Sterling Environmental Engineering, P.C.

PERIODIC REVIEW REPORT
(June 1, 2018 - August 8, 2019)

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

Prepared for:

Orange County Department of Public Works
Division of Environmental Facilities and Services
P.O. Box 637
2455 - 2459 Route 17M
Goshen, New York 10924

Prepared by:

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

November 14, 2019

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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.

11/14/2019

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 June 1, 2018 to August 8, 2019.

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) to address the observed seeps on March 20, 2017. Subsequently on May 31, 2017 the County requested that the NYSDEC issue the required Water Quality (WQ) 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 WQ 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. The County completed and submitted the Groundwater Recovery Well Pilot Study Summary Report on September 14, 2017. Over the course of 2018 and 2019, the County has also conducted regular inspections of the seep locations to document water levels in the Canal.

Based on the results of activities performed in 2018 through August 8, 2019, no 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 June 1, 2018 to August 8, 2019.

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 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) to address the observed seeps on March 20, 2017. Subsequently on May 31, 2017 the County requested that the NYSDEC issue the required WQ 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 WQ 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. The County completed and submitted the Groundwater Recovery Well Pilot Study Summary Report on September 14, 2017. Over the course of 2018 and 2019, the County has also conducted regular inspections of the seep locations to document water levels in the Canal.

1.3 Recommendations

Based on the results of activities performed in 2018 through August 8, 2019, no 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 June 1, 2018 to August 8, 2019.

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.

Groundwater quality results in 2019 indicate no exceedances for alkalinity, biological oxygen demand (BOD), COD, chloride, hardness, hexavalent chromium, sulfate, TKN, TOC, volatile organic compounds (VOC), aluminum, antimony, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, lead, mercury, nickel, potassium, selenium, silver, thallium, vanadium, and zinc. A slight exceedance for nitrogen (as nitrate) was observed at the upgradient overburden monitoring well (MW-233S), and a slight bromide exceedance was reported at the upgradient bedrock monitoring well (MW-233D). These results are considered anomalous following review of historical groundwater analytical data. Ammonia in groundwater exceedances were reported for downgradient overburden well MW-3B and downgradient bedrock well MW-245D. Phenol in groundwater exceedances were reported as estimated concentrations for the upgradient overburden monitoring well MW-233S and downgradient overburden monitoring well MW-220. TDS in groundwater exceedances were reported for both upgradient monitoring wells 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 chart below shows the highest concentration areas for parameter exceedances:

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

As described in Section 4.2.3, in 2019 the upgradient well pair MW-233S / MW-233D was sampled in replacement of upgradient well pair MW-230S / MW-230D. No VOCs were detected at any of the

overburden or bedrock monitoring wells sampled in 2019 except for very low and insignificant concentrations of chloromethane at all monitoring wells sampled excluding the duplicate from MW-3B and MW-245S. These analytical results are consistent with past monitoring results.

The 2019 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. Analytical results for monitoring well samples are summarized in Table 3 and are compared to the NYSDEC TOGS 1.1.1, June 1998.

A detailed summary of reported parameter exceedances for the 2019 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 (55.14 NTU), MW-245S (23.36 NTU), and PZ-4 (102.54 NTU), Downgradient Bedrock MW-245D (76.86 NTU), and Upgradient Overburden MW-233S (33.42 NTU)
Ammonia (2.0 mg/L)	Downgradient Overburden MW-3B (5.48 mg/L) and Downgradient Bedrock MW-245D (6.86 mg/L)
Nitrate as N (10 mg/L)	Upgradient Overburden MW-233S (15 mg/L)
Phenolics (0.001 mg/L)	Downgradient Overburden MW-220 (0.007 mg/L*) and Upgradient Overburden MW-233S (0.015 mg/L*)
TDS (500 mg/L)	Downgradient Overburden MW-3B (630 mg/L), MW-220 (620 mg/L), MW-245S (650 mg/L), and PZ-4 (690 mg/L), Upgradient Overburden MW-233S (550 mg/L), and Upgradient Bedrock MW-233D (550 mg/L)
Arsenic (0.025 mg/L)	Downgradient Overburden **MW-3B (0.0461 mg/L)**, MW-220 (0.05061 mg/L), and PZ-4 (0.09126 mg/L)
Iron (0.3 mg/L**)	Downgradient Overburden **MW-3B (1.46 mg/L**)**, MW-220 (4.21 mg/L**), MW-245S (1.57 mg/L**), **PZ-4 (8.44 mg/L**), a**nd Downgradient Bedrock MW-245D (1.45 mg/L**)
Magnesium (35 mg/L)	Downgradient Overburden **MW-220 (39 mg/L)** and **PZ-4 (42.0 mg/L)**
Manganese (0.3 mg/L**)	Upgradient Overburden MW-233S (1.405 mg/L**), Downgradient Overburden **MW-3B (0.868 mg/L**)**, **MW-220 (0.8478 mg/L**)**, **MW-245S (1.462 mg/L**)**, and PZ-4 (0.5882 mg/L**)
Sodium (20 mg/L)	Upgradient Bedrock **MW-233D (119 mg/L)**, Downgradient Overburden **MW-3B (49.3 mg/L)**, **MW-245S (41.2 mg/L),** and **PZ-4 (23.3 mg/L)** and Downgradient Bedrock **MW-245D (52.1 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 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 ammonia, 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. Past parameter exceedances for turbidity and phenolics were not observed in 2019. Ammonia, phenolics, 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, and 2018 results at lower end of the published historical range for each analyte. Both the total arsenic in groundwater concentration (0.0461 mg/L) and dissolved arsenic in groundwater concentration (0.03731 mg/L) exceeded NYS TOGS 1.1.1. Both the total iron in groundwater concentration at (1.46 mg/L) and dissolved iron in groundwater concentration (0.54 mg/L) exceeded NYS TOGS 1.1.1. Both the total manganese in groundwater concentration (0.868 mg/L) and dissolved manganese in groundwater concentration (0.9032 mg/L) exceeded NYS TOGS 1.1.1. Both the total sodium in groundwater concentration (49.3 mg/L) and the dissolved sodium in groundwater concentration (52.5 mg/L) exceeded NYS TOGS 1.1.1.

- MW-220 (Downgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, phenolics (estimated), TDS, arsenic, iron, magnesium, and manganese were reported during this sampling event. Turbidity, phenolics, 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, and 2018 results. The arsenic detection in groundwater (0.05061 mg/L) was the highest result over the last five (5) monitoring events although well below the historical maximum (0.213 mg/L on February 1989) and near the historical average of 0.04 mg/L.. The reported result for phenolics is associated with a "J" qualifier that indicates the result is above the laboratory method detection limit, but below the laboratory reporting limit and is an approximate concentration. Both the total magnesium in groundwater concentration (39 mg/L) and dissolved magnesium in groundwater concentration (39.7 mg/L) exceeded NYS TOGS 1.1.1. Both the total manganese in groundwater concentration (0.8478 mg/L) and dissolved manganese in groundwater concentration (0.6907 mg/L) exceeded NYS TOGS 1.1.1.

- MW-233S (Upgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, nitrate, phenolics (estimated), TDS, and manganese were reported during this sampling event.

- MW-233D (Upgradient Bedrock Hydrogeologic Unit) - TOGS 1.1.1 exceedances for bromide, 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, and 2018. The 2019 bromide result is considered anomalous and the 2019 TDS result is consistent with historical results. Both the total sodium in groundwater concentration (119 mg/L) and dissolved sodium in groundwater concentration (125 mg/L) 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, and 2018 results. Sodium concentrations have steadily increased since 2012, and the 2019 sodium results were similar to the 2017 and 2018 results. Both the total

manganese in groundwater concentration (1.462 mg/L) and dissolved manganese in groundwater concentration (1.402 mg/L) exceeded NYS TOGS 1.1.1. Both the total sodium in groundwater concentration (41.2 mg/L) and dissolved sodium in groundwater concentration (41.9 mg/L) exceeded NYS TOGS 1.1.1.

- MW-245D (Downgradient Bedrock Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, ammonia, iron, and sodium were reported. Turbidity, ammonia, iron, and sodium consistently exceed their applicable standard. Ammonia levels have slightly increased compared to 2018 results. Iron concentrations were similar to 2017 and 2018 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 (52.1 mg/L) and the dissolved sodium in groundwater concentration (51.7 mg/L) exceeded NYS TOGS 1.1.1.

- PZ-4 (Downgradient Overburden Hydrogeologic Unit) - TOGS 1.1.1 exceedances for turbidity, TDS, arsenic, iron, 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. Iron concentrations increased as compared to 2014, 2015, 2017, and 2018 results. The reported concentration for sodium has steadily increased compared to 2014, 2015, 2017, and 2018 results. Both the total iron in groundwater concentration (8.44 mg/L) and dissolved iron in groundwater concentration (0.317 mg/L) exceeded NYS TOGS 1.1.1. Both the total magnesium in groundwater concentration (42 mg/L) and dissolved magnesium in groundwater concentration (40.8 mg/L) exceeded NYS TOGS 1.1.1. Both the total sodium in groundwater concentration (23.3 mg/L) and dissolved sodium in groundwater concentration (23.0 mg/L) exceeded NYS TOGS 1.1.1.

3.2 Surface Water Quality

The 2019 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 (1.07 mg/L), SW-5 (0.778 mg/L), and SW-8 (1.01 mg/L). Review of historical concentrations (1999 - 2018) indicate that 2019 iron results for SW-5 was lower than 2018 and near the middle limits of the historical range. The 2019 iron concentrations at SW-13 (upstream location) and SW-8 (downstream) were similar to 2018 results and near the middle end of past reported concentrations at this location.

There were no VOCs detected above method detection limits in any of the surface water samples collected. No water quality parameters or other total recoverable metals, besides iron, exceeded standards or guidance values.

3.3 Leachate Quality

The 2019 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 alkalinity, ammonia, bromide, COD, chloride, hardness, nitrate, sulfate, TDS, TKN, and TOC and inorganic parameters, including antimony, arsenic, barium, boron, cadmium, calcium, chromium (total), cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, thallium, and zinc. Inorganic parameters that were not detected include: beryllium, hexavalent chromium, selenium, and silver.

The VOCs benzene (estimated as 0.18 µg/L), chloroethane (estimated as 0.87 µg/L), and chloromethane (estimated as 2.4 µg/L) were detected at manhole MH-15 while benzene (9.9 µg/L), chloroethane (estimated as 17 µg/L), and chloromethane (estimated as 8 µg/L) 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, in 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, seep, and leachate samples.

Explosive gas was detected at monitoring wells MW-207SA and MW-303S with readings of 38% LEL and >100% LEL, respectively. Explosive gas was detected at manhole MH-7 with a reading of 28% LEL. No VOCs were detected at monitoring wells MW-207SA and MW-303S or at manhole MH-7. All other air monitoring locations measured no VOCs and 0% LEL.

A perimeter explosive gas survey was performed on August 7, 2019. 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. This indicates that explosive gas is not migrating off the Landfill property and remains localized. The August 2019 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. Further, inspection in the historical leachate seep area includes photo-documentation and collection of hydrogeologic data. Based on this information, the surface water level in the historic leachate seep area was lower than the seep elevation of 357.25 feet amsl during the following periods: July 1, 2018 through July 20, 2018, August 2, 2018, August 31, 2018 through September 21, 2018, October 26, 2018 through November 2, 2018, December 14, 2018, January 18, 2019, March 1, 2019 through March 8, 2019, April 5, 2019 through April 18, 2019, May 24, 2019, June 7, 2019 through August 30, 2019.

