	J	mg/l	0.0100	0.00327	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.02532		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1528		mg/l	0.00050	0.00017	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.108		mg/l	0.030	0.002	1	08/14/20 09:34	08/14/20 17:52	EPA 3005A	1,6010D	BV
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Calcium, Dissolved	106		mg/l	0.100	0.035	1	08/14/20 09:34	08/14/20 17:52	EPA 3005A	1,6010D	BV
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00016	J	mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00038	J	mg/l	0.00100	0.00038	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.147		mg/l	0.0500	0.0191	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	20.8		mg/l	0.100	0.015	1	08/14/20 09:34	08/14/20 17:52	EPA 3005A	1,6010D	BV
Manganese, Dissolved	0.6776		mg/l	0.00100	0.00044	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/14/20 09:40	08/14/20 12:28	EPA 7470A	1,7470A	EW
Nickel, Dissolved	0.00277		mg/l	0.00200	0.00055	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Potassium, Dissolved	1.90		mg/l	0.100	0.0309	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Sodium, Dissolved	40.8		mg/l	0.100	0.0293	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00379	J	mg/l	0.01000	0.00341	1	08/14/20 09:34	08/17/20 13:16	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	350		mg/l	0.660	NA	1	08/14/20 09:34	08/14/20 17:52	EPA 3005A	1,6010D	BV



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-06
 Client ID: SW-5
 Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:40
 Date Received: 08/12/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.263		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 10:41	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00221		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Barium, Total	0.02720		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Boron, Total	0.025	J	mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 15:07	EPA 3005A	1,6010D	GD
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Calcium, Total	40.9		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 15:07	EPA 3005A	1,6010D	GD
Chromium, Total	0.00042	J	mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00040	J	mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Copper, Total	0.00248		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Iron, Total	0.864		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Lead, Total	0.00088	J	mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Magnesium, Total	12.2		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 15:07	EPA 3005A	1,6010D	GD
Manganese, Total	0.1534		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:47	EPA 7470A	1,7470A	AL
Nickel, Total	0.00144	J	mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Potassium, Total	2.49		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Sodium, Total	37.1		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Thallium, Total	0.00018	J	mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Zinc, Total	0.00582	J	mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 20:57	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	152		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 15:07	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-07

Date Collected: 08/12/20 13:20

Client ID: SW-8

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.194		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 10:45	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00188		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Barium, Total	0.02554		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Boron, Total	0.025	J	mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 15:12	EPA 3005A	1,6010D	GD
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Calcium, Total	39.6		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 15:12	EPA 3005A	1,6010D	GD
Chromium, Total	0.00022	J	mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00037	J	mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Copper, Total	0.00223		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Iron, Total	0.686		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Lead, Total	0.00074	J	mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Magnesium, Total	11.8		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 15:12	EPA 3005A	1,6010D	GD
Manganese, Total	0.1340		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:48	EPA 7470A	1,7470A	AL
Nickel, Total	0.00118	J	mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Potassium, Total	2.36		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Sodium, Total	34.8		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 21:02	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	147		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 15:12	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-08
 Client ID: SW-13
 Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:00
 Date Received: 08/12/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.211		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 11:57	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00208		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Barium, Total	0.02634		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Boron, Total	0.025	J	mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 15:16	EPA 3005A	1,6010D	GD
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Calcium, Total	40.5		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 15:16	EPA 3005A	1,6010D	GD
Chromium, Total	0.00028	J	mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00033	J	mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Copper, Total	0.00228		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Iron, Total	0.720		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Lead, Total	0.00074	J	mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Magnesium, Total	12.0		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 15:16	EPA 3005A	1,6010D	GD
Manganese, Total	0.1410		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:50	EPA 7470A	1,7470A	AL
Nickel, Total	0.00108	J	mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Potassium, Total	2.36		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Sodium, Total	35.6		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 21:07	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	150		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 15:16	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-09

Date Collected: 08/12/20 15:40

Client ID: MH-7

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0616		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 12:02	EPA 3005A	1,6020B	AM
Antimony, Total	0.01542	J	mg/l	0.04000	0.00429	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01613		mg/l	0.00500	0.00165	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Barium, Total	0.2462		mg/l	0.00500	0.00173	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00500	0.00107	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Boron, Total	9.22		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 15:30	EPA 3005A	1,6010D	GD
Cadmium, Total	ND		mg/l	0.00200	0.00059	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Calcium, Total	754		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 15:30	EPA 3005A	1,6010D	GD
Chromium, Total	0.01046		mg/l	0.01000	0.00178	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Cobalt, Total	0.04741		mg/l	0.00500	0.00163	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Copper, Total	0.05014		mg/l	0.01000	0.00384	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Iron, Total	2.86		mg/l	0.500	0.191	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Magnesium, Total	193		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 15:30	EPA 3005A	1,6010D	GD
Manganese, Total	0.7771		mg/l	0.01000	0.00440	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:52	EPA 7470A	1,7470A	AL
Nickel, Total	0.2646		mg/l	0.02000	0.00556	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Potassium, Total	706.		mg/l	1.00	0.309	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.0500	0.0173	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00400	0.00163	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Sodium, Total	2700		mg/l	1.00	0.293	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.01000	0.00143	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.05000	0.01570	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.1000	0.03410	10	08/13/20 15:50	08/14/20 21:12	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	2680		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 15:30	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**SAMPLE RESULTS**

Lab ID: L2032781-10

Date Collected: 08/12/20 16:30

Client ID: MH-15

Date Received: 08/12/20

Sample Location: GOSHEN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0193		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/17/20 12:07	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00349		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Barium, Total	0.1743		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Boron, Total	0.580		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 15:35	EPA 3005A	1,6010D	GD
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Calcium, Total	168		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 15:35	EPA 3005A	1,6010D	GD
Chromium, Total	0.00161		mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00304		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Iron, Total	16.8		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Magnesium, Total	34.0		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 15:35	EPA 3005A	1,6010D	GD
Manganese, Total	1.522		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:54	EPA 7470A	1,7470A	AL
Nickel, Total	0.01246		mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Potassium, Total	32.6		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Sodium, Total	143.		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 21:17	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	558		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 15:35	EPA 3005A	1,6010D	GD



Project Name: ORANGE COUNTY LF

Lab Number: L2032781

Project Number: 2010-15 (TASK 500)

Report Date: 08/19/20

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): 01-04,06-10 Batch: WG1398488-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Thallium, Total	0.00018	J	mg/l	0.00100	0.00014	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/13/20 15:50	08/14/20 19:58	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04,06-10 Batch: WG1398491-1										
Boron, Total	ND		mg/l	0.030	0.002	1	08/13/20 15:50	08/14/20 14:44	1,6010D	GD
Calcium, Total	ND		mg/l	0.100	0.035	1	08/13/20 15:50	08/14/20 14:44	1,6010D	GD
Magnesium, Total	ND		mg/l	0.100	0.015	1	08/13/20 15:50	08/14/20 14:44	1,6010D	GD



Project Name: ORANGE COUNTY LF

Lab Number: L2032781

Project Number: 2010-15 (TASK 500)

Report Date: 08/19/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01-04,06-10 Batch: WG1398491-1										
Hardness	ND		mg/l	0.660	NA	1	08/13/20 15:50	08/14/20 14:44	1,6010D	GD

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04,06-10 Batch: WG1398493-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/13/20 15:40	08/13/20 18:30	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1398825-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Antimony, Dissolved	0.00058	J	mg/l	0.00400	0.00042	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Iron, Dissolved	0.0312	J	mg/l	0.0500	0.0191	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Method Blank Analysis Batch Quality Control

Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Sodium, Dissolved	0.0394	J	mg/l	0.100	0.0293	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Thallium, Dissolved	0.00044	J	mg/l	0.00100	0.00014	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/14/20 09:34	08/17/20 11:25	1,6020B	AM

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): 01-04 Batch: WG1398826-1										
Boron, Dissolved	ND		mg/l	0.030	0.002	1	08/14/20 09:34	08/14/20 17:16	1,6010D	BV
Calcium, Dissolved	ND		mg/l	0.100	0.035	1	08/14/20 09:34	08/14/20 17:16	1,6010D	BV
Magnesium, Dissolved	ND		mg/l	0.100	0.015	1	08/14/20 09:34	08/14/20 17:16	1,6010D	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Hardness by SM 2340B - Mansfield Lab for sample(s): 01-04 Batch: WG1398826-1										
Hardness	ND		mg/l	0.660	NA	1	08/14/20 09:34	08/14/20 17:16	1,6010D	BV

Prep Information

Digestion Method: EPA 3005A



Project Name: ORANGE COUNTY LF

Lab Number: L2032781

Project Number: 2010-15 (TASK 500)

Report Date: 08/19/20

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1398829-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/14/20 09:40	08/14/20 12:08	1,7470A	EW

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04,06-10 Batch: WG1398488-2								
Aluminum, Total	108		-		80-120	-		
Antimony, Total	93		-		80-120	-		
Arsenic, Total	101		-		80-120	-		
Barium, Total	104		-		80-120	-		
Beryllium, Total	115		-		80-120	-		
Cadmium, Total	105		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Cobalt, Total	98		-		80-120	-		
Copper, Total	99		-		80-120	-		
Iron, Total	96		-		80-120	-		
Lead, Total	104		-		80-120	-		
Manganese, Total	101		-		80-120	-		
Nickel, Total	95		-		80-120	-		
Potassium, Total	104		-		80-120	-		
Selenium, Total	110		-		80-120	-		
Silver, Total	102		-		80-120	-		
Sodium, Total	104		-		80-120	-		
Thallium, Total	102		-		80-120	-		
Vanadium, Total	100		-		80-120	-		
Zinc, Total	107		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04,06-10 Batch: WG1398491-2					
Boron, Total	106	-	80-120	-	
Calcium, Total	102	-	80-120	-	
Magnesium, Total	102	-	80-120	-	
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04,06-10 Batch: WG1398491-2					
Hardness	102	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04,06-10 Batch: WG1398493-2					
Mercury, Total	90	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398825-2					
Aluminum, Dissolved	115	-	80-120	-	
Antimony, Dissolved	104	-	80-120	-	
Arsenic, Dissolved	109	-	80-120	-	
Barium, Dissolved	105	-	80-120	-	
Beryllium, Dissolved	96	-	80-120	-	
Cadmium, Dissolved	110	-	80-120	-	
Chromium, Dissolved	106	-	80-120	-	
Cobalt, Dissolved	106	-	80-120	-	
Copper, Dissolved	107	-	80-120	-	
Iron, Dissolved	111	-	80-120	-	
Lead, Dissolved	110	-	80-120	-	
Manganese, Dissolved	104	-	80-120	-	
Nickel, Dissolved	104	-	80-120	-	
Potassium, Dissolved	109	-	80-120	-	
Selenium, Dissolved	105	-	80-120	-	
Silver, Dissolved	108	-	80-120	-	
Sodium, Dissolved	105	-	80-120	-	
Thallium, Dissolved	107	-	80-120	-	
Vanadium, Dissolved	107	-	80-120	-	
Zinc, Dissolved	112	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398826-2					
Boron, Dissolved	90	-	80-120	-	
Calcium, Dissolved	88	-	80-120	-	
Magnesium, Dissolved	92	-	80-120	-	
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398826-2					
Hardness	90	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1398829-2					
Mercury, Dissolved	110	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398488-3 WG1398488-4 QC Sample: L2032781-01 Client ID: MW-245D												
Aluminum, Total	0.0211	2	2.04	101		2.11	104		75-125	3		20
Antimony, Total	0.00069J	0.5	0.5279	106		0.5325	106		75-125	1		20
Arsenic, Total	0.00385	0.12	0.1353	110		0.1354	110		75-125	0		20
Barium, Total	0.09108	2	2.159	103		2.240	107		75-125	4		20
Beryllium, Total	ND	0.05	0.05474	109		0.04894	98		75-125	11		20
Cadmium, Total	0.00014J	0.051	0.05398	106		0.05714	112		75-125	6		20
Chromium, Total	0.00055J	0.2	0.2054	103		0.2025	101		75-125	1		20
Cobalt, Total	ND	0.5	0.5034	101		0.5071	101		75-125	1		20
Copper, Total	0.00095J	0.25	0.2474	99		0.2496	100		75-125	1		20
Iron, Total	1.06	1	2.08	102		2.12	106		75-125	2		20
Lead, Total	0.00159	0.51	0.5516	108		0.5618	110		75-125	2		20
Manganese, Total	0.1134	0.5	0.6320	104		0.6369	105		75-125	1		20
Nickel, Total	0.00067J	0.5	0.4818	96		0.4878	98		75-125	1		20
Potassium, Total	4.34	10	15.0	107		14.8	105		75-125	1		20
Selenium, Total	ND	0.12	0.0828	69	Q	0.0851	71	Q	75-125	3		20
Silver, Total	ND	0.05	0.05166	103		0.05404	108		75-125	5		20
Sodium, Total	51.9	10	60.9	90		60.6	87		75-125	0		20
Thallium, Total	ND	0.12	0.1284	107		0.1286	107		75-125	0		20
Vanadium, Total	ND	0.5	0.5003	100		0.5114	102		75-125	2		20
Zinc, Total	0.01236	0.5	0.5618	110		0.5711	112		75-125	2		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398491-3 WG1398491-4 QC Sample: L2032781-01 Client ID: MW-245D									
Boron, Total	0.048	1	1.13	108	1.13	108	75-125	0	20
Calcium, Total	71.6	10	81.7	101	81.3	97	75-125	0	20
Magnesium, Total	25.3	10	35.1	98	35.0	97	75-125	0	20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398491-3 WG1398491-4 QC Sample: L2032781-01 Client ID: MW-245D									
Hardness	283	66.2	348	98	347	97	75-125	0	20
Total Metals - Mansfield Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398493-3 WG1398493-4 QC Sample: L2032781-01 Client ID: MW-245D									
Mercury, Total	ND	0.005	0.00453	91	0.00477	95	75-125	5	20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398825-3 WG1398825-4 QC Sample: L2032781-01 Client ID: MW-245D											
Aluminum, Dissolved	ND	2	2.56	128	Q	2.56	128	Q	75-125	0	20
Antimony, Dissolved	0.00143J	0.5	0.5336	107		0.5436	109		75-125	2	20
Arsenic, Dissolved	0.00308	0.12	0.1375	112		0.1359	111		75-125	1	20
Barium, Dissolved	0.08288	2	2.228	107		2.221	107		75-125	0	20
Beryllium, Dissolved	ND	0.05	0.05028	100		0.04755	95		75-125	6	20
Cadmium, Dissolved	ND	0.051	0.05793	114		0.05760	113		75-125	1	20
Chromium, Dissolved	ND	0.2	0.2198	110		0.2170	108		75-125	1	20
Cobalt, Dissolved	ND	0.5	0.5269	105		0.5162	103		75-125	2	20
Copper, Dissolved	0.00049J	0.25	0.2729	109		0.2638	106		75-125	3	20
Iron, Dissolved	0.0485J	1	1.62	162	Q	1.27	127	Q	75-125	24	Q 20
Lead, Dissolved	ND	0.51	0.5788	113		0.5690	112		75-125	2	20
Manganese, Dissolved	0.1103	0.5	0.6338	105		0.6213	102		75-125	2	20
Nickel, Dissolved	ND	0.5	0.5188	104		0.5114	102		75-125	1	20
Potassium, Dissolved	4.54	10	16.0	115		15.4	109		75-125	4	20
Selenium, Dissolved	ND	0.12	0.125	104		0.129	108		75-125	3	20
Silver, Dissolved	ND	0.05	0.05501	110		0.05420	108		75-125	1	20
Sodium, Dissolved	54.7	10	64.7	100		62.6	79		75-125	3	20
Thallium, Dissolved	0.00025J	0.12	0.1386	116		0.1316	110		75-125	5	20
Vanadium, Dissolved	ND	0.5	0.5366	107		0.5293	106		75-125	1	20
Zinc, Dissolved	0.01030	0.5	0.5683	112		0.5569	109		75-125	2	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398826-3 WG1398826-4 QC Sample: L2032781-01 Client ID: MW-245D									
Boron, Dissolved	0.048	1	1.08	103	1.06	101	75-125	2	20
Calcium, Dissolved	71.2	10	81.2	100	78.1	69	Q 75-125	4	20
Magnesium, Dissolved	25.8	10	36.1	103	34.6	88	75-125	4	20
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398826-3 WG1398826-4 QC Sample: L2032781-01 Client ID: MW-245D									
Hardness	284	66.2	351	101	338	82	75-125	4	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1398829-3 WG1398829-4 QC Sample: L2032781-01 Client ID: MW-245D									
Mercury, Dissolved	ND	0.005	0.00530	106	0.00522	104	75-125	1	20