A seep sample was collected on August 8, 2019 when the seep area was exposed. The 2019 analytical results for a seep sample collected from the historical seep area are summarized in Table 5 and are generally consistent with historical results. TOGS 1.1.1 Class C surface water quality standard exceedances for ammonia, aluminum, arsenic, cobalt, copper, iron, lead, selenium (estimated), and vanadium were reported during this sampling event. There were no VOCs detected above method detection limits in the seep sample collected during this event. In comparison, iron was the only analyte reported to exceed TOGS 1.1.1 Class C surface water quality standards at downstream surface water sample location SW-8.

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 A. 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 throughout 2018 and through August 2019, the Landfill cover system was observed to be well maintained and remains in good condition. Completed inspection reports are included in Appendix A. 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 B. The total leachate removed from the Landfill for treatment at an offsite permitted facility from June 1, 2018 through August 27, 2019 was 677,508.43 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.

Monitoring wells MW-230S, MW-230D and the well pair MW-235S/MW-235D were previously damaged by mowing activities. Accordingly, MW-233S (Overburden) and MW-233D (Bedrock) were sampled as substitutes for the upgradient well pair location for the 2019 sampling event. The County has updated the SMP groundwater monitoring program to memorialize the change in upgradient monitoring location from MW-230S/MW-230D to MW-233S/MW-233D, as documented in the 2014 Periodic Review Report dated December 8, 2014. 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 A contains documentation of monthly inspections of the surface water runoff features in 2018 through August 8, 2019. 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 C. 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 2019 sampling event, groundwater samples were obtained from four (4) downgradient locations and one (1) upgradient location using low flow methodology and analyzed for 6 NYCRR Part 360 Baseline parameters. Since upgradient bedrock well MW-230D could not be sampled, 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 will implement the following remedial measures when conditions in the Canal are conducive to undertaking the work, 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 ±250-foot long horizontal directional drill (HDD) recovery well.
3. Collection of groundwater by the installed HDD well to eliminate the seeps; and,
4. Offsite transportation and disposal of collected groundwater.

A seep sample was collected on August 8, 2019 when the seeps were exposed. The water levels remained above the elevation of the seeps in late July 2018, early October 2018, late November 2018, early December 2018 to mid-January 2019, all of February 2019, late March 2019, and late April 2019 to mid-May 2019. The County continues to monitor the water levels in the Canal and will proceed with the sediment excavation and HDD well installation as soon as conditions in the Canal are favorable.

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.

Between June 1, 2018 and August 8, 2019, 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 A);
- Mowing of the Landfill cover system in August 2018, June 2019, July 2019, and August 2019;
- Regular leachate removal from aboveground storage tanks for treatment at permitted facilities (see Appendix B);
- Groundwater, surface water, leachate, and air quality monitoring performed on August 7, 2019 and August 8, 2019; and,
- Regular inspection of seeps.

Operational issues were addressed by Landfill staff, including:

- The Orange County inspector noted in the July 12, 2018, August 15, 2018, September 12, 2018, and October 15, 2018 Monthly Inspection Reports (Appendix A) that leachate collection tanks L-2 and L-3 were not functioning properly due to an electrical problem. Fred A. Cook, Jr., Inc.

(Cook), Orange County's contractor, was notified of the condition numerous times during this period. TAM Enterprises replaced a float in the L-3 pump and repaired electrical service at L-2 according to the November 14, 2018 Monthly Inspection Report (see Appendix A).

- Between September 2018 and May 16, 2019, Monthly Inspection Reports identified a minor leak in Tank L-5 near a rung on the ladder. On May 16, 2019, Cook repaired the subject tank with epoxy cement as numerous welding of the joint proved to be unsuccessful. The epoxy seal has been effective in repairing the subject leak.

- The Orange County inspector noted in the December 14, 2018 through July 17, 2019 Monthly Inspection Reports (Appendix A) that leachate collection tank L-1 was not functioning properly due to an electrical problem (bad transformer). Cook was notified of the condition numerous times during this period but claimed it was not their responsibility to repair the electrical problem. TAM Enterprises replaced the transformer at L-1 between July 17, 2019 and the August 15, 2019 Monthly Inspection Report, which notes the pump and tank is working properly.

- The Orange County inspector noted in the April 16, 2019 Monthly Inspection Report (Appendix A) that leachate collection tank L-3 was not pumping due to an electrical problem (loose wires). Cook, Orange County's contractor, was notified of the condition numerous times during this period but claimed it was not their responsibility to repair the electrical problem. TAM Enterprises assessed the condition of tank L-3 and repaired the loose wires on May 15, 2019. The May 15, 2019 Monthly Inspection Report notes tank L-3 is working properly.

- The Orange County inspector noted in the May 15, 2019 Monthly Inspection Report (Appendix A) that the pipe for leachate collection tank L-2 was separated at the collar and was in need of repair. Cook, Orange County's contractor, was notified of the condition but claimed it was not their responsibility to repair the electrical problem. TAM Enterprises assessed the condition of tank L-2 on May 15, 2019 and fixed the loose pipe with a fastening coupler. The May 15, 2019 Monthly Inspection Report concluded that tank L-2 was working properly following repair work completed by TAMS on May 15, 2019.

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 over the June 1, 2018 through August 8, 2019 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. Due to past damage at the MW-230 well pair (MW-230D), upgradient well pair MW-233S/MW-233D was used as a suitable replacement for the 2019 PCM sampling event and will be used for subsequent events. The SMP has been updated accordingly. 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. Orange County plans to implement the following approved remedial measures beginning in October 2019:

a) Excavate and remove impacted soil at the seep area;
b) Install, develop, and test HDD well to withdraw upgradient groundwater; and,
c) Collect and manage upgradient groundwater from the HDD well to mitigate the seeps to the Canal.

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 the reporting period (June 1, 2018 through August 8, 2019):

- 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, except for very low concentrations of chloromethane.

- Applicable TOGS 1.1.1 groundwater standards were exceeded for ammonia, bromide, nitrate, phenolics, TDS, arsenic, iron, 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 at all surface water sampling locations (SW-5, SW-8, and SW-13). A comparison of upstream (background conditions) to downstream surface water quality indicates that no downstream surface water results exceeded upstream conditions, including water quality parameters historically tracked such as alkalinity, ammonia, chloride, hardness, magnesium, and sodium.

- The 2019 analytical results for leachate collected from onsite manholes are consistent with previous results.

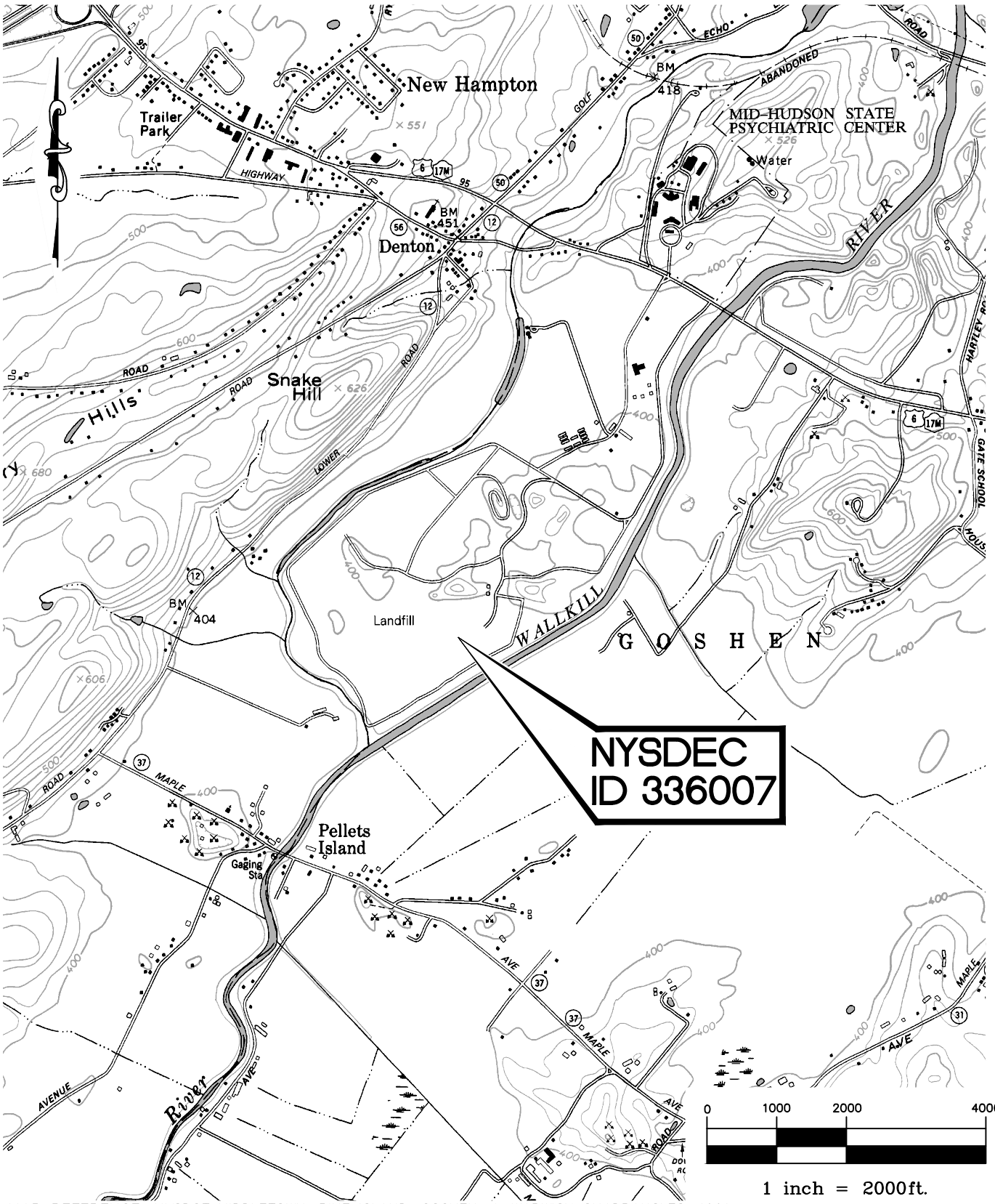
- The August 2019 air quality monitoring survey for explosive gas and VOCs indicated the Landfill is in full compliance with the requirements set forth in 6 NYCRR 360-2.15(k)(4) and 2.17(Effective prior to November 4, 2017).

- 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 conducted regular inspections of the seep locations and will continue to pursue implementation of the approved RAWP.

FIGURES



MAP REFERENCE: NYSDOT MIDDLETOWN, PINE ISLAND, GOSHEN, & WARWICK QUADRANGLES, 1991.

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

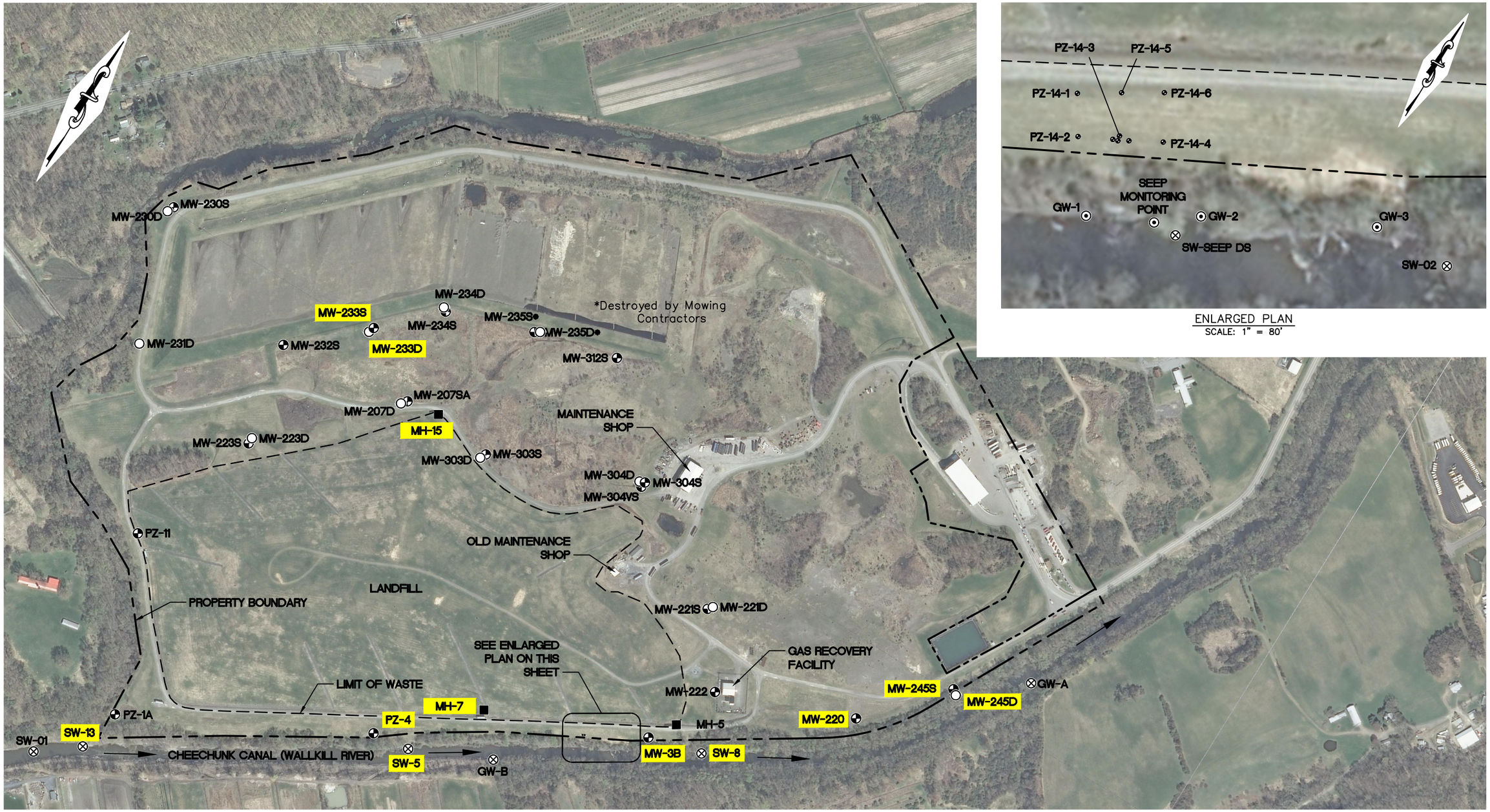
SITE LOCATION MAP

ORANGE CO. DEPT. OF PUBLIC WORKS

ORANGE COUNTY LANDFILL

TOWN OF GOSHEN ORANGE CO., N.Y.

PROJ. No.: 2013–29	DATE: 1/30/15	SCALE: 1" = 2000'	DWG. NO. 2010–15054	FIGURE 1



ENLARGED PLAN
SCALE: 1" = 80'

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

0 250 500 1000

(IN FEET)
1 inch = 500 ft.

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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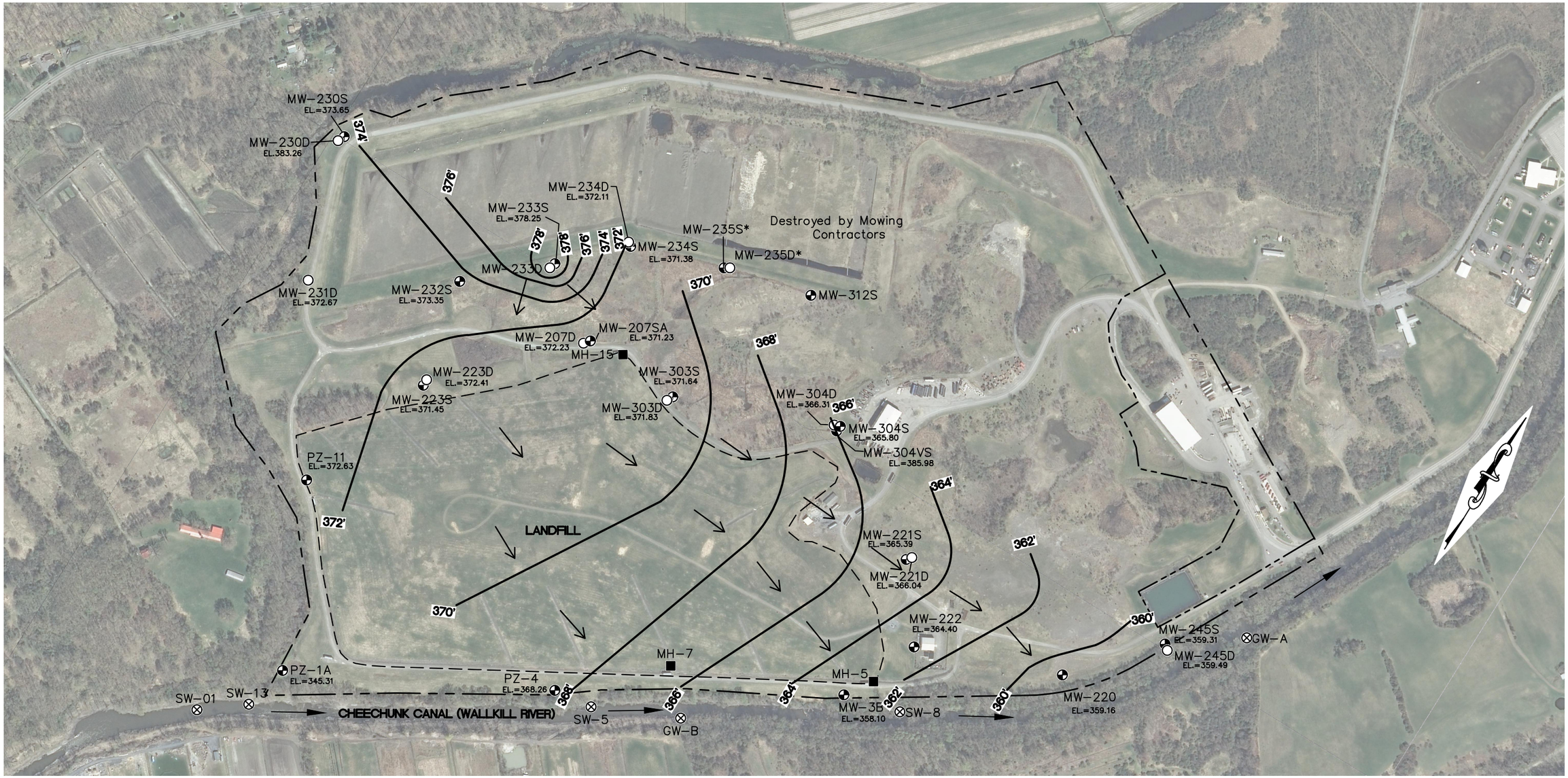
SAMPLE LOCATION MAP
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL
TOWN OF GOSHEN ORANGE CO., N.Y.

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

S:\Drawings\2010-15 - Orange County\2010-15039.SampleLocMap.dwg CAD 9/16/2019 5:16 PM



LEGEND:

- GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION
- MW-245S EL. = 359.31 — OVERBURDEN MONITORING WELL AND PIEZOMETER LOCATION WITH AUGUST 7, 2019 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL (AMSL))
- MW-245D EL. = 359.49 — BEDROCK MONITORING WELL LOCATION WITH AUGUST 7, 2019 GROUNDWATER ELEVATION (FEET AMSL)
- MH-7 — LEACHATE SAMPLING LOCATION
- SW-5 — SURFACE WATER SAMPLE LOCATION
- 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.

0 250 500 1000

(IN FEET)
1 inch = 500 ft.

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GROUNDWATER CONTOUR MAP – OVERBURDEN HYDROGEOLOGIC UNIT
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL
TOWN OF GOSHEN ORANGE CO., N.Y.

PROJ. No.: 2010–15	DATE: 09/16/2019	SCALE: 1"=500'	DWG. NO. 2010–15107	FIGURE 3

S:\Drawings\2010-15 - Orange County\2010-15107_F-3 - GW Elev Map 2019_Recovered.dwg CAD 9/19/2019 10:42 AM

TABLES

TABLE 1

Summary of Field Parameter Measurements
August 7 - 8, 2019
Orange County Landfill, Goshen, New York

Parameter	Title 6 Part 703.3 Standards	Units	Groundwater Sample Locations							Surface Water Locations			SEEP	Manhole Leachate	
			MW-3B	MW-220	MW-233S	MW-233D	MW-245S	MW-245D	PZ-4	SW-5	SW-8	SW-13	SEEP08082019	MH-7	MH-15
Static Water Level [1]	---	feet	28.33	19.78	11.04	17.53	31.82	31.59	14.08	---	---	---	---	---	---
Specific Conductivity	---	mS/cm	1.118	1.024	0.909	0.964	1.041	0.842	1.147	0.601	0.587	0.593	1.139	8.639	1.514
Temperature	---	degrees C	15.2	15.2	12.1	12.5	13.1	13.4	13.6	27.4	24.1	24.0	18.9	8.7	6.7
pH [2]	6.5<pH< 8.5	pH Units	6.87	6.88	7.14	7.89	6.95	7.40	7.19	7.82	7.83	7.81	6.96	6.20	6.90
ORP	--	mV	-35.2	15.8	157.8	170.5	-11.6	-147.3	105.8	112.7	93.4	64.6	-59.6	-2.5	-4.9
Dissolved Oxygen [3]	> 6.0	mg/L	0.43	0.66	0.88	6.36	0.55	0.67	4.39	7.37	7.16	6.95	2.24	2.58	1.88
Turbidity [4]	5.0	NTU	1.79	**55.14**	**33.42**	2.04	**23.36**	**76.86**	**102.54**	71.38	15.58	18.09	1394.23	35.8	6.11

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 fresh groundwater only.

--- No standard or not measured.