INORGANICS & MISCELLANEOUS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-01
Client ID: MW-245D
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 11:25
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	32		A.P.C.U.	5.0	5.0	1	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	285.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	500		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:47	1,9010C/9012B	AG
Nitrogen, Ammonia	6.40		mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:47	44,350.1	AT
Nitrogen, Nitrate	0.038	J	mg/l	0.10	0.023	1	-	08/14/20 06:17	44,353.2	MR
Nitrogen, Total Kjeldahl	6.60		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 19:50	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	9.8	J	mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
BOD, 5 day	7.1		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	2.20		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	0.007	J	mg/l	0.030	0.006	1	08/18/20 04:45	08/18/20 07:26	4,420.1	MV
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:14	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.136		mg/l	0.050	0.013	1	-	08/13/20 18:17	44,300.0	AT
Chloride	36.7		mg/l	0.500	0.083	1	-	08/13/20 18:17	44,300.0	AT
Sulfate	107.		mg/l	10.0	4.54	10	-	08/13/20 19:55	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-02
Client ID: DUP08122020
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 00:00
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	28		A.P.C.U.	5.0	5.0	1	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	294.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	530		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:52	1,9010C/9012B	AG
Nitrogen, Ammonia	1.87		mg/l	0.075	0.024	1	08/19/20 11:50	08/19/20 15:30	44,350.1	JO
Nitrogen, Nitrate	0.097	J	mg/l	0.10	0.023	1	-	08/14/20 06:25	44,353.2	MR
Nitrogen, Total Kjeldahl	2.43		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 19:53	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	7.5	J	mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
BOD, 5 day	5.0		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	1.84		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:31	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:16	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.121		mg/l	0.050	0.013	1	-	08/13/20 18:28	44,300.0	AT
Chloride	34.0		mg/l	0.500	0.083	1	-	08/13/20 18:28	44,300.0	AT
Sulfate	111.		mg/l	10.0	4.54	10	-	08/13/20 22:10	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-03
Client ID: PZ-4
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:05
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	1800		A.P.C.U.	500	500	100	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	710.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	820		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:53	1,9010C/9012B	AG
Nitrogen, Ammonia	0.308		mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:54	44,350.1	AT
Nitrogen, Nitrate	0.060	J	mg/l	0.10	0.023	1	-	08/14/20 06:26	44,353.2	MR
Nitrogen, Total Kjeldahl	2.58		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 19:54	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	160		mg/l	40	11.	4	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
BOD, 5 day	ND		mg/l	10	NA	5	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	1.33		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:34	4,420.1	BR
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:16	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.403		mg/l	0.050	0.013	1	-	08/13/20 20:28	44,300.0	AT
Chloride	53.8		mg/l	5.00	0.839	10	-	08/13/20 23:37	44,300.0	AT
Sulfate	85.3		mg/l	1.00	0.454	1	-	08/13/20 20:28	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-04
Client ID: MW-3B
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 13:10
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	44		A.P.C.U.	10	10.	2	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	357.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	560		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:54	1,9010C/9012B	AG
Nitrogen, Ammonia	0.624		mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:55	44,350.1	AT
Nitrogen, Nitrate	0.049	J	mg/l	0.10	0.023	1	-	08/14/20 06:27	44,353.2	MR
Nitrogen, Total Kjeldahl	0.864		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 19:55	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	5.2	J	mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
BOD, 5 day	5.4		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	1.52		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:35	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:17	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.704		mg/l	0.050	0.013	1	-	08/13/20 20:39	44,300.0	AT
Chloride	60.8		mg/l	5.00	0.839	10	-	08/13/20 23:48	44,300.0	AT
Sulfate	41.3		mg/l	1.00	0.454	1	-	08/13/20 20:39	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-06
Client ID: SW-5
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 14:40
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	130		A.P.C.U.	25	25.	5	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	120.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	300		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:55	1,9010C/9012B	AG
Nitrogen, Ammonia	0.148		mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:56	44,350.1	AT
Nitrogen, Nitrate	0.86		mg/l	0.10	0.023	1	-	08/14/20 06:29	44,353.2	MR
Nitrogen, Total Kjeldahl	0.978		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 19:57	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	22.		mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	8.14		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:36	4,420.1	BR
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:17	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.260		mg/l	0.050	0.013	1	-	08/13/20 20:50	44,300.0	AT
Chloride	60.2		mg/l	5.00	0.839	10	-	08/13/20 23:59	44,300.0	AT
Sulfate	24.6		mg/l	1.00	0.454	1	-	08/13/20 20:50	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-07
Client ID: SW-8
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 13:20
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	160		A.P.C.U.	25	25.	5	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	122.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	320		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	0.001	J	mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:56	1,9010C/9012B	AG
Nitrogen, Ammonia	0.148		mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:57	44,350.1	AT
Nitrogen, Nitrate	0.86		mg/l	0.10	0.023	1	-	08/14/20 06:30	44,353.2	MR
Nitrogen, Total Kjeldahl	0.855		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 19:57	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	19.		mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	8.42		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:37	4,420.1	BR
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:18	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.257		mg/l	0.050	0.013	1	-	08/13/20 21:01	44,300.0	AT
Chloride	60.9		mg/l	5.00	0.839	10	-	08/14/20 00:10	44,300.0	AT
Sulfate	24.6		mg/l	1.00	0.454	1	-	08/13/20 21:01	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-08
Client ID: SW-13
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:00
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	110		A.P.C.U.	25	25.	5	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	121.		mg CaCO ₃ /L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	320		mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:57	1,9010C/9012B	AG
Nitrogen, Ammonia	0.143		mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:58	44,350.1	AT
Nitrogen, Nitrate	0.86		mg/l	0.10	0.023	1	-	08/14/20 06:31	44,353.2	MR
Nitrogen, Total Kjeldahl	0.865		mg/l	0.300	0.066	1	08/13/20 12:50	08/13/20 20:01	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	24.		mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:36	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	8.16		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	0.015	J	mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:38	4,420.1	BR
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:18	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.255		mg/l	0.050	0.013	1	-	08/13/20 21:12	44,300.0	AT
Chloride	61.0		mg/l	5.00	0.839	10	-	08/14/20 00:21	44,300.0	AT
Sulfate	24.1		mg/l	1.00	0.454	1	-	08/13/20 21:12	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-09
Client ID: MH-7
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 15:40
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	920		A.P.C.U.	120	120	25	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	450.		mg CaCO3/L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	13000		mg/l	20	6.1	2	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	0.053		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:58	1,9010C/9012B	AG
Nitrogen, Ammonia	91.6		mg/l	1.88	0.600	25	08/13/20 13:00	08/13/20 21:05	44,350.1	AT
Nitrogen, Nitrate	360		mg/l	5.0	1.1	50	-	08/14/20 06:43	44,353.2	MR
Nitrogen, Total Kjeldahl	103.		mg/l	3.00	0.660	10	08/13/20 12:50	08/13/20 20:19	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	1200		mg/l	100	27.	10	08/14/20 17:05	08/14/20 19:36	44,410.4	TL
BOD, 5 day	ND		mg/l	40	NA	20	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	264.		mg/l	20.0	4.56	40	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	0.046		mg/l	0.030	0.006	1	08/18/20 04:45	08/18/20 08:41	4,420.1	MV
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:19	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	46.6		mg/l	5.00	1.32	100	-	08/14/20 00:54	44,300.0	AT
Chloride	3890		mg/l	50.0	8.39	100	-	08/14/20 00:54	44,300.0	AT
Sulfate	2500		mg/l	100	45.4	100	-	08/14/20 00:54	44,300.0	AT



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

SAMPLE RESULTS

Lab ID: L2032781-10
Client ID: MH-15
Sample Location: GOSHEN, NY

Date Collected: 08/12/20 16:30
Date Received: 08/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	1100		A.P.C.U.	250	250	50	-	08/13/20 10:06	121,2120B	JA
Alkalinity, Total	718.		mg CaCO3/L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
Solids, Total Dissolved	1000		mg/l	20	6.1	2	-	08/14/20 07:50	121,2540C	DW
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:59	1,9010C/9012B	AG
Nitrogen, Ammonia	41.6		mg/l	1.88	0.600	25	08/13/20 13:00	08/13/20 21:06	44,350.1	AT
Nitrogen, Nitrate	0.28		mg/l	0.10	0.023	1	-	08/14/20 06:44	44,353.2	MR
Nitrogen, Total Kjeldahl	49.5		mg/l	3.00	0.660	10	08/13/20 12:50	08/13/20 20:20	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	96.		mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:36	44,410.4	TL
BOD, 5 day	6.4		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Total Organic Carbon	32.2		mg/l	5.00	1.14	10	-	08/14/20 05:56	121,5310C	DW
Phenolics, Total	0.014	J	mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:40	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:19	1,7196A	JA
Anions by Ion Chromatography - Westborough Lab										
Bromide	3.53		mg/l	0.500	0.132	10	-	08/14/20 01:26	44,300.0	AT
Chloride	186.		mg/l	5.00	0.839	10	-	08/14/20 01:26	44,300.0	AT
Sulfate	11.0		mg/l	1.00	0.454	1	-	08/14/20 01:15	44,300.0	AT



Project Name: ORANGE COUNTY LF

Lab Number: L2032781

Project Number: 2010-15 (TASK 500)