Table 2
Summary of Water Elevation Measurements
August 7-8, 2019
Orange County Landfill, Goshen NY

Well I.D.	Measuring Point Elevation (ft)	Static Water Level (ft)	Groundwater Elevation (ft)
MW-220	378.94	19.78	359.16
MW-230D	385.51	2.25	383.26
MW-231D	387.67*	15.00	372.67
MW-232S	388.64	15.29	373.35
MW-233S	389.29	11.04	378.25
MW-233D	---	17.53	---
MW-245S	391.13	31.82	359.31
MW-245D	391.08	31.59	359.49
MW-3B	386.43	28.33	358.10
PZ-14-1[I]	390.10	27.47	362.63
PZ-14-2[I]	381.84	20.14	361.70
PZ-14-3[I]	381.71	21.29	360.42
PZ-14-4[I]	381.70	19.66	362.04
PZ-14-5[I]	392.08	29.23	362.85
PZ-14-6[I]	390.95	28.00	362.95
PZ-4	382.34	14.08	368.26

Notes:
--- = Not measured or no available data
[I] = Measuring point elevation surveyed by Sterling Environmental Engineering, P.C. on September 6, 2014.
* = 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 7 - 8, 2019
Orange County Landfill, Goshen, New York

ANALYTE	SAMPLE ID: / COLLECTION DATE: / SAMPLE MATRIX:	MW-3B 8/7/2019 WATER	DUP-080719 8/7/2019 WATER	MW-220 8/7/2019 WATER	MW-233S 8/7/2019 WATER	MW-233D 8/7/2019 WATER	MW-245S 8/8/2019 WATER	MW-245D 8/8/2019 WATER	PZ-4 8/7/2019 WATER
	NY-AWQS								
LEACHATE INDICATOR PARAMETERS, mg/L									
Alkalinity, Total	---	505	516	433	309	181	355	280	476
BOD, 5 day	---	ND	ND	ND	ND	ND	ND	ND	ND
Bromide	2	0.737	0.692	0.013 U	0.013 U	**3.91**	0.013 U	0.013 U	0.757
Chemical Oxygen Demand	---	2.7 U	2.7 U	2.7 U	6 J	2.7 U	2.7 U	2.7 U	84
Chloride	250	49.8	50.5	17	1.15	109	52.9	30.1	43.4
Chromium, Hexavalent	0.05	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
Color (Color Units)	---	47	28	170	7	5 U	17	23	30
Cyanide, Total	0.2	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hardness, Total	---	428	450	504	455	200	456	298	593
Nitrogen, Ammonia	2	**5.48**	**5.79**	0.106	0.104	0.046 J	0.166	**6.86**	0.113
Nitrogen, Nitrate	10	0.033 U	0.033 U	0.033 U	**15**	0.048 J	0.033 U	0.31	0.74
Nitrogen, Total Kjeldahl	---	6.26	6.44	0.275 J	0.119 J	0.153 J	0.244 J	6.88	0.616
Phenolics, Total	0.001	0.006 U	0.006 U	**0.007** J	**0.015** J	0.006 U	0.006 U	0.006 U	0.006 U
Sulfate	250	33.9	33.2	123	135	128	128	105	105
Total Dissolved Solids	500	**630**	**630**	**620**	**550**	**550**	**650**	500	**690**
Total Organic Carbon	---	3.3	3.33	2.2	3.76	0.617	2.35	1.33	1.74
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	---	2.1 J	0.7 U	1.2 J	7.1	3.4	0.7 U	0.98 J	2 J
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

Notes:
Values in **BOLD** indicate an exceedance of applicable water quality standard.
U = Sample concentration was not detected at or above the indicated 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 1998
(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

Summary of Groundwater Analytical Results
August 7 - 8, 2019
Orange County Landfill, Goshen, New York

ANALYTE	SAMPLE ID: / COLLECTION DATE: / SAMPLE MATRIX:	MW-3B 8/7/2019 WATER	DUP-080719 8/7/2019 WATER	MW-220 8/7/2019 WATER	MW-233S 8/7/2019 WATER	MW-233D 8/7/2019 WATER	MW-245S 8/8/2019 WATER	MW-245D 8/8/2019 WATER	PZ-4 8/7/2019 WATER
	NY-AWQS								
DISSOLVED HARDNESS BY SM 2340B, mg/L									
Hardness	---	448	484	498	453	201	450	292	549
DISSOLVED METALS, mg/L									
Aluminum, Dissolved	---	0.00661 J	0.00347 J	0.00348 J	0.00372 J	0.00327 U	0.00327 U	0.00412 J	0.113
Antimony, Dissolved	0.003	0.00093 J	0.00042 U	0.00057 J	0.001 J	0.00252 J	0.00042 U	0.00071 J	0.00276 J
Arsenic, Dissolved	0.025	**0.03731**	**0.03944**	0.0033	0.00049	0.00075	0.0112	0.00317	0.00463
Barium, Dissolved	1	0.3864	0.4154	0.0566	0.05265	0.0362	0.06605	0.08438	0.04888
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	0.186	0.191	0.029 J	0.016 J	0.091	0.026 J	0.048	0.108
Cadmium, Dissolved	0.005	0.00005 U	0.00005 U	0.00005 U	0.00006 J	0.00005 U	0.00005 U	0.00005 U	0.00005 U
Calcium, Dissolved	---	126	138	134	125	48.3	128	73.9	153
Chromium, Dissolved	0.05	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00031 J
Cobalt, Dissolved	---	0.00028 J	0.00029 J	0.00043 J	0.00016 U	0.00016 U	0.00029 J	0.00016 U	0.00021 J
Copper, Dissolved	0.2	0.00038 U	0.00038 U	0.00038 U	0.00104	0.00043 J	0.00038 U	0.00107	0.00363
Iron, Dissolved	0.3	**0.54**	**0.437**	0.122	0.0309 J	0.0202 J	0.0536	0.201	**0.317**
Lead, Dissolved	0.025	0.0004 J	0.00034 U	0.00034 U	0.00034 U	0.00034 U	0.00034 U	0.00034 U	0.00049 J
Magnesium, Dissolved	35	32.3	33.9	**39.7**	34.2	19.5	31.7	26.1	**40.8**
Manganese, Dissolved	0.3	**0.9032**	**0.9416**	**0.6907**	0.09386	0.00167	**1.402**	0.1388	0.1185
Mercury, Dissolved	0.0007	0.0001 J	0.00009 J	0.0001 J	0.0001 J	0.0001 J	0.00009 U	0.00009 U	0.00011 J
Nickel, Dissolved	0.1	0.00551	0.00525	0.00115 J	0.00087 J	0.00055 U	0.00066 J	0.00071 J	0.00378
Potassium, Dissolved	---	5.79	6.09	2.38	2.14	1.85	2.1	3.82	3.85
Selenium, Dissolved	0.01	0.00173 U	0.00173 U	0.00173 U	0.00358 J	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	**52.5**	**54.1**	11.5	1.57	**125**	**41.9**	**51.7**	**23**
Thallium, Dissolved	0.0005	0.00014 U	0.00014 U	0.00014 U	0.00014 U	0.00028 J	0.00014 U	0.00014 U	0.0002 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	0.00438 J	0.00341 U	0.00395 J	0.00341 U	0.00642 J	0.00341 U	0.00341 U	0.00924 J
TOTAL METALS, mg/L									
Aluminum, Total	---	0.0263	0.0167	0.05	0.0124	0.0126	0.375	0.0136	1.04
Antimony, Total	0.003	0.00042 U	0.00042 U	0.00042 U	0.00047 J	0.00057 J	0.00042 U	0.00044 J	0.00116 J
Arsenic, Total	0.025	**0.0461**	**0.04727**	**0.05061**	0.00089	0.00086	0.02071	0.00366	**0.09126**
Barium, Total	1	0.3793	0.4152	0.06625	0.07195	0.03874	0.07048	0.09246	0.06547
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	0.00022 J
Boron, Total	1	0.163	0.176	0.026 J	0.014 J	0.084	0.026 J	0.048	0.098
Cadmium, Total	0.005	0.00005 U	0.00005 U	0.00005 U	0.00024	0.00005 U	0.00005 U	0.00011 J	0.00009 J
Calcium, Total	---	121	126	137	127	0.035	129	75	168
Chromium, Total	0.05	0.00044 J	0.00025 J	0.00035 J	0.00035 J	0.00034 J	0.00136	0.00114	0.00245
Cobalt, Total	---	0.00029 J	0.00035 J	0.00065	0.00067	0.00016 U	0.00057	0.00016 U	0.00221
Copper, Total	0.2	0.00046 J	0.00038 U	0.00045 J	0.00374	0.00098 J	0.00126	0.00038 U	0.01016
Iron, Total	0.3 [1]	**1.46**	**1.46**	**4.21**	0.167	0.0972	**1.57**	**1.45**	**8.44**
Lead, Total	0.025	0.00066 J	0.00052 J	0.0034	0.00034 U	0.00198	0.00098 J	0.0011	0.01394
Magnesium, Total	35	30.7	32.5	**39**	33.3	19.5	32.8	26.9	**42**
Manganese, Total	0.3 [1]	**0.868**	**0.9184**	**0.8478**	**1.405**	0.02018	**1.462**	0.1435	**0.5882**
Mercury, Total	0.0007	0.0001 J	0.00012 J	0.00011 J	0.00012 J	0.0001 J	0.00009 U	0.00009 U	0.00011 J
Nickel, Total	0.1	0.00485	0.00583	0.00125 J	0.00605	0.0009 J	0.00163 J	0.001 J	0.00694
Potassium, Total	---	5.64	6.13	2.52	2.14	1.78	2.16	3.88	3.62
Selenium, Total	0.01	0.00173 U	0.00173 U	0.00173 U	0.00403 J	0.00173 U	0.00173 U	0.00173 U	0.00173 U
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	**49.3**	**53.9**	11.8	1.53	**119**	**41.2**	**52.1**	**23.3**
Thallium, Total	0.0005	0.00014 U	0.00014 U	0.00014 U	0.00014 U	0.00014 U	0.00014 U	0.00014 U	0.00014 U
Vanadium, Total	---	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00157 U	0.00182 J
Zinc, Total	2	0.00567 J	0.00472 J	0.00508 J	0.01039	0.0085 J	0.00447 J	0.01389	0.03925

Notes:
Values in **BOLD** indicate an exceedance of applicable water quality standard.
U = Sample concentration was not detected at or above the indicated 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 1998
[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 4
Summary of Surface Water Analytical Results (August 7-8, 2019)
Orange County Landfill, Goshen, New York

ANALYTE	Units	Surface Water Standard[A]	SW-5	SW-8	SW-13	SEEP080819
Water Quality Parameters						
Alkalinity, Total	mg/L	---	154	152	152	605
Ammonia	mg/L	[1]	0.12	0.135	0.145	**12.2**
Biochemical Oxygen Demand	mg/L	---	ND	ND	ND	ND
Bromide	mg/L	---	0.326	0.406	0.402	0.467
Chemical Oxygen Demand	mg/L	---	16	21	21	350
Chloride	mg/L	---	69.3	66.6	66.6	42.9
Chromium, Hexavalent	mg/L	0.011[4]	0.003 U	0.003 U	0.004 J	0.003 U
Color, Apparent	Color Units	---	80	85	55	130
Cyanide, Total	mg/L	0.0052[3]	0.001 U	0.001 U	0.001 J	0.001 U
Hardness	mg/L	---	178	187	188	571
Nitrate, as N	mg/L	---	1.1	1	1	0.17
Phenolics, Total	mg/L	---	0.007 J	0.006 U	0.006 U	0.014 J
Sulfate	mg/L	---	22.1	23.2	23.3	5.32
Total Dissolved Solids	mg/L	---	330	350	350	600
Total Kjeldahl Nitrogen	mg/L	---	0.842	0.743	0.908	14.6
Total Organic Carbon	mg/L	---	7.15	8.73	8.63	5.47
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
1,1,1-Trichloroethane	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
1,1,2-Trichloroethane	µg/L	---	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
1,1-Dichloroethene	µg/L	---	0.17 U	0.17 U	0.17 U	0.17 U
1,2-Dichlorobenzene	µg/L	5 [3]	0.7 U	0.7 U	0.7 U	0.7 U
1,2-Dichloroethane	µg/L	---	0.13 U	0.13 U	0.13 U	0.13 U
1,2-Dichloropropane	µg/L	---	0.14 U	0.14 U	0.14 U	0.14 U
1,3-Dichlorobenzene	µg/L	5 [3]	0.7 U	0.7 U	0.7 U	0.7 U
1,4-Dichlorobenzene	µg/L	5 [3]	0.7 U	0.7 U	0.7 U	0.7 U
2-Chloroethylvinyl ether	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	µg/L	10[H(FC)]	0.16 U	0.16 U	0.16 U	0.16 U
Bromodichloromethane	µg/L	---	0.19 U	0.19 U	0.19 U	0.19 U
Bromoform	µg/L	---	0.65 U	0.65 U	0.65 U	0.65 U
Bromomethane	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
Carbon tetrachloride	µg/L	---	0.13 U	0.13 U	0.13 U	0.13 U
Chlorobenzene	µg/L	5	0.7 U	0.7 U	0.7 U	0.7 U
Chloroethane	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
Chloroform	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
Chloromethane	µg/L	---	1.5 J	0.7 U	0.7 U	0.7 U
cis-1,3-Dichloropropene	µg/L	---	0.14 U	0.14 U	0.14 U	0.14 U
Dibromochloromethane	µg/L	---	0.15 U	0.15 U	0.15 U	0.15 U
Dichlorodifluoromethane	µg/L	---	1 U	1 U	1 U	1 U
Ethylbenzene	µg/L	*17*	0.7 U	0.7 U	0.7 U	0.7 U
Methylene chloride	µg/L	200[H(FC)]	0.7 U	0.7 U	0.7 U	0.7 U
o-Xylene	µg/L	*65* [3]	0.7 U	0.7 U	0.7 U	0.7 U
p/m-Xylene	µg/L	*65* [3]	0.7 U	0.7 U	0.7 U	0.7 U
Tetrachloroethene	µg/L	*1* [H(FC)]	0.18 U	0.18 U	0.18 U	0.18 U
Toluene	µg/L	6,000[H(FC)]	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,3-Dichloropropene	µg/L	---	0.16 U	0.16 U	0.16 U	0.16 U
Trichloroethene	µg/L	40[H(FC)]	0.18 U	0.18 U	0.18 U	0.18 U
Trichlorofluoromethane	µg/L	---	0.7 U	0.7 U	0.7 U	0.7 U
Vinyl chloride	µg/L	---	0.07 U	0.07 U	0.07 U	0.07 U
Metals, Total Recoverable						
Aluminum, Total	mg/L	0.1	0.263	0.369	0.417	**13.6**
Antimony, Total	mg/L	---	0.00042 U	0.00042 U	0.00042 U	0.00043 J
Arsenic, Total	mg/L	0.15[4]	0.00228	0.00228	0.00239	**0.2078**
Barium, Total	mg/L	---	0.02869	0.0297	0.02943	0.6886
Beryllium, Total	mg/L	[5]	0.0001 U	0.0001 U	0.0001 U	0.00105
Boron, Total	mg/L	10	0.023 J	0.026 J	0.025 J	0.165
Cadmium, Total	mg/L	[5]	0.00005 U	0.00005 U	0.00005 U	0.00054
Calcium, Total	mg/L	---	46.3	49	49.5	142
Chromium, Total	mg/L	[5]	0.00055 J	0.00072 J	0.00078 J	0.02076
Cobalt, Total	mg/L	.005	0.00049 J	0.00057	0.00055	**0.02115**
Copper, Total	mg/L	[5]	0.00275	0.00278	0.00296	**0.06615**
Iron, Total	mg/L	0.3	**0.778**	**1.01**	**1.07**	**43.9**
Lead, Total	mg/L	[5]	0.00085 J	0.00065 J	0.00072 J	**0.0321**
Magnesium, Total	mg/L	---	15.2	15.6	15.7	52.6
Manganese, Total	mg/L	---	0.1317	0.1347	0.1417	2.968
Mercury, Total	mg/L	0.00077[4]	0.00011 J	0.00009 U	0.00009 U	0.00009 U
Nickel, Total	mg/L	[5]	0.0016 J	0.00184 J	0.00177 J	0.04256
Potassium, Total	mg/L	---	2.48	2.59	2.59	14.1
Selenium, Total	mg/L	0.0046	0.00173 U	0.00173 U	0.00173 U	**0.00481** J
Silver, Total	mg/L	0.0001[6]	0.00016 U	0.00016 U	0.00016 U	0.00016 U
Sodium, Total	mg/L	---	49.2	44.7	45.3	42.9
Thallium, Total	mg/L	0.008	0.00014 U	0.00014 U	0.00014 U	0.00014 J
Vanadium, Total	mg/L	0.014	0.00157 U	0.00161 J	0.0016 J	**0.02255**
Zinc, Total	mg/L	[5]	0.00545 J	0.00612 J	0.00628 J	0.1692

Notes:

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

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

U = Compound is not detected at or above laboratory method detection 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)

[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 = 1.1, SW-8 = 1.33, SW-13 = 1.38, SEEP080819 = 2.12

[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 Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, and Zinc are based on the individual sample's hardness.

Beryllium (mg/L): SW-5 = 1.1; and SW-8 = 1.1; SW-13 = 1.1; and, SEEP080819 = 1.1

Cadmium (mg/L): SW-5 = 0.00329; SW-8 = 0.00342; SW-13 = 0.00344; and, SEEP080819 = 0.00822

Chromium: (mg/L): SW-5 =0.11885; and SW-8 = 0.12375; SW-13 = 0.12429; and, SEEP080819 = 0.30874

Copper (mg/L): SW-5 = 0.01466; SW-8 = 0.01529; SW-13 = 0.01536; and, SEEP080819 = 0.03969

Lead (mg/L): SW-5 = 0.00705; SW-8 = 0.00743; SW-13 = 0.00747: and, SEEP080819 = 0.02361

Nickel (mg/L): SW-5 = 0.08471; SW-8 = 0.08832; SW-13 = 0.08871; and, SEEP080819 = 0.22708

Zinc (mg/L): SW-5 = 0.13490; SW-8 = 0.14131; SW-13 = 0.14131, SEEP080819 = 0.36332

[6] = Standard applies to ionic silver.

Table 5

Summary of Leachate Analytical Results
August 7-8, 2019
Orange County Landfill, Goshen, New York

ANALYTE	SAMPLE ID: COLLECTION DATE: SAMPLE MATRIX:	MH-15 8/7/2019 WATER	MH-7 8/7/2019 WATER
	NY-AWQS [A]		
LEACHATE INDICATOR PARAMETERS, mg/L			
Alkalinity, Total	---	430	2310
BOD, 5 day	---	6.7	30
Bromide	2	0.839	**13.6**
Chemical Oxygen Demand	---	16	550
Chloride	250	58.8	**1,030**
Chromium, Hexavalent	0.05	0.003 U	0.003 U
Color (Color Units)	---	95	470
Cyanide, Total	0.2	0.001 U	0.002 J
Hardness, Total	---	327	690
Nitrogen, Ammonia	2	18.5	342
Nitrogen, Nitrate	10	7.2	0.1
Phenolics, Total	0.001	0.006 U	0.022 J
Sulfate	250	15.9	90.6
Total Dissolved Solids	500	**550**	**3,000**
Total Kjeldahl Nitrogen	---	22.2	356
Total Organic Carbon	---	13.6	144
VOLATILE ORGANIC COMPOUNDS, µg/L			
1,1,1,2-Tetrachloroethane	5 [B]	0.7 U	7 U
1,1,1-Trichloroethane	5 [B]	0.7 U	7 U
1,1,2-Trichloroethane	1 [B]	0.5 U	5 U
1,1-Dichloroethane	5 [B]	0.7 U	7 U
1,1-Dichloroethene	5	0.17 U	1.7 U
1,2-Dichlorobenzene	5 [B]	0.7 U	7 U
1,2-Dichloroethane	0.6	0.13 U	1.3 U
1,2-Dichloropropane	1 [B]	0.14 U	1.4 U
1,3-Dichlorobenzene	3 [B]	0.7 U	7 U
1,4-Dichlorobenzene	3 [B]	0.7 U	7 U
2-Chloroethylvinyl ether	---	0.7 U	7 U
Benzene	1	0.18 J	**9.9**
Bromodichloromethane	50	0.19 U	1.9 U
Bromoform	50	0.65 U	6.5 U
Bromomethane	5 [B]	0.7 U	7 U
Carbon tetrachloride	5	0.13 U	1.3 U
Chlorobenzene	5	0.7 U	**17** J
Chloroethane	5 [B]	0.87 J	7 U
Chloroform	7	0.7 U	7 U
Chloromethane	---	2.4 J	8 J
cis-1,3-Dichloropropene	0.4 [B]	0.14 U	1.4 U
Dibromochloromethane	50	0.15 U	1.5 U
Dichlorodifluoromethane	5 [B]	1 U	10 U
Ethylbenzene	5 [B]	0.7 U	7 U
Methylene chloride	5 [B]	0.7 U	7 U
o-Xylene	5 [B]	0.7 U	7 U
p/m-Xylene	5 [B]	0.7 U	7 U
Tetrachloroethene	5	0.18 U	1.8 U
Toluene	5 [B]	0.7 U	7 U
trans-1,2-Dichloroethene	5 [B]	0.7 U	7 U
trans-1,3-Dichloropropene	0.4 [B]	0.16 U	1.6 U
Trichloroethene	5	0.18 U	1.8 U
Trichlorofluoromethane	5 [B]	0.7 U	7 U
Vinyl chloride	2	0.07 U	0.71 U
Total VOCs	---	3.45 J	34.9
TOTAL METALS, mg/L			
Aluminum, Total		0.0255	0.673
Antimony, Total	0.003	0.00145 J	**0.00301** J
Arsenic, Total	0.025	0.00355	**0.02732**
Barium, Total	1	0.07328	0.1703
Beryllium, Total	0.003	0.0001 U	0.0001 U
Boron, Total	1	0.245	**2.35**
Cadmium, Total	0.005	0.00005 U	0.00009 J
Calcium, Total	---	101	166
Chromium, Total	0.05	0.00107	0.00986
Cobalt, Total	---	0.0013	0.01428
Copper, Total	0.2	0.00145	0.00611
Iron, Total	0.3 [1]	**2.14**	**21.2**
Lead, Total	0.025	0.00034 U	0.00443
Magnesium, Total	35	18.3	**66.8**
Manganese, Total	0.3 [1]	**0.343**	**0.7446**
Mercury, Total	0.0007	0.00011 J	0.0001 J
Nickel, Total	0.1	0.00542	0.0572
Potassium, Total	---	18.8	158
Selenium, Total	0.01	0.00173 U	0.00173 U
Silver, Total	0.05	0.00016 U	0.00016 U
Sodium, Total	20	**60.4**	**697**
Thallium, Total	0.0005	0.00014 U	0.00015 J
Vanadium, Total	---	0.00204 J	0.0116
Zinc, Total	2	0.00341 U	0.04145

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.
U = Sample concentration 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 1998

[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

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: 6/6/18 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: 5/9/18			
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 Backfilled:_____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present — [x] No — [ ] Yes *

30. Dead Animals present — [x] No — [ ] Yes *

31. Oil slick on adjacent waters — [x] No — [ ] Yes *

32. Damaged leachate manholes — [x] No — [ ] Yes *

33. Leachate seeps — [x] No — [ ] Yes — Stain Color: _____

Length: _____

34. Leachate fluid — [ ] Puddle * — [ ] Stream * — [x] None

35. Gulls/scavenger birds present — [x] No — [ ] Yes *

36. Other animal foraging evidence — [x] No — [ ] Yes *

37. No smoking warnings — [x] Present — [ ] Missing/Damaged

38. Survey Monuments — [x] Undisturbed — [ ] Disturbed

39. Leachate Collection tanks and piping

L - 1	[x] OK	[ ] Problem *
L - 2	[ ] OK	[x] Problem *
L - 3	[ ] OK	[x] Problem *
L - 4	[x] OK	[ ] Problem *
L - 5	[x] OK	[ ] Problem *
L - 7	[x] OK	[ ] Problem *