Report Date: 08/19/20

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02-04,06-08,10 Batch: WG1398288-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/13/20 08:45	08/13/20 12:26	4,420.1	BR
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398375-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/13/20 08:15	08/13/20 09:13	1,7196A	JA
General Chemistry - Westborough Lab for sample(s): 01,03-04,06-10 Batch: WG1398388-1										
Nitrogen, Ammonia	0.055	J	mg/l	0.075	0.024	1	08/13/20 13:00	08/13/20 20:39	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398389-1										
Nitrogen, Total Kjeldahl	0.279	J	mg/l	0.300	0.022	1	08/13/20 12:50	08/13/20 19:37	4,351.3/1 (M)	AT
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398438-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	08/13/20 12:20	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398532-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/20 14:50	08/14/20 09:32	1,9010C/9012B	AG
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398630-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	08/13/20 20:10	08/18/20 14:20	121,5210B	JW
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398682-1										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/20 16:50	44,300.0	
Chloride	0.087	J	mg/l	0.500	0.083	1	-	08/13/20 16:50	44,300.0	
Sulfate	ND		mg/l	1.00	0.454	1	-	08/13/20 16:50	44,300.0	
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398732-1										
Nitrogen, Nitrate	0.042	J	mg/l	0.10	0.023	1	-	08/14/20 06:54	44,353.2	MR
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398749-1										
Solids, Total Dissolved	9.0	J	mg/l	10	3.1	1	-	08/14/20 07:50	121,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1398753-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	08/14/20 05:56	121,5310C	DW
General Chemistry - Westborough Lab for sample(s): 01-04,06-10 Batch: WG1399029-1										
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/14/20 17:05	08/14/20 19:35	44,410.4	TL
General Chemistry - Westborough Lab for sample(s): 01,09 Batch: WG1399824-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/18/20 04:45	08/18/20 07:24	4,420.1	MV
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1400361-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	08/19/20 11:50	08/19/20 15:13	44,350.1	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-04,06-08,10 Batch: WG1398288-2								
Phenolics, Total	84		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398375-2								
Chromium, Hexavalent	101		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-10 Batch: WG1398388-2								
Nitrogen, Ammonia	91		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398389-2								
Nitrogen, Total Kjeldahl	101		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398438-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398532-2 WG1398532-3								
Cyanide, Total	104		101		85-115	3		20
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398630-2								
BOD, 5 day	112		-		85-115	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398682-2					
Bromide	100	-	90-110	-	
Chloride	102	-	90-110	-	
Sulfate	103	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398732-2					
Nitrogen, Nitrate	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398749-2					
Solids, Total Dissolved	99	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1398753-2					
Total Organic Carbon	96	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 Batch: WG1399029-2					
Chemical Oxygen Demand	95	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01,09 Batch: WG1399824-2					
Phenolics, Total	87	-	70-130	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** ORANGE COUNTY LF**Project Number:** 2010-15 (TASK 500)**Lab Number:** L2032781**Report Date:** 08/19/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1400361-2					
Nitrogen, Ammonia	98	-	90-110	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398375-4 WG1398375-5 QC Sample: L2032781-01 Client ID: MW-245D												
Chromium, Hexavalent	ND	0.1	0.101	101		0.105	105		85-115	4		20
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-10 QC Batch ID: WG1398388-4 QC Sample: L2032781-01 Client ID: MW-245D												
Nitrogen, Ammonia	6.40	4	10.2	95		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398389-4 QC Sample: L2032781-01 Client ID: MW-245D												
Nitrogen, Total Kjeldahl	6.60	8	14.4	98		-	-		77-111	-		24
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398438-4 QC Sample: L2032781-01 Client ID: MW-245D												
Alkalinity, Total	285.	100	386	101		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398532-4 WG1398532-5 QC Sample: L2032781-01 Client ID: MW-245D												
Cyanide, Total	ND	0.2	0.212	106		0.177	88		80-120	18		20
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398630-4 QC Sample: L2032781-01 Client ID: MW-245D												
BOD, 5 day	7.1	100	140	128		-	-		50-145	-		35
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398682-3 WG1398682-4 QC Sample: L2032781-01 Client ID: MW-245D												
Bromide	0.136	0.4	0.483	87	Q	0.490	89	Q	90-110	1		20
Chloride	36.7	4	39.7	76	Q	40.0	83	Q	90-110	1		18
Sulfate	107.	80	185	97		185	97		90-110	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398732-4 QC Sample: L2032781-01 Client ID: MW-245D												
Nitrogen, Nitrate	0.038J	4	3.9	98		-	-		83-113	-		6

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1398753-4 QC Sample: L2032781-01 Client ID: MW-245D									
Total Organic Carbon	2.20	4	6.24	101	-	-	80-120	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1399029-3 QC Sample: L2032781-01 Client ID: MW-245D									
Chemical Oxygen Demand	9.8J	47.6	57	120	Q	-	90-110	-	20
General Chemistry - Westborough Lab Associated sample(s): 01,09 QC Batch ID: WG1399824-4 QC Sample: L2032781-01 Client ID: MW-245D									
Phenolics, Total	0.007J	0.4	0.30	75	-	-	70-130	-	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1400361-4 QC Sample: L2033664-01 Client ID: MS Sample									
Nitrogen, Ammonia	ND	4	3.93	98	-	-	90-110	-	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

Report Date: 08/19/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398375-3	QC Sample: L2032781-01	Client ID: MW-245D		
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab	Associated sample(s): 01,03-04,06-10	QC Batch ID: WG1398388-3	QC Sample: L2032781-01	Client ID: MW-245D		
Nitrogen, Ammonia	6.40	6.39	mg/l	0		20
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398389-3	QC Sample: L2032781-01	Client ID: MW-245D		
Nitrogen, Total Kjeldahl	6.60	6.66	mg/l	1		24
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398429-1	QC Sample: L2032781-01	Client ID: MW-245D		
Color, Apparent	32	32	A.P.C.U.	0		
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398438-3	QC Sample: L2032781-01	Client ID: MW-245D		
Alkalinity, Total	285.	282	mg CaCO3/L	1		10
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398630-3	QC Sample: L2032781-01	Client ID: MW-245D		
BOD, 5 day	7.1	6.8	mg/l	4		35
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398732-3	QC Sample: L2032781-01	Client ID: MW-245D		
Nitrogen, Nitrate	0.038J	0.056J	mg/l	NC		6
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398749-3	QC Sample: L2032781-01	Client ID: MW-245D		
Solids, Total Dissolved	500	490	mg/l	2		10
General Chemistry - Westborough Lab	Associated sample(s): 01-04,06-10	QC Batch ID: WG1398753-3	QC Sample: L2032781-01	Client ID: MW-245D		
Total Organic Carbon	2.20	1.50	mg/l	38	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L2032781

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Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04,06-10 QC Batch ID: WG1399029-4 QC Sample: L2032781-01 Client ID: MW-245D					
Chemical Oxygen Demand	9.8J	14	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 01,09 QC Batch ID: WG1399824-3 QC Sample: L2032781-01 Client ID: MW-245D					
Phenolics, Total	0.007J	0.007J	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1400361-3 QC Sample: L2033664-01 Client ID: DUP Sample					
Nitrogen, Ammonia	ND	ND	mg/l	NC	20

Project Name: ORANGE COUNTY LF**Lab Number:** L2032781**Project Number:** 2010-15 (TASK 500)**Report Date:** 08/19/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler Custody Seal**

A	Absent
B	Absent
C	Absent
D	Absent
E	Absent
F	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-01A	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260(14)
L2032781-01A1	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2032781-01A2	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260(14)
L2032781-01B	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260(14)
L2032781-01B1	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2032781-01B2	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260(14)
L2032781-01C	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260(14)
L2032781-01C1	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2032781-01C2	Vial HCl preserved	A	NA		5.0	Y	Absent		NYTCL-8260(14)
L2032781-01D	Vial H2SO4 preserved	A	NA		5.0	Y	Absent		TOC-5310(28)
L2032781-01D1	Vial H2SO4 preserved	B	NA		3.7	Y	Absent		TOC-5310(28)
L2032781-01D2	Vial H2SO4 preserved	A	NA		5.0	Y	Absent		TOC-5310(28)
L2032781-01E	Vial H2SO4 preserved	A	NA		5.0	Y	Absent		TOC-5310(28)
L2032781-01E1	Vial H2SO4 preserved	B	NA		3.7	Y	Absent		TOC-5310(28)
L2032781-01E2	Vial H2SO4 preserved	A	NA		5.0	Y	Absent		TOC-5310(28)
L2032781-01F	Plastic 250ml unpreserved/No Headspace	A	NA		5.0	Y	Absent		ALK-T-2320(14)
L2032781-01F1	Plastic 250ml unpreserved/No Headspace	B	NA		3.7	Y	Absent		ALK-T-2320(14)

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-01F2	Plastic 250ml unpreserved/No Headspace	A	NA		5.0	Y	Absent		ALK-T-2320(14)
L2032781-01G	Plastic 250ml unpreserved	A	NA		5.0	Y	Absent		-
L2032781-01G1	Plastic 250ml unpreserved	B	7	7	3.7	Y	Absent		-
L2032781-01G2	Plastic 250ml unpreserved	A	7	7	5.0	Y	Absent		-
L2032781-01H	Plastic 250ml unpreserved	A	7	7	5.0	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-01H1	Plastic 250ml unpreserved	B	7	7	3.7	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-01H2	Plastic 250ml unpreserved	A	7	7	5.0	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-01I	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),MG-TI(180),HARDT(180),CA-TI(180),CO-6020T(180)
L2032781-01I1	Plastic 250ml HNO3 preserved	B	<2	<2	3.7	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),MG-TI(180),HARDT(180),CA-TI(180),CO-6020T(180)
L2032781-01I2	Plastic 250ml HNO3 preserved	A	<2	<2	5.0	Y	Absent		SE-6020T(180),FE-6020T(180),BA-6020T(180),TL-6020T(180),NI-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),MG-TI(180),HARDT(180),CA-TI(180),CO-6020T(180)
L2032781-01J	Plastic 250ml NaOH preserved	A	>12	>12	5.0	Y	Absent		TCN-9010(14)
L2032781-01J1	Plastic 250ml NaOH preserved	B	>12	>12	3.7	Y	Absent		TCN-9010(14)
L2032781-01J2	Plastic 250ml NaOH preserved	A	>12	>12	5.0	Y	Absent		TCN-9010(14)
L2032781-01K	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		COLOR-A-2120(2)

*Values in parentheses indicate holding time in days

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No: 08192018:00
Lab Number: L2032781
Report Date: 08/19/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-01K1	Amber 250ml unpreserved	B	7	7	3.7	Y	Absent		COLOR-A-2120(2)
L2032781-01K2	Amber 250ml unpreserved	A	7	7	5.0	Y	Absent		COLOR-A-2120(2)
L2032781-01L	Plastic 500ml H2SO4 preserved	A	<2	<2	5.0	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-01L1	Plastic 500ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-01L2	Plastic 500ml H2SO4 preserved	A	<2	<2	5.0	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-01M	Plastic 950ml unpreserved	A	7	7	5.0	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-01M1	Plastic 950ml unpreserved	B	7	7	3.7	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-01M2	Plastic 950ml unpreserved	A	7	7	5.0	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-01N	Amber 1000ml H2SO4 preserved	A	<2	<2	5.0	Y	Absent		NY-TPHENOL-420(28)
L2032781-01N1	Amber 1000ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		NY-TPHENOL-420(28)
L2032781-01N2	Amber 1000ml H2SO4 preserved	A	<2	<2	5.0	Y	Absent		NY-TPHENOL-420(28)
L2032781-01W	Plastic 120ml HNO3 preserved Filtrates	A	NA		5.0	Y	Absent		B-SI(180),SE-6020S(180),K-6020S(180),V-6020S(180),CU-6020S(180),MN-6020S(180),CO-6020S(180),ZN-6020S(180),BE-6020S(180),FE-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),HARDS(180),NA-6020S(180),TL-6020S(180),BA-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AG-6020S(180),AL-6020S(180),HG-S(28),CA-SI(180),CD-6020S(180)
L2032781-02A	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2032781-02B	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2032781-02C	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2032781-02D	Vial H2SO4 preserved	B	NA		3.7	Y	Absent		TOC-5310(28)
L2032781-02E	Vial H2SO4 preserved	B	NA		3.7	Y	Absent		TOC-5310(28)
L2032781-02F	Plastic 250ml unpreserved/No Headspace	B	NA		3.7	Y	Absent		ALK-T-2320(14)
L2032781-02G	Plastic 250ml unpreserved	B	7	7	3.7	Y	Absent		-
L2032781-02H	Plastic 250ml unpreserved	B	7	7	3.7	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),NO3-353(2),BOD-5210(2),TDS-2540(7),BR-300(28)

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No: 08192018:00
Lab Number: L2032781
Report Date: 08/19/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-02I	Plastic 250ml HNO3 preserved	B	<2	<2	3.7	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),B-TI(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AL-6020T(180),CD-6020T(180),MG-TI(180),HG-T(28),AG-6020T(180),CO-6020T(180),CA-TI(180),HARDT(180)
L2032781-02J	Plastic 250ml NaOH preserved	B	>12	>12	3.7	Y	Absent		TCN-9010(14)
L2032781-02K	Amber 250ml unpreserved	B	7	7	3.7	Y	Absent		COLOR-A-2120(2)
L2032781-02L	Plastic 500ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-02M	Plastic 950ml unpreserved	B	7	7	3.7	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2),BOD-5210(2),TDS-2540(7),BR-300(28)
L2032781-02N	Amber 1000ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		NY-TPHENOL-420(28)
L2032781-02W	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.7	Y	Absent		CU-6020S(180),SE-6020S(180),B-SI(180),V-6020S(180),K-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),FE-6020S(180),CR-6020S(180),TL-6020S(180),NA-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),HARDS(180),AG-6020S(180),MG-SI(180),SB-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CA-SI(180),CD-6020S(180)
L2032781-03A	Vial HCl preserved	E	NA		2.8	Y	Absent		NYTCL-8260(14)
L2032781-03B	Vial HCl preserved	E	NA		2.8	Y	Absent		NYTCL-8260(14)
L2032781-03C	Vial HCl preserved	E	NA		2.8	Y	Absent		NYTCL-8260(14)
L2032781-03D	Vial H2SO4 preserved	E	NA		2.8	Y	Absent		TOC-5310(28)
L2032781-03E	Vial H2SO4 preserved	E	NA		2.8	Y	Absent		TOC-5310(28)
L2032781-03F	Plastic 250ml unpreserved/No Headspace	E	NA		2.8	Y	Absent		ALK-T-2320(14)
L2032781-03G	Plastic 250ml unpreserved	E	7	7	2.8	Y	Absent		-
L2032781-03H	Plastic 250ml unpreserved	E	7	7	2.8	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BR-300(28),NO3-353(2),TDS-2540(7),BOD-5210(2)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-03I	Plastic 250ml HNO3 preserved	E	<2	<2	2.8	Y	Absent		TL-6020T(180),SE-6020T(180),BA-6020T(180),FE-6020T(180),K-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),B-TI(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),AG-6020T(180),CD-6020T(180),MG-TI(180),HG-T(28),HARDT(180),CA-TI(180),CO-6020T(180)
L2032781-03J	Plastic 250ml NaOH preserved	E	>12	>12	2.8	Y	Absent		TCN-9010(14)
L2032781-03K	Amber 250ml unpreserved	E	7	7	2.8	Y	Absent		COLOR-A-2120(2)
L2032781-03L	Plastic 500ml H2SO4 preserved	E	<2	<2	2.8	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-03M	Plastic 950ml unpreserved	E	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),BR-300(28),NO3-353(2),TDS-2540(7),BOD-5210(2)
L2032781-03N	Amber 1000ml H2SO4 preserved	E	<2	<2	2.8	Y	Absent		NY-TPHENOL-420(28)
L2032781-03W	Plastic 120ml HNO3 preserved Filtrates	E	NA		2.8	Y	Absent		V-6020S(180),B-SI(180),SE-6020S(180),K-6020S(180),CU-6020S(180),MN-6020S(180),CO-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),PB-6020S(180),HARDS(180),NI-6020S(180),NA-6020S(180),BA-6020S(180),TL-6020S(180),MG-SI(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),CA-SI(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L2032781-04A	Vial HCl preserved	E	NA		2.8	Y	Absent		NYTCL-8260(14)
L2032781-04B	Vial HCl preserved	E	NA		2.8	Y	Absent		NYTCL-8260(14)
L2032781-04C	Vial HCl preserved	E	NA		2.8	Y	Absent		NYTCL-8260(14)
L2032781-04D	Vial H2SO4 preserved	E	NA		2.8	Y	Absent		TOC-5310(28)
L2032781-04E	Vial H2SO4 preserved	E	NA		2.8	Y	Absent		TOC-5310(28)
L2032781-04F	Plastic 250ml unpreserved/No Headspace	E	NA		2.8	Y	Absent		ALK-T-2320(14)
L2032781-04G	Plastic 250ml unpreserved	E	7	7	2.8	Y	Absent		-
L2032781-04H	Plastic 250ml unpreserved	E	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-04I	Plastic 250ml HNO3 preserved	E	<2	<2	2.8	Y	Absent		FE-6020T(180),TL-6020T(180),BA-6020T(180),SE-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),B-TI(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),MG-TI(180),CO-6020T(180),CA-TI(180),HARDT(180)
L2032781-04J	Plastic 250ml NaOH preserved	E	>12	>12	2.8	Y	Absent		TCN-9010(14)
L2032781-04K	Amber 250ml unpreserved	E	7	7	2.8	Y	Absent		COLOR-A-2120(2)
L2032781-04L	Plastic 500ml H2SO4 preserved	E	<2	<2	2.8	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-04M	Plastic 950ml unpreserved	E	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),BOD-5210(2),NO3-353(2),BR-300(28),TDS-2540(7)
L2032781-04N	Amber 1000ml H2SO4 preserved	E	<2	<2	2.8	Y	Absent		NY-TPHENOL-420(28)
L2032781-04W	Plastic 120ml HNO3 preserved Filtrates	E	NA		2.8	Y	Absent		K-6020S(180),B-SI(180),CU-6020S(180),V-6020S(180),SE-6020S(180),MN-6020S(180),BE-6020S(180),ZN-6020S(180),CO-6020S(180),CR-6020S(180),FE-6020S(180),NA-6020S(180),PB-6020S(180),TL-6020S(180),HARDS(180),BA-6020S(180),NI-6020S(180),MG-SI(180),AS-6020S(180),SB-6020S(180),AG-6020S(180),HG-S(28),CD-6020S(180),AL-6020S(180),CA-SI(180)
L2032781-05A	Vial HCl preserved	C	NA		3.9	Y	Absent		NYTCL-8260(14)
L2032781-05B	Vial HCl preserved	C	NA		3.9	Y	Absent		NYTCL-8260(14)
L2032781-06A	Vial HCl preserved	D	NA		5.6	Y	Absent		NYTCL-8260(14)
L2032781-06B	Vial HCl preserved	D	NA		5.6	Y	Absent		NYTCL-8260(14)
L2032781-06C	Vial HCl preserved	D	NA		5.6	Y	Absent		NYTCL-8260(14)
L2032781-06D	Vial H2SO4 preserved	D	NA		5.6	Y	Absent		TOC-5310(28)
L2032781-06E	Vial H2SO4 preserved	D	NA		5.6	Y	Absent		TOC-5310(28)
L2032781-06F	Plastic 250ml unpreserved/No Headspace	D	NA		5.6	Y	Absent		ALK-T-2320(14)
L2032781-06H	Plastic 250ml unpreserved	D	7	7	5.6	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),TDS-2540(7),BR-300(28),NO3-353(2),BOD-5210(2)

Project Name: ORANGE COUNTY LF
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Report Date: 08/19/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-06I	Plastic 250ml HNO3 preserved	D	<2	<2	5.6	Y	Absent		BA-6020T(180),TL-6020T(180),SE-6020T(180),FE-6020T(180),CR-6020T(180),NI-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AL-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180),MG-TI(180),CO-6020T(180),CA-TI(180),HARDT(180)
L2032781-06J	Plastic 250ml NaOH preserved	D	>12	>12	5.6	Y	Absent		TCN-9010(14)
L2032781-06K	Amber 250ml unpreserved	D	7	7	5.6	Y	Absent		COLOR-A-2120(2)
L2032781-06L	Plastic 500ml H2SO4 preserved	D	<2	<2	5.6	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-06M	Plastic 950ml unpreserved	D	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),TDS-2540(7),BR-300(28),NO3-353(2),BOD-5210(2)
L2032781-06N	Amber 1000ml H2SO4 preserved	D	<2	<2	5.6	Y	Absent		NY-TPHENOL-420(28)
L2032781-07A	Vial HCl preserved	D	NA		5.6	Y	Absent		NYTCL-8260(14)
L2032781-07B	Vial HCl preserved	D	NA		5.6	Y	Absent		NYTCL-8260(14)
L2032781-07C	Vial HCl preserved	D	NA		5.6	Y	Absent		NYTCL-8260(14)
L2032781-07D	Vial H2SO4 preserved	D	NA		5.6	Y	Absent		TOC-5310(28)
L2032781-07E	Vial H2SO4 preserved	D	NA		5.6	Y	Absent		TOC-5310(28)
L2032781-07F	Plastic 250ml unpreserved/No Headspace	D	NA		5.6	Y	Absent		ALK-T-2320(14)
L2032781-07H	Plastic 250ml unpreserved	D	7	7	5.6	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BR-300(28),TDS-2540(7),BOD-5210(2),NO3-353(2)
L2032781-07I	Plastic 250ml HNO3 preserved	D	<2	<2	5.6	Y	Absent		TL-6020T(180),FE-6020T(180),SE-6020T(180),BA-6020T(180),NI-6020T(180),K-6020T(180),CR-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),AL-6020T(180),MG-TI(180),CD-6020T(180),HG-T(28),CA-TI(180),HARDT(180),CO-6020T(180)
L2032781-07J	Plastic 250ml NaOH preserved	D	>12	>12	5.6	Y	Absent		TCN-9010(14)
L2032781-07K	Amber 250ml unpreserved	D	7	7	5.6	Y	Absent		COLOR-A-2120(2)
L2032781-07L	Plastic 500ml H2SO4 preserved	D	<2	<2	5.6	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-07M	Plastic 950ml unpreserved	D	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),BR-300(28),TDS-2540(7),BOD-5210(2),NO3-353(2)
L2032781-07N	Amber 1000ml H2SO4 preserved	D	<2	<2	5.6	Y	Absent		NY-TPHENOL-420(28)

*Values in parentheses indicate holding time in days

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No: 08192018:00
Lab Number: L2032781
Report Date: 08/19/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-08A	Vial HCl preserved	F	NA		3.1	Y	Absent		NYTCL-8260(14)
L2032781-08B	Vial HCl preserved	F	NA		3.1	Y	Absent		NYTCL-8260(14)
L2032781-08C	Vial HCl preserved	F	NA		3.1	Y	Absent		NYTCL-8260(14)
L2032781-08D	Vial H2SO4 preserved	F	NA		3.1	Y	Absent		TOC-5310(28)
L2032781-08E	Vial H2SO4 preserved	F	NA		3.1	Y	Absent		TOC-5310(28)
L2032781-08F	Plastic 250ml unpreserved/No Headspace	F	NA		3.1	Y	Absent		ALK-T-2320(14)
L2032781-08H	Plastic 250ml unpreserved	F	7	7	3.1	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),NO3-353(2),TDS-2540(7),BR-300(28)
L2032781-08I	Plastic 250ml HNO3 preserved	F	<2	<2	3.1	Y	Absent		SE-6020T(180),TL-6020T(180),BA-6020T(180),FE-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),B-TI(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-TI(180),CO-6020T(180),HARDT(180),CA-TI(180)
L2032781-08J	Plastic 250ml NaOH preserved	F	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2032781-08K	Amber 250ml unpreserved	F	7	7	3.1	Y	Absent		COLOR-A-2120(2)
L2032781-08L	Plastic 500ml H2SO4 preserved	F	<2	<2	3.1	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-08M	Plastic 950ml unpreserved	F	7	7	3.1	Y	Absent		SO4-300(28),CL-300(28),BOD-5210(2),NO3-353(2),TDS-2540(7),BR-300(28)
L2032781-08N	Amber 1000ml H2SO4 preserved	F	<2	<2	3.1	Y	Absent		NY-TPHENOL-420(28)
L2032781-09A	Vial HCl preserved	F	NA		3.1	Y	Absent		NYTCL-8260(14)
L2032781-09B	Vial HCl preserved	F	NA		3.1	Y	Absent		NYTCL-8260(14)
L2032781-09C	Vial HCl preserved	F	NA		3.1	Y	Absent		NYTCL-8260(14)
L2032781-09D	Vial H2SO4 preserved	F	NA		3.1	Y	Absent		TOC-5310(28)
L2032781-09E	Vial H2SO4 preserved	F	NA		3.1	Y	Absent		TOC-5310(28)
L2032781-09F	Plastic 250ml unpreserved/No Headspace	F	NA		3.1	Y	Absent		ALK-T-2320(14)
L2032781-09H	Plastic 250ml unpreserved	F	7	7	3.1	Y	Absent		SO4-300(28),HEXCR-7196(1),CL-300(28),BR-300(28),NO3-353(2),TDS-2540(7),BOD-5210(2)

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Serial_No: 08192018:00
Lab Number: L2032781
Report Date: 08/19/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032781-09I	Plastic 250ml HNO3 preserved	F	<2	<2	3.1	Y	Absent		TL-6020T(180),BA-6020T(180),SE-6020T(180),FE-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),B-TI(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),MG-TI(180),AG-6020T(180),CD-6020T(180),HG-T(28),AL-6020T(180),HARDT(180),CA-TI(180),CO-6020T(180)
L2032781-09J	Plastic 250ml NaOH preserved	F	>12	>12	3.1	Y	Absent		TCN-9010(14)
L2032781-09K	Amber 250ml unpreserved	F	7	7	3.1	Y	Absent		COLOR-A-2120(2)
L2032781-09L	Plastic 500ml H2SO4 preserved	F	<2	<2	3.1	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-09M	Plastic 950ml unpreserved	F	7	7	3.1	Y	Absent		SO4-300(28),CL-300(28),BR-300(28),NO3-353(2),TDS-2540(7),BOD-5210(2)
L2032781-09N	Amber 1000ml H2SO4 preserved	F	<2	<2	3.1	Y	Absent		NY-TPHENOL-420(28)
L2032781-10A	Vial HCl preserved	C	NA		3.9	Y	Absent		NYTCL-8260(14)
L2032781-10B	Vial HCl preserved	C	NA		3.9	Y	Absent		NYTCL-8260(14)
L2032781-10C	Vial HCl preserved	C	NA		3.9	Y	Absent		NYTCL-8260(14)
L2032781-10D	Vial H2SO4 preserved	C	NA		3.9	Y	Absent		TOC-5310(28)
L2032781-10E	Vial H2SO4 preserved	C	NA		3.9	Y	Absent		TOC-5310(28)
L2032781-10F	Plastic 250ml unpreserved/No Headspace	C	NA		3.9	Y	Absent		ALK-T-2320(14)
L2032781-10H	Plastic 250ml unpreserved	C	7	7	3.9	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),NO3-353(2),BR-300(28),BOD-5210(2),TDS-2540(7)
L2032781-10I	Plastic 250ml HNO3 preserved	C	<2	<2	3.9	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),B-TI(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),MG-TI(180),AL-6020T(180),CO-6020T(180),HARDT(180),CA-TI(180)
L2032781-10J	Plastic 250ml NaOH preserved	C	>12	>12	3.9	Y	Absent		TCN-9010(14)
L2032781-10K	Amber 250ml unpreserved	C	7	7	3.9	Y	Absent		COLOR-A-2120(2)
L2032781-10L	Plastic 500ml H2SO4 preserved	C	<2	<2	3.9	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L2032781-10M	Plastic 950ml unpreserved	C	7	7	3.9	Y	Absent		SO4-300(28),CL-300(28),NO3-353(2),BR-300(28),BOD-5210(2),TDS-2540(7)
L2032781-10N	Amber 1000ml H2SO4 preserved	C	<2	<2	3.9	Y	Absent		NY-TPHENOL-420(28)

*Values in parentheses indicate holding time in days

Project Name: ORANGE COUNTY LF
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Serial_No:08192018:00
Lab Number: L2032781
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
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Project Name: ORANGE COUNTY LF
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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- 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.
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.