35. Condensate Tanks

C - 1	[x] OK	[ ] Problem *
C – 2	[x] OK	[ ] Problem *
C - 3	[x] OK	[ ] Problem *
C – 4	(Maintenance Shop)	
	[x] OK	[ ] Problem *

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

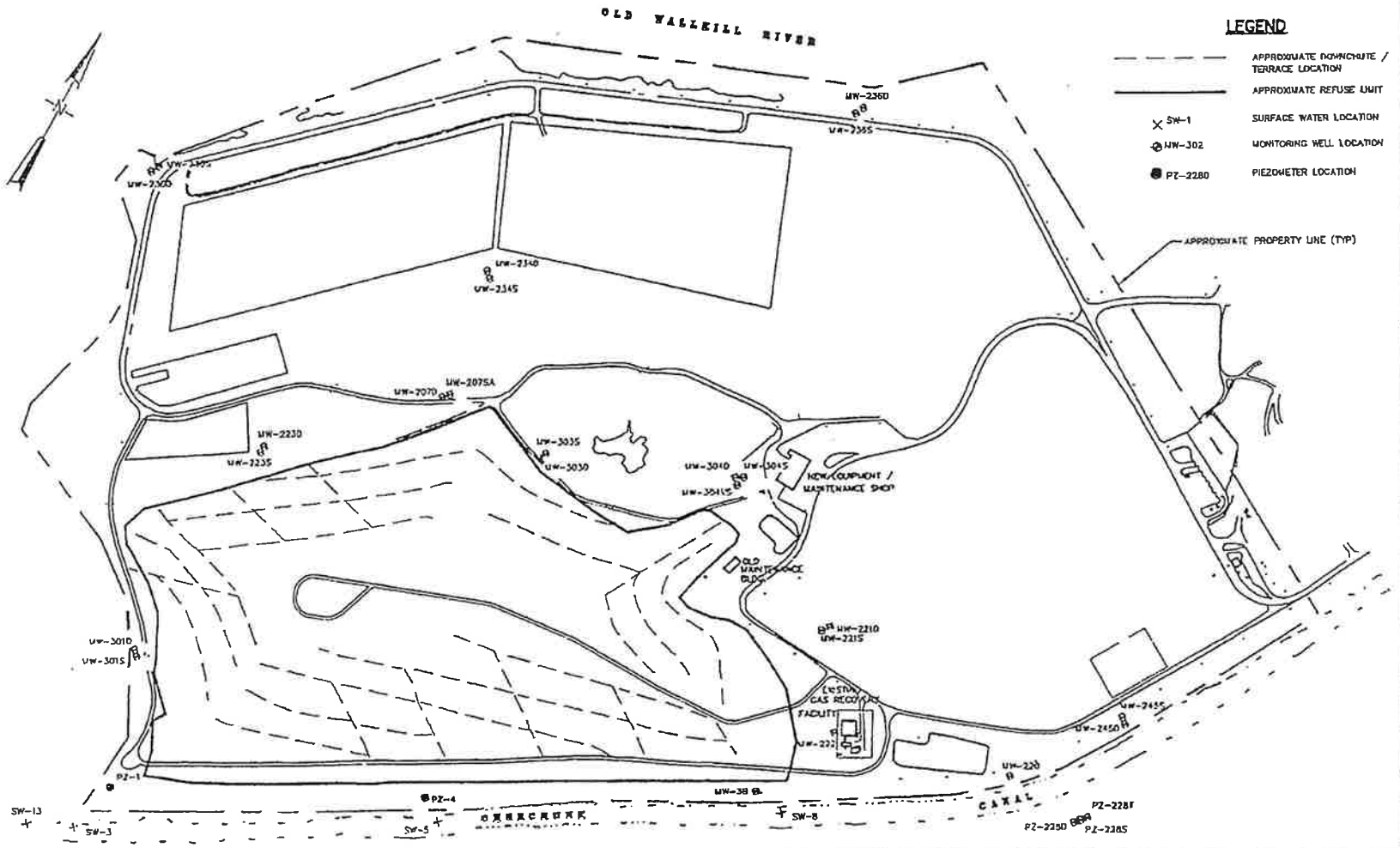
COMMENTS: L-2 and L-3 Still not working.

CORRECTIVE ACTION TAKEN: None.

BY:

DATE: 6/6/18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 7/12/18 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: 5/9/18			
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 Backfilled:_____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present — [x] No — [ ] Yes *

30. Dead Animals present — [x] No — [ ] Yes *

31. Oil slick on adjacent waters — [x] No — [ ] Yes *

32. Damaged leachate manholes — [x] No — [ ] Yes *

33. Leachate seeps — [x] No — [ ] Yes — Stain Color: _____

Length: _____

34. Leachate fluid — [ ] Puddle * — [ ] Stream * — [x] None

35. Gulls/scavenger birds present — [x] No — [ ] Yes *

36. Other animal foraging evidence — [x] No — [ ] Yes *

37. No smoking warnings — [x] Present — [ ] Missing/Damaged

38. Survey Monuments — [x] Undisturbed — [ ] Disturbed

39. Leachate Collection tanks and piping

L - 1	[x] OK	[ ] Problem *
L - 2	[ ] OK	[x] Problem *
L - 3	[ ] OK	[x] Problem *
L - 4	[x] OK	[ ] Problem *
L - 5	[x] OK	[ ] Problem *
L - 7	[x] OK	[ ] Problem *

35. Condensate Tanks

C - 1	[x] OK	[ ] Problem *
C – 2	[x] OK	[ ] Problem *
C - 3	[x] OK	[ ] Problem *
C – 4	(Maintenance Shop)	
	[x] OK	[ ] Problem *

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

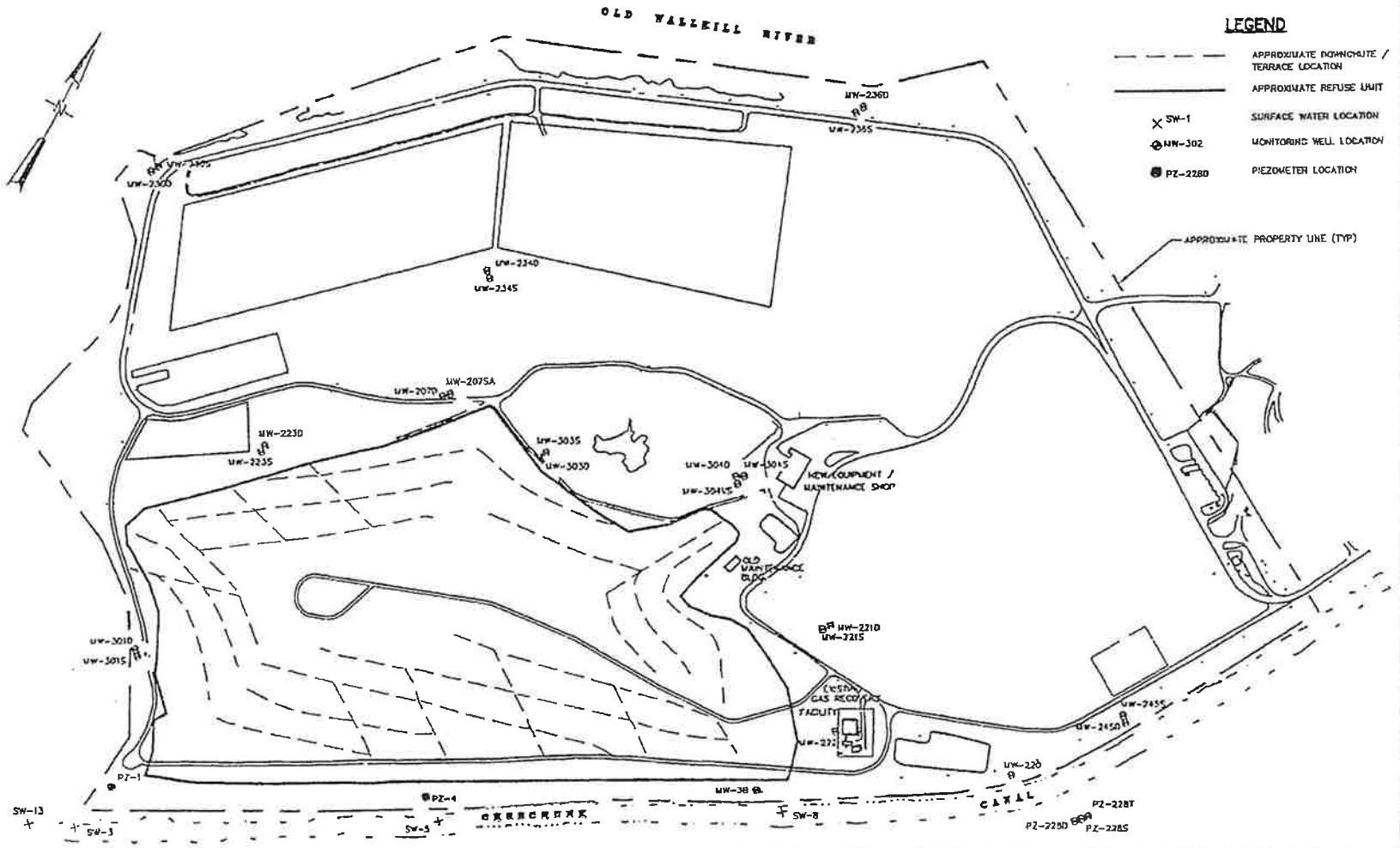
COMMENTS: L-2 and L-3 still down and not working.

CORRECTIVE ACTION TAKEN: None

BY: [signature]

DATE: 7/12/18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 8/15/18 Performed By: Ken Shemwell

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: 7/27/18			
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 Backfilled:_____
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