Footnotes

Report Format: DU Report with 'J' Qualifiers



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- 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. 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. (DoD and NYSDEC Part 375 PFAS only.)
- 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.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: ORANGE COUNTY LF
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Data Qualifiers

- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)

Lab Number: L2032781
Report Date: 08/19/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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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 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; 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.**EPA TO-12** Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan 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.****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.****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.

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

8/13/20

L2032781

☒ Same as Client Info

Please identify below location of applicable disposal facilities.

☐ Rush (only if pre approved) ☐ # of Days:

* Total Baseline Metals (88' Regs)

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Hexcr, T, T	CL, NO	Total H	Her	CO	NYTCL	ALK-T-2	Sample Specific Comments
		Date	Time										
32781-01	MW-245D MW-245D	8-12-2020	1125	G-W	PWS								
01	MW-245D MW-245D-MS		1130										
01	MW-245D MW-245D-MSD		1135										
02	MW-245D DUP08122020		-										
03	MW-245D PZ-4		1405										
04	MW-3B		1310										
	PWS		PWS										
05	TB08122020	8-12-2020	-	LW	PWS								

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.

Date/Time

 NEW YORK CHAIN OF CUSTODY 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		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 <u>2</u> of <u>4</u>		Date Rec'd in Lab <u>8/13/20</u>		ALPHA Job # <u>L2032781</u>																																																																																				
		Project Information Project Name: <u>Orange County LF</u> Project Location: <u>Goshen, NY</u> Project # <u>2010-15</u> (Use Project name as Project #) ☐				Deliverables ☒ ASP-A ☐ ASP-B ☐ EQulS (1 File) ☐ EQulS (4 File) ☐ Other				Billing Information ☒ Same as Client Info PO #																																																																																		
		Client Information Client: <u>Sterling Environmental Engineering</u> Address: <u>24 Wade Rd</u> <u>Latham, NY 12110</u> Phone: <u>518-456-4900</u> Fax: <u>518-456-3532</u> Email: <u>mark.williams@sterlingenvironmental.com</u>				Regulatory Requirement ☒ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge				Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other: <u>NA</u>																																																																																		
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Mansfield, MA 02048
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4 of 4

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APPENDIX C

CATEGORY B PACKAGE

APPENDIX D

**ORANGE COUNTY LANDFILL POST-CLOSURE
FIELD INSPECTION DOCUMENTS
AND MONTHLY INSPECTION REPORTS**

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 8/15/19

Performed By Alex Sherwood

- | | | | |
|---|--|---|--|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface corrosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle ☐ ATV |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

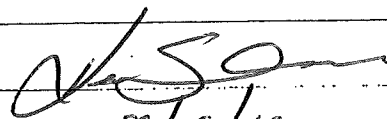
COMMENTS:

CORRECTIVE ACTION TAKEN:

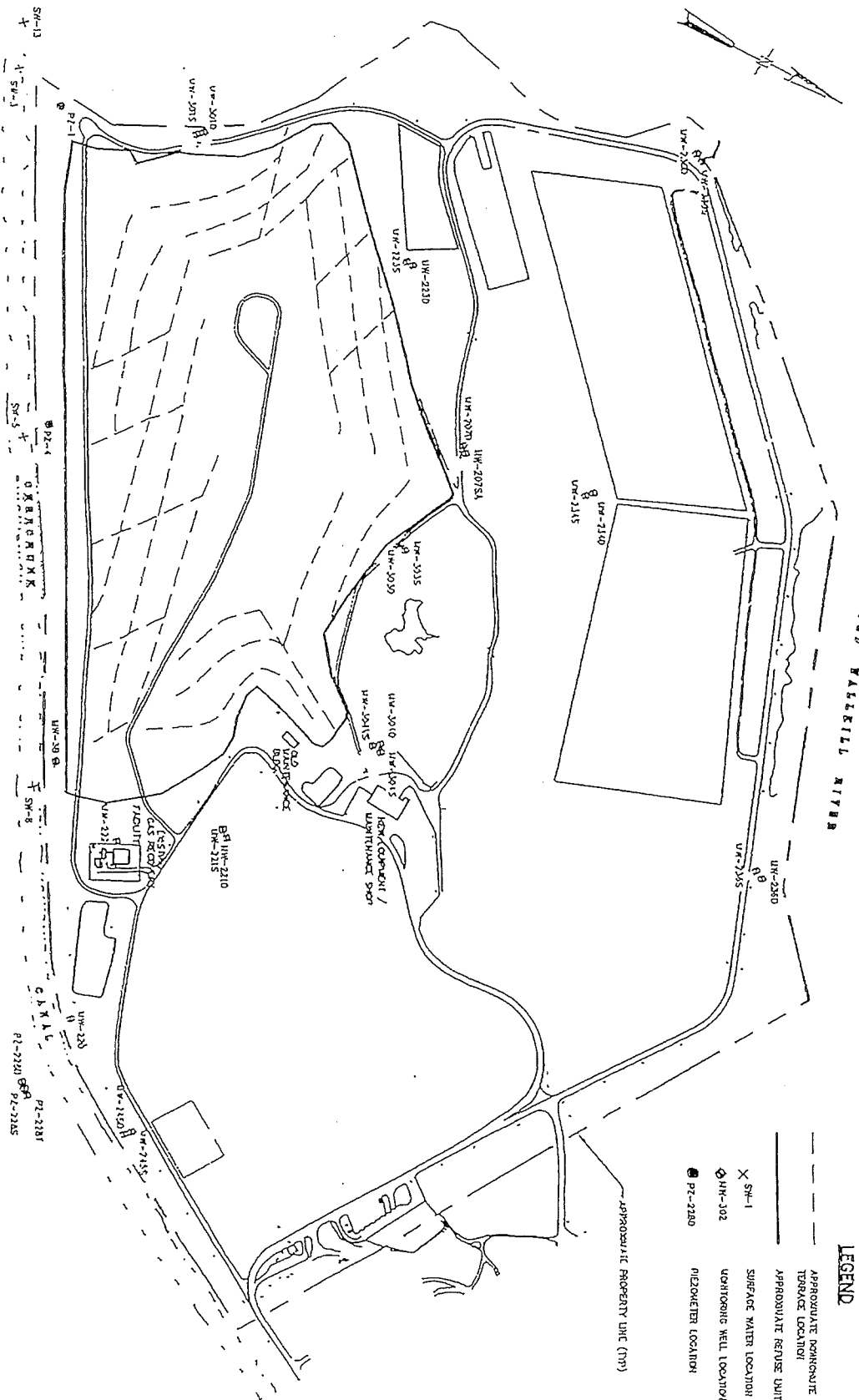
TAM ENTERPRISES was awarded the contract to maintain and remove all leachate from tanks and manholes. They also repaired and replaced the bad transformer at L-1. All pumps and tanks are now working properly.

BY:

DATE:


8/15/19

OLD
HAKKILL
MOUNTAIN



Stearns & Wheeler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A

FIELD INSPECTION SITE MAP

SCALE: 1" = 600'

ORANGE COUNTY LANDFILL SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT ORANGE COUNTY

Date: 9/17/19

Performed By Alex Sherwood

1. Access road condition ☒ Good ☐ Fair ☐ Poor *
2. Access Control (Monitoring of Access road & entrance into landfill property) ☒ Has been maintained properly ☐ Has not been maintained properly
3. Roadside ditches, culverts & other site drainage ways ☒ Unobstructed ☐ Obstructed * ☐ Sediments
4. Catch Basins ☒ Unobstructed ☐ Obstructed * ☐ Sediments
5. Detention Basin ☒ Unobstructed ☐ Obstructed * ☐ Sediments
6. Terraces ☒ Unobstructed ☐ Obstructed * ☐ Sediments
7. Terraces downchutes ☒ Unobstructed ☐ Obstructed * ☐ Sediments
8. Terraces headwall ☒ Unobstructed ☐ Obstructed * ☐ Sediments
9. Grass condition ☒ Good ☐ Poor ☐ Dead
10. Other Plants Present
 - Woody Plants ☒ Not on cap ☐ Present* Date Removed: _____
12. Capped Gas Wells ☒ Good Condition ☐ Damaged*
13. Surface erosion ☒ None ☐ Minor ☐ Needs repair *
14. Landfill Stability (Sloughing) ☒ No soil movement ☐ Soil movement present*
15. Cracks (Within landfill cover) ☒ No Cracks Visible ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description)
16. Geomembrane liner exposed ☒ No ☐ Yes
17. Settlement ☒ No Settlement visible ☐ Settlement is visible*
(Note Measurement, Location & Description)
18. Most recent mowing date: 8/6/19
19. Stressed vegetation ☒ No ☐ Yes*
20. Damage to leachate cleanouts ☒ No ☐ Yes
21. Monitoring Wells ☒ Secure with locks ☐ Damaged*
22. Litter present ☒ No ☐ Yes Est. removal date: _____
23. Evidence of ponded water ☒ None ☐ Observed* ☐ Suspected *
24. Fallen trees ☒ None ☐ Present on cap * Est. removal date: _____
25. Evidence of trespass ☐ Yes* ☒ No
26. Evidence of motor vehicle trespass ☒ No ☐ Auto/Truck ☐ Motorcycle ☐ ATV
27. Woodchuck/rodent holes in cap ☒ No ☐ Yes Date Back filled: _____
28. Evidence of lightning strike ☒ No ☐ Yes *

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1

☒ OK

☐ Problem *

L - 2

☒ OK

☐ Problem *

L - 3

☒ OK

☐ Problem *

L - 4

☒ OK

☐ Problem *

L - 5

☒ OK

☐ Problem *

L - 7

☒ OK

☐ Problem *

35. Condensate Tanks

C - 1

☒ OK

☐ Problem *

C - 2

☒ OK

☐ Problem *

C - 3

☒ OK

☐ Problem *

C - 4

(Maintenance Shop)

☒ OK

☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

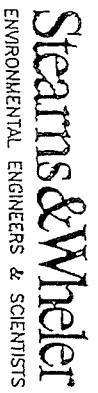
COMMENTS:

RECTIVE ACTION TAKEN:

BY:

DATE:

Henry J. Sherrill
9/17/19



ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

SCALE: 1" = 600'

DATE: 03/96

JOB No.: 2535

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 10/16/19

Performed By: Ken Sherwood

- | | | | |
|---|--|---|---|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

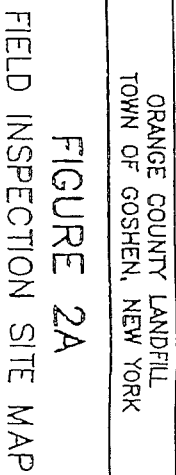
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

Ken Sherrill
10/16/19



ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 11/13/19

Performed By: Ken Sherwood

1. Access road condition ☒ Good ☐ Fair ☐ Poor *
2. Access Control (Monitoring of Access road & entrance into landfill property) ☒ Has been maintained properly ☐ Has not been maintained properly
3. Roadside ditches, culverts & other site drainage ways ☒ Unobstructed ☐ Obstructed * ☐ Sediments
4. Catch Basins ☒ Unobstructed ☐ Obstructed * ☐ Sediments
5. Detention Basin ☒ Unobstructed ☐ Obstructed * ☐ Sediments
6. Terraces ☒ Unobstructed ☐ Obstructed * ☐ Sediments
7. Terraces downchutes ☒ Unobstructed ☐ Obstructed * ☐ Sediments
8. Terraces headwall ☒ Unobstructed ☐ Obstructed * ☐ Sediments
9. Grass condition ☒ Good ☐ Poor ☐ Dead
10. Other Plants Present ☐ Burdock ☐ Thistle ☐ Other
- Woody Plants ☒ Not on cap ☐ Present* Date Removed: _____
12. Capped Gas Wells ☒ Good Condition ☐ Damaged*
13. Surface erosion ☒ None ☐ Minor ☐ Needs repair *
14. Landfill Stability (Sloughing) ☒ No soil movement ☐ Soil movement present*
15. Cracks (Within landfill cover) ☒ No Cracks Visible ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description)
16. Geomembrane liner exposed ☒ No ☐ Yes
17. Settlement ☒ No Settlement visible ☐ Settlement is visible*
(Note Measurement, Location & Description)
18. Most recent mowing date: 8/6/19
19. Stressed vegetation ☒ No ☐ Yes*
20. Damage to leachate cleanouts ☒ No ☐ Yes
21. Monitoring Wells ☒ Secure with locks ☐ Damaged*
22. Litter present ☒ No ☐ Yes Est. removal date: _____
23. Evidence of ponded water ☒ None ☐ Observed* ☐ Suspected *
24. Fallen trees ☒ None ☐ Present on cap * Est. removal date: _____
25. Evidence of trespass ☐ Yes* ☒ No
- Evidence of motor vehicle trespass ☒ No ☐ Auto/Truck ☐ Motorcycle ☐ ATV
27. Woodchuck/rodent holes in cap ☒ No ☐ Yes Date Back filled: _____
28. Evidence of lightning strike ☒ No ☐ Yes *