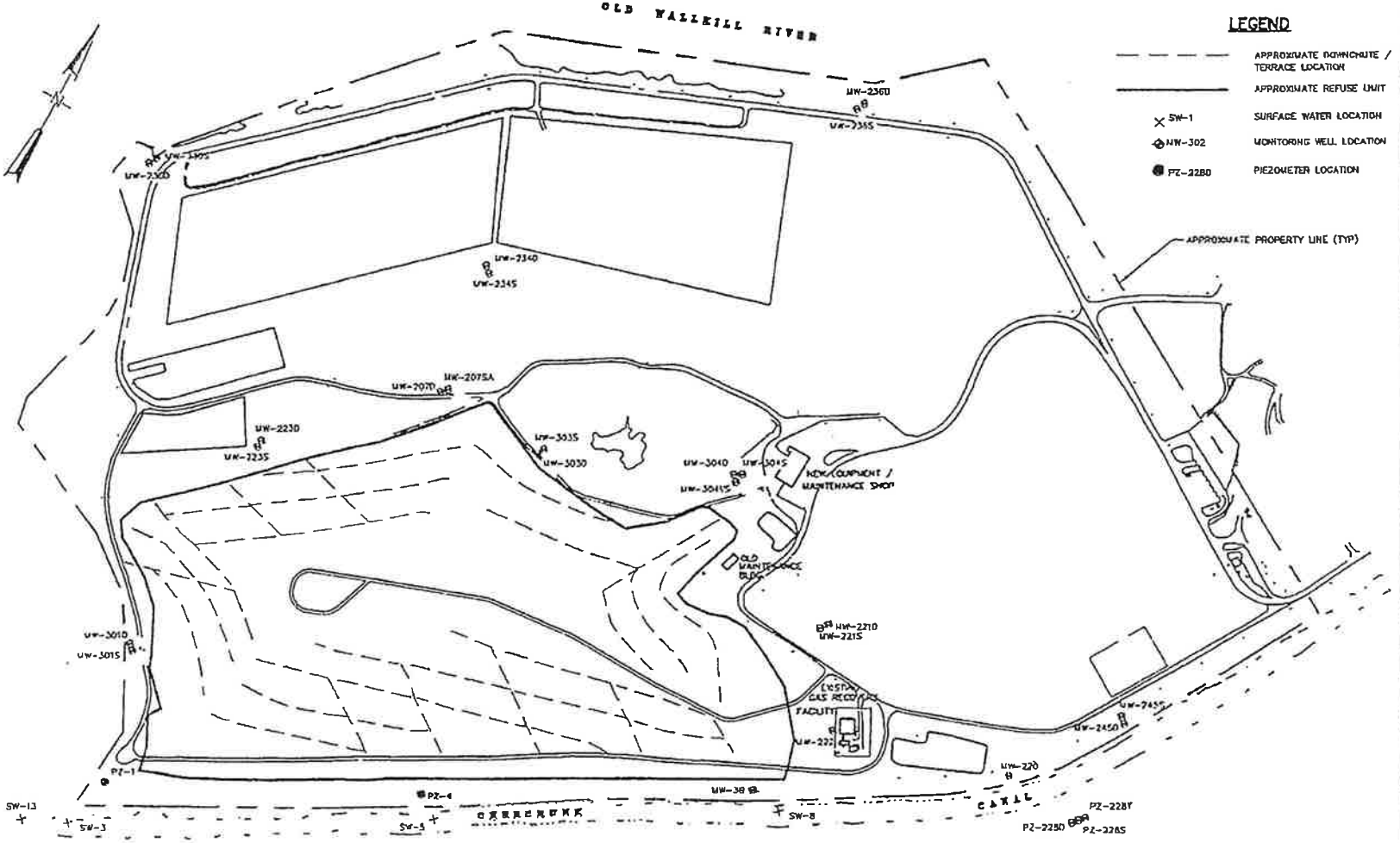
COMMENTS: L-2 and L-3 still not working. Cook has been e-mailed again.

CORRECTIVE ACTION TAKEN: None

BY: [signature]

DATE: 8/15/18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 9/12/18 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: 8/3/18			
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 Backfilled:_____
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

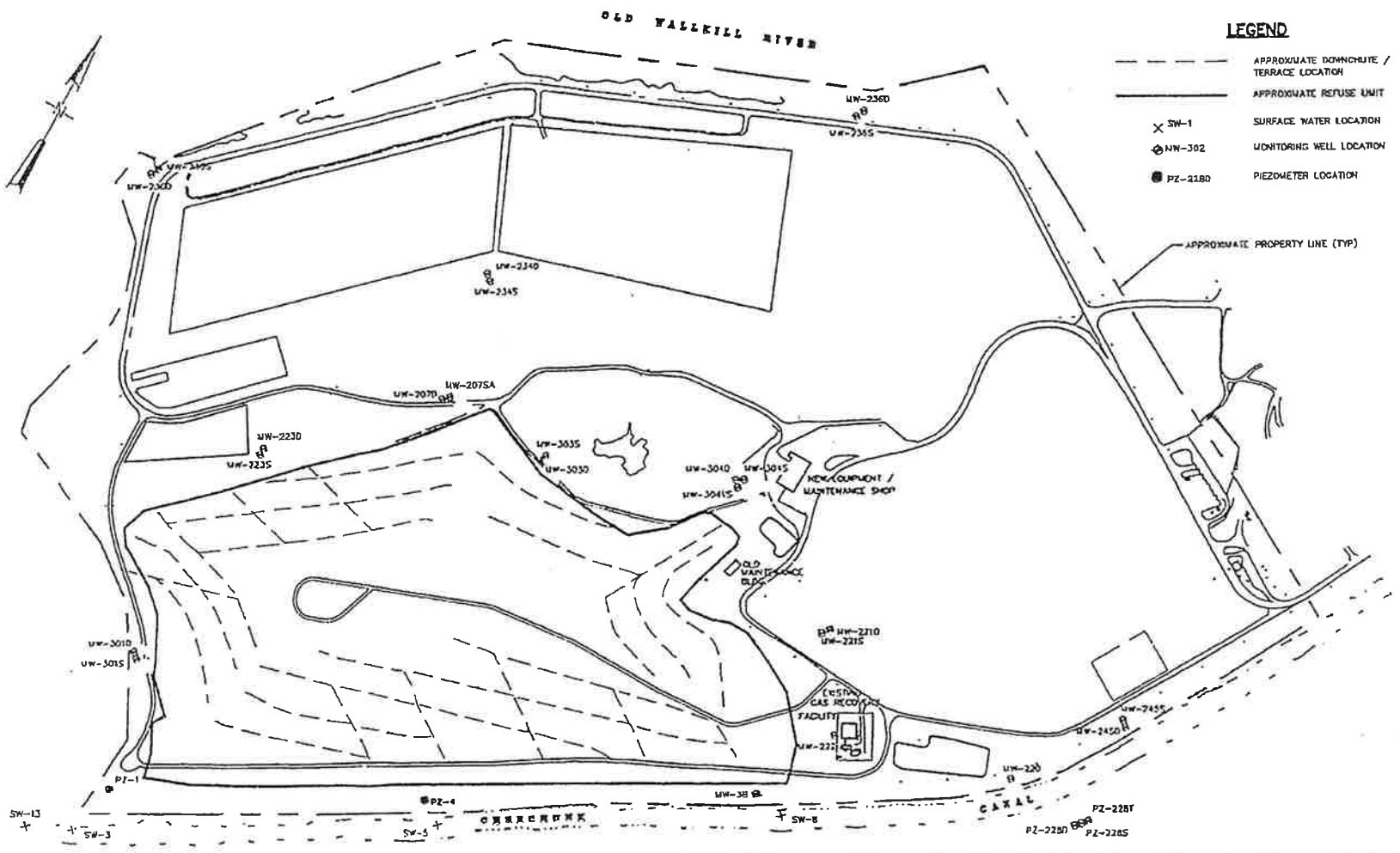
COMMENTS: L-2 and L-3 still don't work electric not working. Now L-5 has a leak in tank by latter rung.

CORRECTIVE ACTION TAKEN: None

BY: [signature]

DATE: 9/12/18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler ENVIRONMENTAL ENGINEERS & SCIENTISTS	ORANGE COUNTY LANDFILL TOWN OF GOSHEN, NEW YORK
SCALE: 1" = 600' DATE: 03/96 JOB No.: 2535	FIGURE 2A FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 10/15/18 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: 8/3/18			
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: L-2 and L-3 Still down and electric not working. Cook has been notified several times.

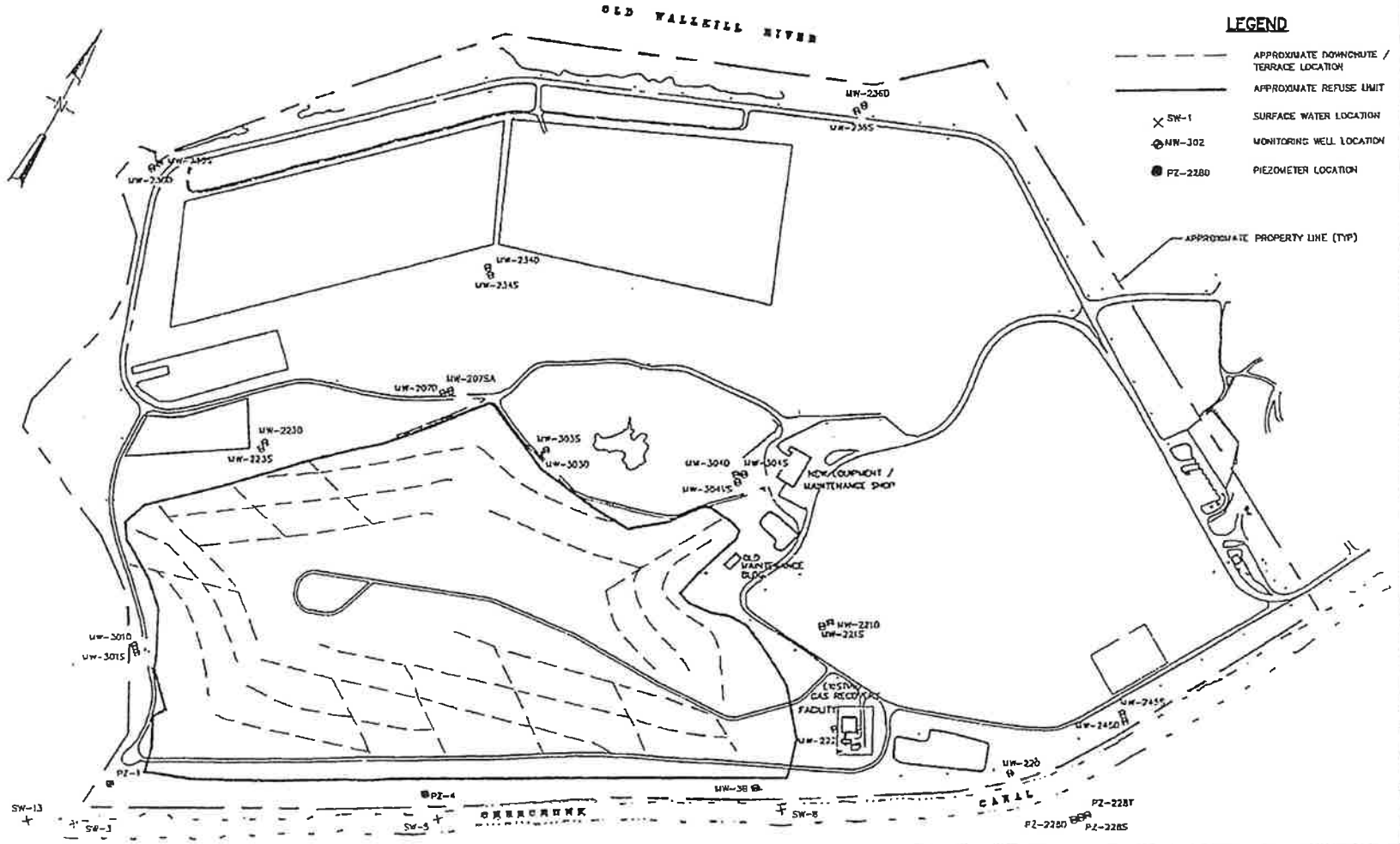
L-5 Still hasn't been fixed. Leachate is coming out of tank by hole in latter rung.