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1

☒ OK

☐ Problem *

L - 2

☒ OK

☐ Problem *

L - 3

☒ OK

☐ Problem *

L - 4

☒ OK

☐ Problem *

L - 5

☒ OK

☐ Problem *

L - 7

☒ OK

☐ Problem *

35. Condensate Tanks

C - 1

☒ OK

☐ Problem *

C - 2

☒ OK

☐ Problem *

C - 3

☒ OK

☐ Problem *

C - 4

(Maintenance Shop)

☒ OK

☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

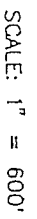
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

11/13/19



Stearns & Wheeler
ENVIRONMENTAL ENGINEERS & SCIENTISTS
DATE: 03/96 JOB No.: 2535

DATE: 03/96

JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A

FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 12/18/19

Performed By: Ken Sherwood

- | | | | |
|---|--|---|---|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

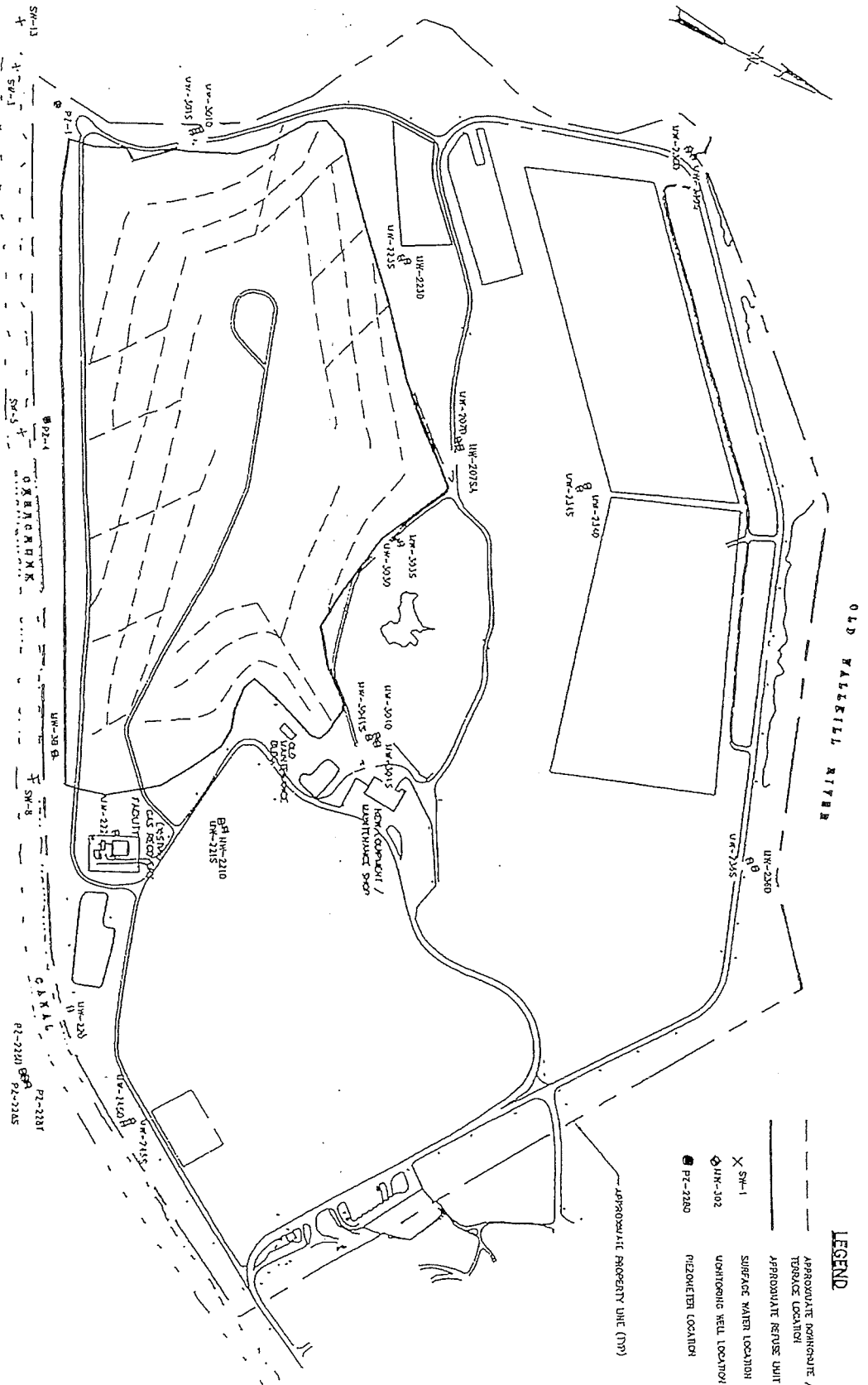
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

Kenneth J. Zherman
12/18/19



SCALE: 1" = 600'

Stearns & Wheeler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK
FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT ORANGE COUNTY

Date: 01/16/20

Performed By: Ken Sherwood

- | | | | |
|---|--|---|--|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface corrosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle ☐ ATV |
| 27. Woodchuck/mole holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1

☒ OK

☐ Problem *

L - 2

☒ OK

☐ Problem *

L - 3

☒ OK

☐ Problem *

L - 4

☒ OK

☐ Problem *

L - 5

☒ OK

☐ Problem *

L - 7

☒ OK

☐ Problem *

35. Condensate Tanks

C - 1

☒ OK

☐ Problem *

C - 2

☒ OK

☐ Problem *

C - 3

☒ OK

☐ Problem *

C - 4

(Maintenance Shop)

☒ OK

☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

General J. Sherrill
01/16/20



ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

SCALE: 1" = 600'

DATE: 03/96

JOB No.: 2535

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 2/14/20

Performed By: Ken Sherwood

1. Access road condition ☒ Good ☐ Fair ☐ Poor *
2. Access Control (Monitoring of Access road & entrance into landfill property) ☒ Has been maintained properly ☐ Has not been maintained properly
3. Roadside ditches, culverts & other site drainage ways ☒ Unobstructed ☐ Obstructed * ☐ Sediments
4. Catch Basins ☒ Unobstructed ☐ Obstructed * ☐ Sediments
5. Detention Basin ☒ Unobstructed ☐ Obstructed * ☐ Sediments
6. Terraces ☒ Unobstructed ☐ Obstructed * ☐ Sediments
7. Terraces downchutes ☒ Unobstructed ☐ Obstructed * ☐ Sediments
8. Terraces headwall ☒ Unobstructed ☐ Obstructed * ☐ Sediments
9. Grass condition ☒ Good ☐ Poor ☐ Dead
10. Other Plants Present ☐ Burdock ☐ Thistle ☐ Other
- Woody Plants ☒ Not on cap ☐ Present* Date Removed: _____
12. Capped Gas Wells ☒ Good Condition ☐ Damaged*
13. Surface erosion ☒ None ☐ Minor ☐ Needs repair *
14. Landfill Stability (Sloughing) ☒ No soil movement ☐ Soil movement present*
15. Cracks (Within landfill cover) ☒ No Cracks Visible ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description)
16. Geomembrane liner exposed ☒ No ☐ Yes
17. Settlement ☒ No Settlement visible ☐ Settlement is visible*
(Note Measurement, Location & Description)
18. Most recent mowing date: 8/6/19
19. Stressed vegetation ☒ No ☐ Yes*
20. Damage to leachate cleanouts ☒ No ☐ Yes
21. Monitoring Wells ☒ Secure with locks ☐ Damaged*
22. Litter present ☒ No ☐ Yes Est. removal date: _____
23. Evidence of ponded water ☒ None ☐ Observed* ☐ Suspected *
24. Fallen trees ☒ None ☐ Present on cap * Est. removal date: _____
25. Evidence of trespass ☐ Yes* ☒ No
- Evidence of motor vehicle trespass ☒ No ☐ Auto/Truck ☐ Motorcycle ☐ ATV
27. Woodchuck/rodent holes in cap ☒ No ☐ Yes Date Back filled: _____
28. Evidence of lightning strike ☒ No ☐ Yes *

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

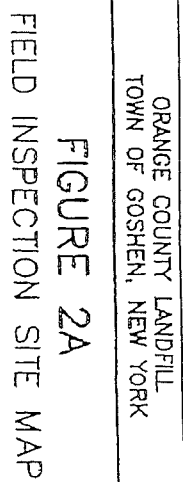
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

Kenneth J. Shuman
2/14/20



ORANGE COUNTY LANDFILL SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT ORANGE COUNTY

Date: 3/16/20

Performed By: Ken Sherwood

- | | | | |
|---|--|---|--|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| 11. Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| 26. Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle ☐ ATV |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

35. Condensate Tanks

L - 1 ☒ OK ☐ Problem *

C - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

L - 5 ☒ OK ☐ Problem *

☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

Kenel J. Sherrill

DATE:

3/16/20



ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A

FIELD INSPECTION SITE MAP

SCALE: 1" = 600'

DATE: 03/96

JOB No.: 2535

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 4/15/20

Performed By: Ken Sherwood

1. Access road condition ☒ Good ☐ Fair ☐ Poor *
2. Access Control (Monitoring of Access road & entrance into landfill property) ☒ Has been maintained properly ☐ Has not been maintained properly
3. Roadside ditches, culverts & other site drainage ways ☒ Unobstructed ☐ Obstructed * ☐ Sediments
4. Catch Basins ☒ Unobstructed ☐ Obstructed * ☐ Sediments
5. Detention Basin ☒ Unobstructed ☐ Obstructed * ☐ Sediments
6. Terraces ☒ Unobstructed ☐ Obstructed * ☐ Sediments
7. Terraces downchutes ☒ Unobstructed ☐ Obstructed * ☐ Sediments
8. Terraces headwall ☒ Unobstructed ☐ Obstructed * ☐ Sediments
9. Grass condition ☒ Good ☐ Poor ☐ Dead
10. Other Plants Present ☐ Burdock ☐ Thistle ☐ Other
11. Woody Plants ☒ Not on cap ☐ Present* Date Removed: _____
12. Capped Gas Wells ☒ Good Condition ☐ Damaged*
13. Surface erosion ☒ None ☐ Minor ☐ Needs repair *
14. Landfill Stability (Sloughing) ☒ No soil movement ☐ Soil movement present*
15. Cracks (Within landfill cover) ☒ No Cracks Visible ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description)
16. Geomembrane liner exposed ☒ No ☐ Yes
17. Settlement ☒ No Settlement visible ☐ Settlement is visible*
(Note Measurement, Location & Description)
18. Most recent mowing date: 8/6/19
19. Stressed vegetation ☒ No ☐ Yes*
20. Damage to leachate cleanouts ☒ No ☐ Yes
21. Monitoring Wells ☒ Secure with locks ☐ Damaged*
22. Litter present ☒ No ☐ Yes Est. removal date: _____
23. Evidence of ponded water ☒ None ☐ Observed* ☐ Suspected *
24. Fallen trees ☒ None ☐ Present on cap * Est. removal date: _____
25. Evidence of trespass ☐ Yes* ☒ No
26. Evidence of motor vehicle trespass ☒ No ☐ Auto/Truck ☐ Motorcycle ☐ ATV
27. Woodchuck/rodent holes in cap ☒ No ☐ Yes Date Back filled: _____
28. Evidence of lightning strike ☒ No ☐ Yes *

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

Kenneth J. Shenn
4/15/20



ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 5/14/20

Performed By: Ken Sherwood

- | | | | |
|---|--|---|---|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

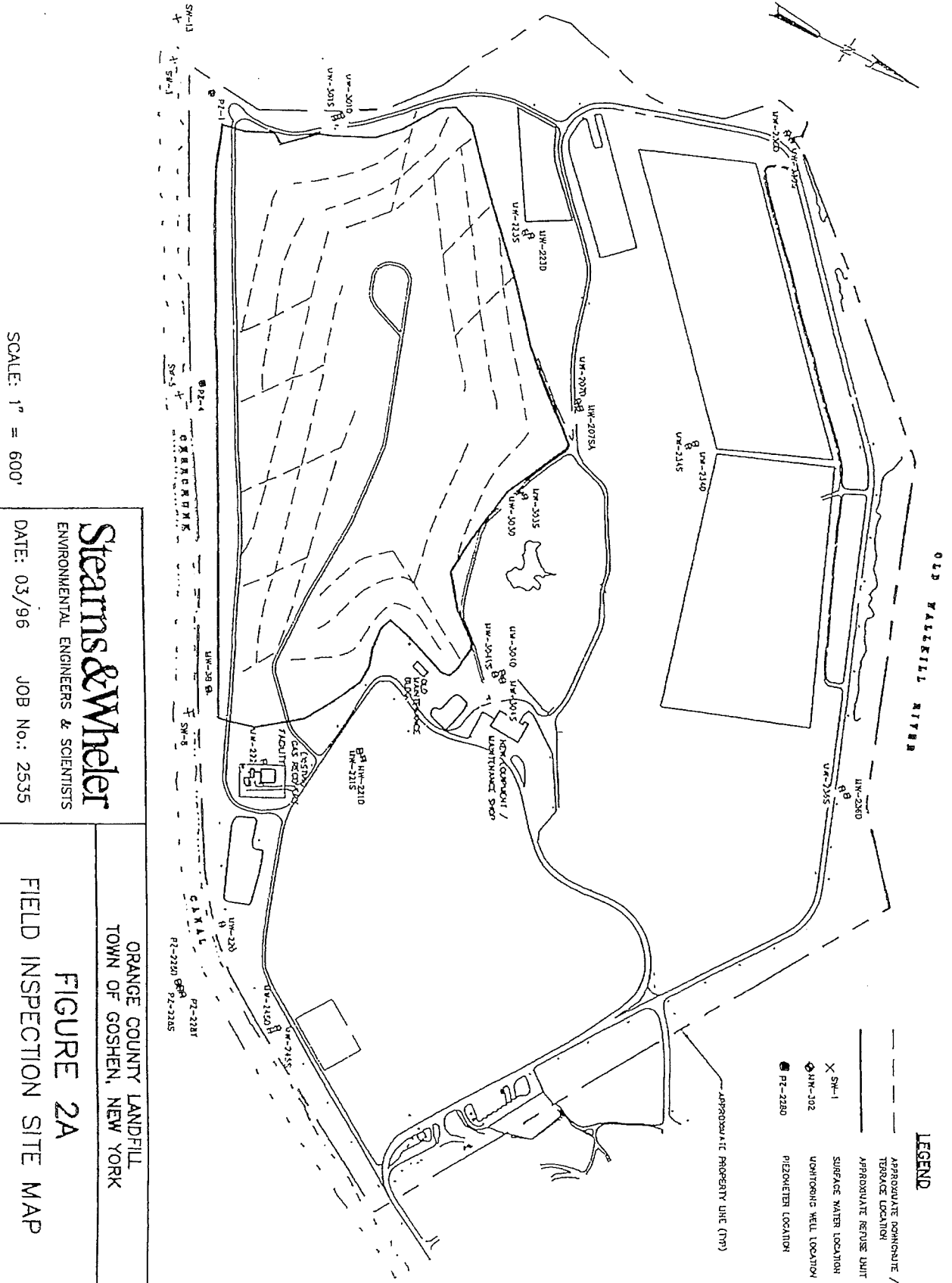
CORRECTIVE ACTION TAKEN:

BY:

Kenneth J. Sherman

DATE:

5/14/20



ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 6/16/20

Performed By: Ken Sherwood

- | | | | |
|---|--|---|--|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| 11. Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/6/19</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| 26. Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle ☐ ATV |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

Kenneth J. Sherrill

DATE:

6/16/20



ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A

FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT ORANGE COUNTY

Date: 7/15/20

Performed By: BRIAN R. LADLIE

- | | | | |
|---|--|---|--|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| 11. Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: | <u>7/14/20</u> | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle ☐ ATV |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

L - 5 ☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

Brian R. L...
7/15/20



ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A

FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 8/14/20

Performed By: Brian R. Lader

- | | | | |
|---|--|---|--|
| 1. Access road condition | ☒ Good | ☐ Fair | ☐ Poor * |
| 2. Access Control (Monitoring of Access road & entrance into landfill property) | ☒ Has been maintained properly | ☐ Has not been maintained properly | |
| 3. Roadside ditches, culverts & other site drainage ways | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 4. Catch Basins | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 5. Detention Basin | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 6. Terraces | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 7. Terraces downchutes | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 8. Terraces headwall | ☒ Unobstructed | ☐ Obstructed * | ☐ Sediments |
| 9. Grass condition | ☒ Good | ☐ Poor | ☐ Dead |
| 10. Other Plants Present | ☐ Burdock | ☐ Thistle | ☐ Other |
| 11. Woody Plants | ☒ Not on cap | ☐ Present* | Date Removed: _____ |
| 12. Capped Gas Wells | ☒ Good Condition | ☐ Damaged* | |
| 13. Surface erosion | ☒ None | ☐ Minor | ☐ Needs repair * |
| 14. Landfill Stability (Sloughing) | ☒ No soil movement | ☐ Soil movement present* | |
| 15. Cracks (Within landfill cover) | ☒ No Cracks Visible | ☐ Landfill cover crack(s) are visible*
(Note Measurement, Location & Description) | |
| 16. Geomembrane liner exposed | ☒ No | ☐ Yes | |
| 17. Settlement | ☒ No Settlement visible | ☐ Settlement is visible*
(Note Measurement, Location & Description) | |
| 18. Most recent mowing date: <u>8/12/20</u> | | | |
| 19. Stressed vegetation | ☒ No | ☐ Yes* | |
| 20. Damage to leachate cleanouts | ☒ No | ☐ Yes | |
| 21. Monitoring Wells | ☒ Secure with locks | ☐ Damaged* | |
| 22. Litter present | ☒ No | ☐ Yes | Est. removal date: _____ |
| 23. Evidence of ponded water | ☒ None | ☐ Observed* | ☐ Suspected * |
| 24. Fallen trees | ☒ None | ☐ Present on cap * | Est. removal date: _____ |
| 25. Evidence of trespass | ☐ Yes* | ☒ No | |
| 26. Evidence of motor vehicle trespass | ☒ No | ☐ Auto/Truck | ☐ Motorcycle ☐ ATV |
| 27. Woodchuck/rodent holes in cap | ☒ No | ☐ Yes | Date Back filled: _____ |
| 28. Evidence of lightning strike | ☒ No | ☐ Yes * | |

29. Unauthorized materials present

☒ No

☐ Yes *

30. Dead Animals present

☒ No

☐ Yes *

31. Oil slick on adjacent waters

☒ No

☐ Yes *

32. Damaged leachate manholes

☒ No

☐ Yes *

33. Leachate seeps

☒ No

☐ Yes

Stain Color: _____

Length: _____

34. Leachate fluid

☐ Puddle *

☐ Stream *

☒ None

35. Gulls/scavenger birds present

☒ No

☐ Yes *

36. Other animal foraging evidence

☒ No

☐ Yes *

37. No smoking warnings

☒ Present

☐ Missing/Damaged

38. Survey Monuments

☒ Undisturbed

☐ Disturbed

39. Leachate Collection tanks and piping

35. Condensate Tanks

L - 1 ☒ OK ☐ Problem *

C - 1 ☒ OK ☐ Problem *

L - 2 ☒ OK ☐ Problem *

C - 2 ☒ OK ☐ Problem *

L - 3 ☒ OK ☐ Problem *

C - 3 ☒ OK ☐ Problem *

L - 4 ☒ OK ☐ Problem *

C - 4 (Maintenance Shop)

L - 5 ☒ OK ☐ Problem *

☒ OK ☐ Problem *

L - 7 ☒ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

Brian R. Lee

8/14/20



APPROXIMATE PROPERTY LINE (TM)

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A

FIELD INSPECTION SITE MAP

SCALE: 1" = 600'

DATE: 03/96

JOB No.: 2535

APPENDIX E

ORANGE COUNTY LEACHATE VOLUME COLLECTED FROM LEACHATE COLLECTION SYSTEM

Material Usage ALL SITES

From Date: 8/1/2019 to 12/31/2019
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/11/2020

Print Time: 10:48AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
Outgoing								
Material: 048	David Zuidema, Inc.							
Customer: 750	LEACH-MANHOLES/TANKS # 1-5							
OC2025	10/17/19	8091164	1021.583 Gal	4.260 tn			\$0.00	\$0.00
David Zuidema, Inc. Totals			1021.583 Gal	4.260 tn			\$0.00	\$0.00
Tickets: 1								
Customer: 772	LEACH-MANHOLES/TANKS # 1-5							
22	8/23/19	2358190	1270.983 Gal	5.300 tn			\$0.00	\$0.00
83	8/26/19	2358538	4498.801 Gal	18.760 tn			\$0.00	\$0.00
88	8/26/19	2358603	4587.530 Gal	19.130 tn			\$0.00	\$0.00
83	8/26/19	2358686	3901.679 Gal	16.270 tn			\$0.00	\$0.00
51	8/27/19	2358835	6529.976 Gal	27.230 tn			\$0.00	\$0.00
51	8/27/19	2358908	6431.655 Gal	26.820 tn			\$0.00	\$0.00
59	9/3/19	2360060	5582.734 Gal	23.280 tn			\$0.00	\$0.00
22	9/3/19	2360075	4731.415 Gal	19.730 tn			\$0.00	\$0.00
79	9/5/19	2360399	5227.818 Gal	21.800 tn			\$0.00	\$0.00
79	9/5/19	2360472	5359.712 Gal	22.350 tn			\$0.00	\$0.00
79	9/5/19	2360543	5431.655 Gal	22.650 tn			\$0.00	\$0.00
71	9/6/19	2360723	6453.237 Gal	26.910 tn			\$0.00	\$0.00
71	9/9/19	2361014	6386.091 Gal	26.630 tn			\$0.00	\$0.00
56	9/9/19	2361150	2510.791 Gal	10.470 tn			\$0.00	\$0.00
71	9/9/19	2361160	5738.609 Gal	23.930 tn			\$0.00	\$0.00
56	9/9/19	2361177	5115.108 Gal	21.330 tn			\$0.00	\$0.00
22	9/9/19	2361191	4352.518 Gal	18.150 tn			\$0.00	\$0.00
56	10/21/19	2368229	6968.825 Gal	29.060 tn			\$0.00	\$0.00
56	10/21/19	2368328	4187.050 Gal	17.460 tn			\$0.00	\$0.00
56	10/22/19	2368458	2712.230 Gal	11.310 tn			\$0.00	\$0.00
71	10/22/19	2368459	6268.585 Gal	26.140 tn			\$0.00	\$0.00
56	10/22/19	2368463	3201.439 Gal	13.350 tn			\$0.00	\$0.00
56	10/22/19	2368486	1086.331 Gal	4.530 tn			\$0.00	\$0.00
71	10/22/19	2368519	6450.839 Gal	26.900 tn			\$0.00	\$0.00
56	10/22/19	2368547	4318.945 Gal	18.010 tn			\$0.00	\$0.00
56	10/22/19	2368594	2601.918 Gal	10.850 tn			\$0.00	\$0.00
25	10/31/19	2370020	2254.197 Gal	9.400 tn			\$0.00	\$0.00
56	11/8/19	2371484	6990.408 Gal	29.150 tn			\$0.00	\$0.00
56	11/12/19	2371868	4199.041 Gal	17.510 tn			\$0.00	\$0.00
56	11/12/19	2371969	3623.501 Gal	15.110 tn			\$0.00	\$0.00
56	11/12/19	2372000	3364.508 Gal	14.030 tn			\$0.00	\$0.00
11111	11/27/19	2375043	2477.218 Gal	10.330 tn			\$0.00	\$0.00
11111	11/27/19	2375081	1717.026 Gal	7.160 tn			\$0.00	\$0.00
56	12/16/19	2377863	4170.264 Gal	17.390 tn			\$0.00	\$0.00
56	12/16/19	2377958	6968.825 Gal	29.060 tn			\$0.00	\$0.00
60102	12/17/19	2378119	6978.417 Gal	29.100 tn			\$0.00	\$0.00

Material Usage ALL SITES

From Date: 8/1/2019 to 12/31/2019
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/11/2020

Print Time: 10:49AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
56	12/18/19	2378202	6992.806 Gal	29.160 tn			\$0.00	\$0.00
56	12/19/19	2378327	6786.571 Gal	28.300 tn			\$0.00	\$0.00
56	12/31/19	2380063	6920.863 Gal	28.860 tn			\$0.00	\$0.00
TAM Enterprises, Inc. Totals			185350.119 Gal	772.910 tn			\$0.00	\$0.00
Tickets: 39								
LEACH-MANHOLES/TANKS # 1-5 Totals			186371.702 Gal	777.170 tn			\$0.00	\$0.00
Tickets: 40								
Material:	049	TAM Enterprises, Inc.						
Customer:	772	LEACH-MANHOLE/TANK #7						
11111	8/23/19	2358170	2880.096 Gal	12.010 tn			\$0.00	\$0.00
56	10/21/19	2368313	2808.153 Gal	11.710 tn			\$0.00	\$0.00
56	11/12/19	2371861	2781.775 Gal	11.600 tn			\$0.00	\$0.00
11111	11/27/19	2375040	2798.561 Gal	11.670 tn			\$0.00	\$0.00
56	12/16/19	2377849	2817.746 Gal	11.750 tn			\$0.00	\$0.00
TAM Enterprises, Inc. Totals			14086.331 Gal	58.740 tn			\$0.00	\$0.00
Tickets: 5								
LEACH-MANHOLE/TANK #7 Totals			14086.331 Gal	58.740 tn			\$0.00	\$0.00
Tickets: 5								
Outgoing Totals				835.910 tn			\$0.00	\$0.00
Tickets: 45								
In and Outbound Combined Totals				835.91		\$0.00	\$0.00	\$0.00
				0.00				

Total Leachate Removed per this generated report= 200,458.033 Gallons (Ticket #: 8091164 from OCTS#3)	<u>-1,021.583 Gallons</u>
	=199,436.450 Gallons

Note: Code 048 Refers to the OCLF leachate collection tanks
Code 049 Refers to the OCTS#1 leachate collection tank

Resulting in the following leachate totals from this generated report:

Code 048 =	185,350.119 Gallons
Code 049 =	<u>14,086.331</u> Gallons
Check:	199,436.45 Gallons

Material Usage ALL SITES

From Date: 1/1/2020 to 8/31/2020
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/11/2020

Print Time: 10:50AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
Outgoing								
Material:	048	OC New Hampton Trans Station						
Customer:	601	LEACH-MANHOLES/TANKS # 1-5						
60101	1/31/20	2385441	2390.887 Gal	9.970	tn		\$0.00	\$0.00
OC New Hampton Trans Station Totals			2390.887 Gal	9.970	tn		\$0.00	\$0.00
Tickets: 1								
Customer:	772	LEACH-MANHOLES/TANKS # 1-5						
60101	1/2/20	2380236	4187.050 Gal	17.460	tn		\$0.00	\$0.00
60101	1/2/20	2380326	6985.612 Gal	29.130	tn		\$0.00	\$0.00
60100	1/3/20	2380688	4119.904 Gal	17.180	tn		\$0.00	\$0.00
56	1/29/20	2384902	5860.911 Gal	24.440	tn		\$0.00	\$0.00
56	1/30/20	2385076	6947.242 Gal	28.970	tn		\$0.00	\$0.00
87	1/30/20	2385079	5983.213 Gal	24.950	tn		\$0.00	\$0.00
11117	2/3/20	2385619	6218.225 Gal	25.930	tn		\$0.00	\$0.00
11104	2/3/20	2385620	6971.223 Gal	29.070	tn		\$0.00	\$0.00
60100	2/11/20	2386919	6352.518 Gal	26.490	tn		\$0.00	\$0.00
56	2/12/20	2387095	7016.787 Gal	29.260	tn		\$0.00	\$0.00
59	2/12/20	2387096	6194.245 Gal	25.830	tn		\$0.00	\$0.00
11111	2/12/20	2387160	6985.612 Gal	29.130	tn		\$0.00	\$0.00
56	2/13/20	2387292	6966.427 Gal	29.050	tn		\$0.00	\$0.00
56	2/13/20	2387348	6976.019 Gal	29.090	tn		\$0.00	\$0.00
56	2/18/20	2387754	6901.679 Gal	28.780	tn		\$0.00	\$0.00
22	2/21/20	2388421	1851.319 Gal	7.720	tn		\$0.00	\$0.00
56	2/24/20	2388956	6326.139 Gal	26.380	tn		\$0.00	\$0.00
22	3/2/20	2390081	2076.739 Gal	8.660	tn		\$0.00	\$0.00
56	3/2/20	2390084	6920.863 Gal	28.860	tn		\$0.00	\$0.00
56	3/9/20	2391371	4297.362 Gal	17.920	tn		\$0.00	\$0.00
60101	3/17/20	2392887	6446.043 Gal	26.880	tn		\$0.00	\$0.00
56	3/23/20	2393807	6601.918 Gal	27.530	tn		\$0.00	\$0.00
56	3/31/20	2395130	6906.475 Gal	28.800	tn		\$0.00	\$0.00
56	4/2/20	2395499	7016.787 Gal	29.260	tn		\$0.00	\$0.00
83	4/2/20	2395526	1333.333 Gal	5.560	tn		\$0.00	\$0.00
59	4/6/20	2396289	6043.165 Gal	25.200	tn		\$0.00	\$0.00
22	4/10/20	2397127	1952.038 Gal	8.140	tn		\$0.00	\$0.00
3615	4/15/20	2398095	6949.640 Gal	28.980	tn		\$0.00	\$0.00
22	4/20/20	2398788	4719.424 Gal	19.680	tn		\$0.00	\$0.00
22	4/20/20	2398841	4865.707 Gal	20.290	tn		\$0.00	\$0.00
22	4/27/20	2400221	4309.353 Gal	17.970	tn		\$0.00	\$0.00
59	5/6/20	2402406	6731.415 Gal	28.070	tn		\$0.00	\$0.00
22	5/8/20	2402775	4187.050 Gal	17.460	tn		\$0.00	\$0.00
22	5/8/20	2402873	2071.942 Gal	8.640	tn		\$0.00	\$0.00
75	5/11/20	2403252	7019.185 Gal	29.270	tn		\$0.00	\$0.00
56	5/11/20	2403369	7047.962 Gal	29.390	tn		\$0.00	\$0.00

Material Usage ALL SITES

From Date: 1/1/2020 to 8/31/2020
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/11/2020

Print Time: 10:51AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
56	5/18/20	2404879	6505.995 Gal	27.130 tn			\$0.00	\$0.00
87	5/18/20	2405023	6505.995 Gal	27.130 tn			\$0.00	\$0.00
59	5/18/20	2405083	6465.228 Gal	26.960 tn			\$0.00	\$0.00
22	5/22/20	2406141	2143.885 Gal	8.940 tn			\$0.00	\$0.00
22	5/26/20	2406781	4364.508 Gal	18.200 tn			\$0.00	\$0.00
22	5/26/20	2406869	4669.065 Gal	19.470 tn			\$0.00	\$0.00
56	5/26/20	2406953	7023.981 Gal	29.290 tn			\$0.00	\$0.00
300	5/27/20	2407180					\$0.00	\$0.00
106	5/27/20	2407205	7417.266 Gal	30.930 tn			\$0.00	\$0.00
106	5/27/20	2407257	6525.180 Gal	27.210 tn			\$0.00	\$0.00
22	5/28/20	2407649	2139.089 Gal	8.920 tn			\$0.00	\$0.00
56	6/1/20	2408464	7014.388 Gal	29.250 tn			\$0.00	\$0.00
87	6/1/20	2408503	5911.271 Gal	24.650 tn			\$0.00	\$0.00
56	6/15/20	2411684	31.175 Gal	0.130 tn			\$0.00	\$0.00
56	6/15/20	2411702	6942.446 Gal	28.950 tn			\$0.00	\$0.00
56	6/22/20	2413507	6976.019 Gal	29.090 tn			\$0.00	\$0.00
107	6/29/20	2415285	6467.626 Gal	26.970 tn			\$0.00	\$0.00
56	7/6/20	2416862	6947.242 Gal	28.970 tn			\$0.00	\$0.00
56	7/13/20	2418373	6966.427 Gal	29.050 tn			\$0.00	\$0.00
78	7/21/20	2420397	4170.264 Gal	17.390 tn			\$0.00	\$0.00
11111	7/28/20	2422075	6868.106 Gal	28.640 tn			\$0.00	\$0.00
60101	8/4/20	2423646	6983.213 Gal	29.120 tn			\$0.00	\$0.00
78	8/10/20	2424790	6623.501 Gal	27.620 tn			\$0.00	\$0.00
22	8/17/20	2426516	4808.153 Gal	20.050 tn			\$0.00	\$0.00
56	8/17/20	2426635	6659.472 Gal	27.770 tn			\$0.00	\$0.00
22	8/24/20	2428154	4762.590 Gal	19.860 tn			\$0.00	\$0.00
56	8/25/20	2428450	6952.038 Gal	28.990 tn			\$0.00	\$0.00
56	8/31/20	2429745	7002.398 Gal	29.200 tn			\$0.00	\$0.00
107	8/31/20	2429766	6525.180 Gal	27.210 tn			\$0.00	\$0.00
TAM Enterprises, Inc. Totals			362712.227 Gal	1512.510 tn			\$0.00	\$0.00

Tickets: 65

LEACH-MANHOLES/TANKS # 1-5 Totals	365103.114 Gal	1,522.480 tn	\$0.00	\$0.00
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Tickets: 66

Material:	049	TAM Enterprises, Inc.						
Customer:	772	LEACH-MANHOLE/TANK #7						
60101	1/2/20	2380237	2788.969	Gal	11.630	tn	\$0.00	\$0.00
22	1/22/20	2383821	1491.607	Gal	6.220	tn	\$0.00	\$0.00
56	1/29/20	2384899	1136.691	Gal	4.740	tn	\$0.00	\$0.00
60100	2/11/20	2386913	647.482	Gal	2.700	tn	\$0.00	\$0.00
22	2/14/20	2387454	508.393	Gal	2.120	tn	\$0.00	\$0.00
56	2/24/20	2388943	604.317	Gal	2.520	tn	\$0.00	\$0.00
56	3/9/20	2391368	2724.221	Gal	11.360	tn	\$0.00	\$0.00
60101	3/17/20	2392888	517.986	Gal	2.160	tn	\$0.00	\$0.00

Material Usage ALL SITES

From Date: 1/1/2020 to 8/31/2020
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/11/2020

Print Time: 10:51AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
56	3/23/20	2393804	350.120 Gal	1.460 tn			\$0.00	\$0.00
59	4/6/20	2396286	441.247 Gal	1.840 tn			\$0.00	\$0.00
22	5/6/20	2402269	4645.084 Gal	19.370 tn			\$0.00	\$0.00
56	5/6/20	2402407	258.993 Gal	1.080 tn			\$0.00	\$0.00
56	5/18/20	2404849	482.014 Gal	2.010 tn			\$0.00	\$0.00
56	7/6/20	2416852	21.583 Gal	0.090 tn			\$0.00	\$0.00
56	8/17/20	2426578	9.592 Gal	0.040 tn			\$0.00	\$0.00
22	8/31/20	2429722	1266.187 Gal	5.280 tn			\$0.00	\$0.00
TAM Enterprises, Inc. Totals			17894.486 Gal	74.620 tn			\$0.00	\$0.00
Tickets: 16								
LEACH-MANHOLE/TANK #7 Totals			17894.486 Gal	74.620 tn			\$0.00	\$0.00
Tickets: 16								
Outgoing Totals				1597.100 tn			\$0.00	\$0.00
Tickets: 82								
In and Outbound Combined Totals				1,597.100	\$0.00	\$0.00	\$0.00	\$0.00
0.00								

Total Leachate Removed per this generated report= 382,997.600 Gallons

Note: Code 048 Refers to the OCLF leachate collection tanks

Code 049 Refers to the OCTS#1 leachate collection tank

Ticket #: 2385441 Should be under code 049, not 048. Resulting in the following Leachate totals from this generate report:

Code 048 = 362,712.227

Code 049 = 20,285.373

Check: $382,997.600$

APPENDIX F

**NYSDEC INSTITUTIONAL AND ENGINEERING
CONTROLS CERTIFICATION FORM**



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1	
Site No.	336007		
Site Name Orange County Landfill			
Site Address: Route 17M		Zip Code: 10924	
City/Town: Goshen			
County: Orange			
Site Acreage: 75.000			
Reporting Period: January 01, 1995 to September 30, 2020			
		YES	NO
1. Is the information above correct?		☒	☐
If NO, include handwritten above or on a separate sheet.			
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		☐	☒
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?		☐	☒

		Box 2	
		YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill		☒	☐
7. Are all ICs in place and functioning as designed?		☒	☐

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
---	------

Description of Institutional ControlsParcelOwnerInstitutional Control

16-1-1.1

O. C. Dept. Envirion. Facilities Services

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

This is a municipal landfill that has been capped under Title 3, with leachate collection. Landfill gas collection and control is no longer required per Division of Air Resources. Periodic groundwater monitoring and inspections and reporting in accordance with June 6, 2014 SMP are required.

The Department concluded seeps along the Cheechunk Canal are leachate and Orange County was notified in a letter dated 11/25/13. Orangs County and their consultant, Sterling Envionmental, have been investigating this matter. Also, the Department has drafted an Order on Consent that will require the following items to be submitted between the beginning of Decemeber 2014 and the end of January 2015: Long Term Seep Evaluation Report, Expedited IRM Work Plan, Long Term Seep Elimination Feasibility Study, and Supplemental Sediment Investigation Work Plan.

Box 4**Description of Engineering Controls**ParcelEngineering Control

16-1-1.1

Cover System
Leachate Collection

Landfill Cap
Leachate collection
Gas collection - no longer active
Monitoring wells

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

X ☐

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

X ☐

**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. 336007

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Robert J. Gray, P.E. at 2455-2459 Route 17M, PO Box 637, Goshen, NY 10924
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

10/27/20
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 Andrew M. Millspaugh, P.E. at 24 Wade Road, Latham, NY 12110,
print name print business address

am certifying as a Professional Engineer for the Orange County Department of Public Works (Owner)
(Owner or Remedial Party)



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



10/28/2020
Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

- I. Executive Summary: (1/2-page or less)
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
 1. progress made during the reporting period toward meeting the remedial objectives for the site
 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
 - C. Compliance
 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. Recommendations
 1. recommend whether any changes to the SMP are needed
 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
 3. recommend whether the requirements for discontinuing site management have been met.
- II. Site Overview (one page or less)
 - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
 - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
- IV. IC/EC Plan Compliance Report (if applicable)
 - A. IC/EC Requirements and Compliance
 1. Describe each control, its objective, and how performance of the control is evaluated.
 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
 4. Conclusions and recommendations for changes.
 - B. IC/EC Certification
 1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
- V. Monitoring Plan Compliance Report (if applicable)
 - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
 - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
 - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
 - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
 - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
 - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
 - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
 - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
 - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
 - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.