CORRECTIVE ACTION TAKEN: None -

BY: [signature]

DATE: 10/15/18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 11/14/18 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: 8/3/18			
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 Backfilled:_____
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

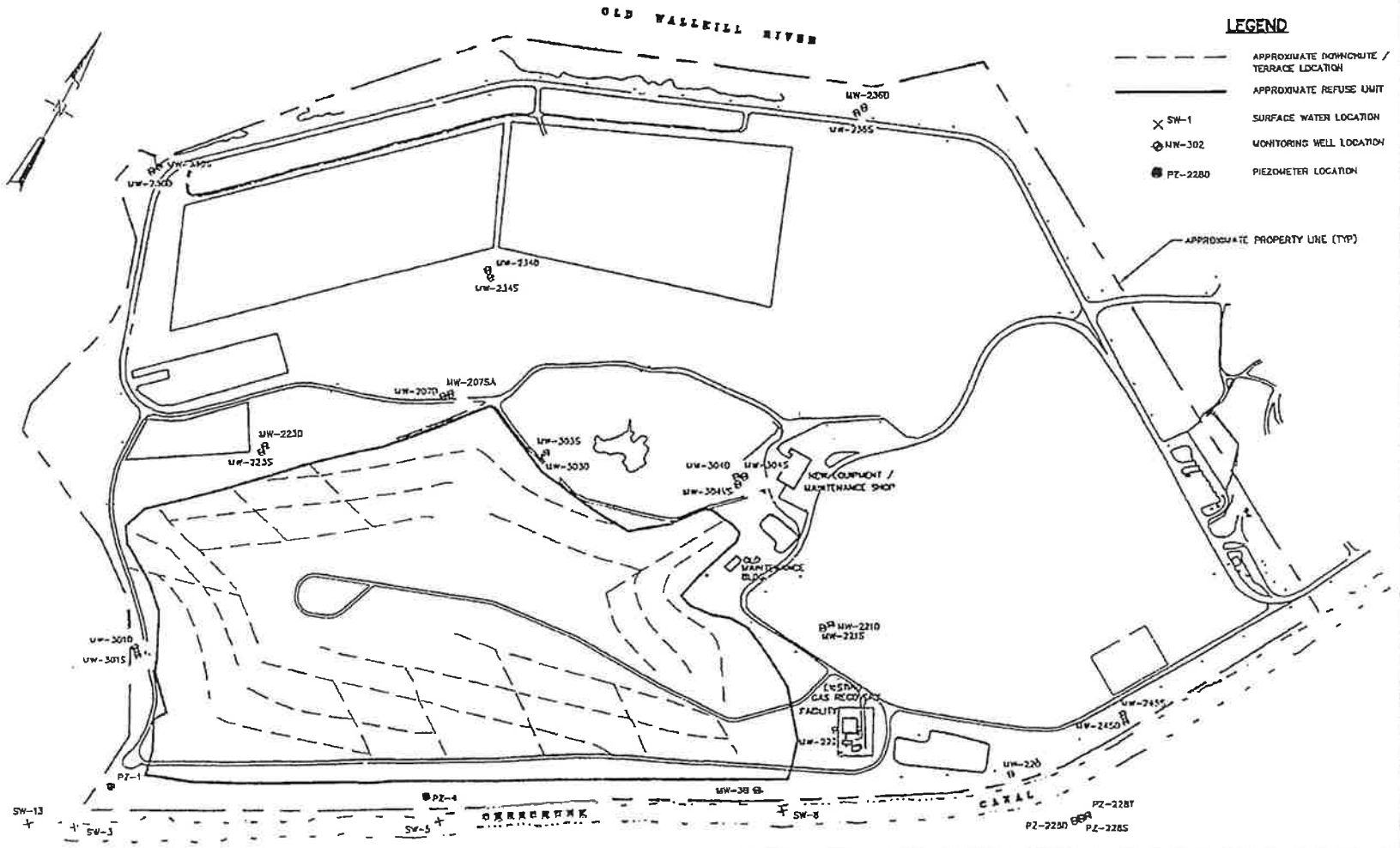
COMMENTS: T&M has fixed the problems with L-2 and L-3 and they are now operational.

CORRECTIVE ACTION TAKEN: Repaired float in L-3 pump and fixed electric with L-2.

BY: [signature]

DATE: 11-14-18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 12/14/18 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: 8/3/18			
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 Backfilled:_____
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

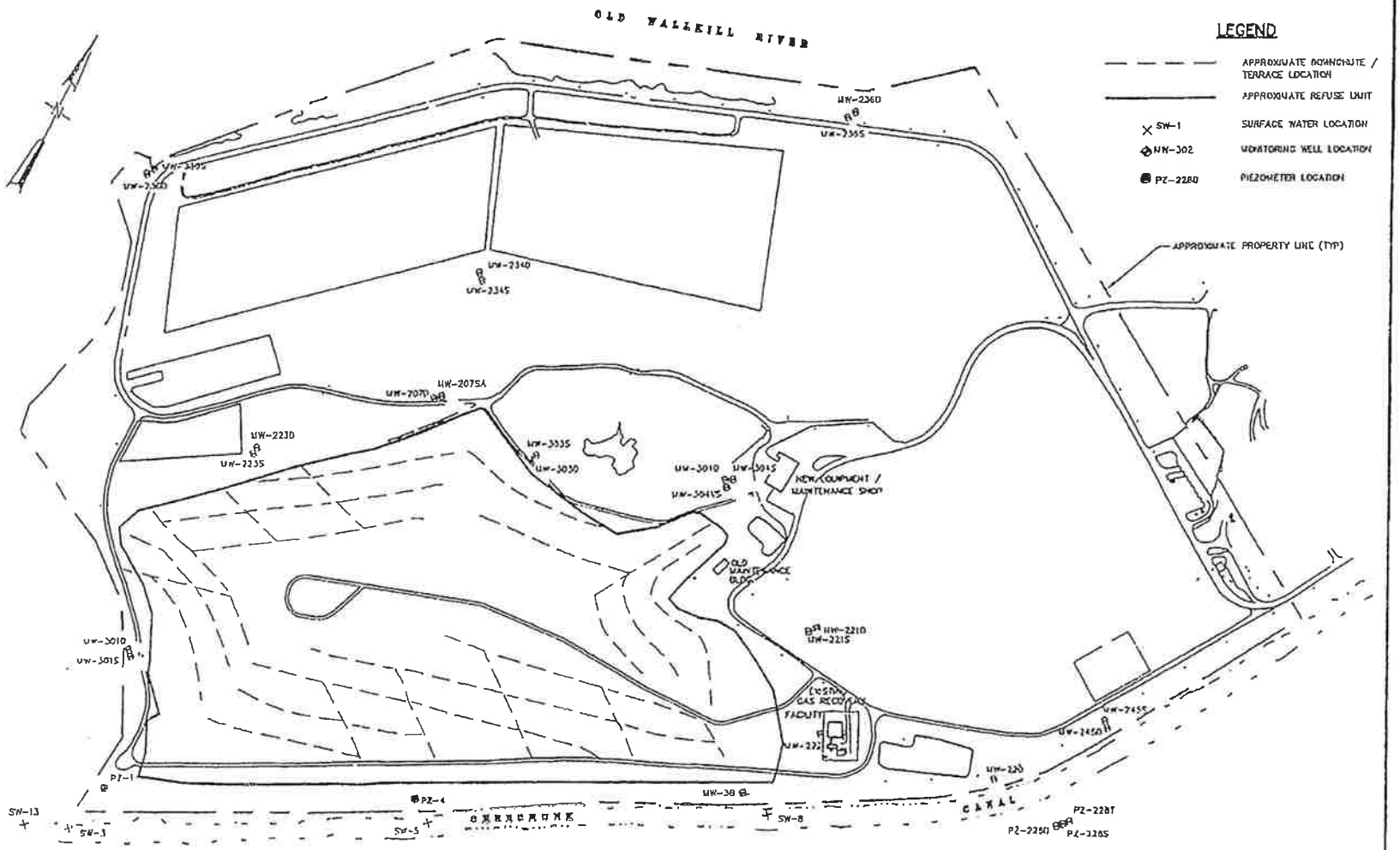
COMMENTS: L-1 panel electric box fell off plywood and electric not working for unit. L-5 was welded but is still leaking at the tank.

CORRECTIVE ACTION TAKEN: None by Vendor. I have contacted Vendor a number of times by e-mail but have not seen a repair done.

BY: [signature]

DATE: 12/14/18

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

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: 1/15/19 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: 8/3/18			
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 Backfilled:_____
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

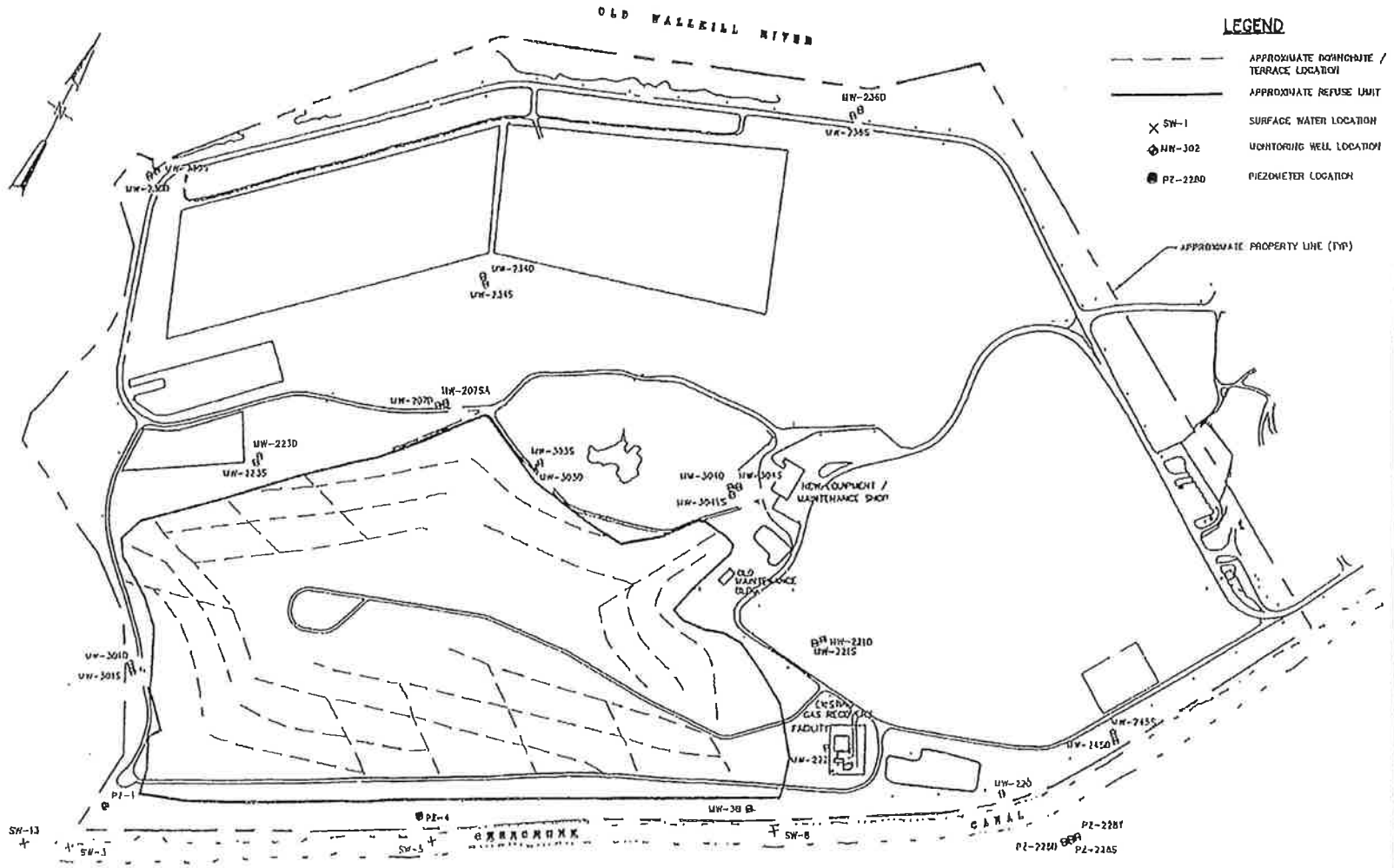
COMMENTS: Tank L-1 is not pumping due to electrical issue. Tank L-5 still needs to be repaired with a leak by ladder rung.

CORRECTIVE ACTION TAKEN: Vendor has been notified several times by myself through e-mail.

BY: [signature]

DATE: 1/15/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

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: 2/15/19 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: 8/3/18			
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 Backfilled:_____
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

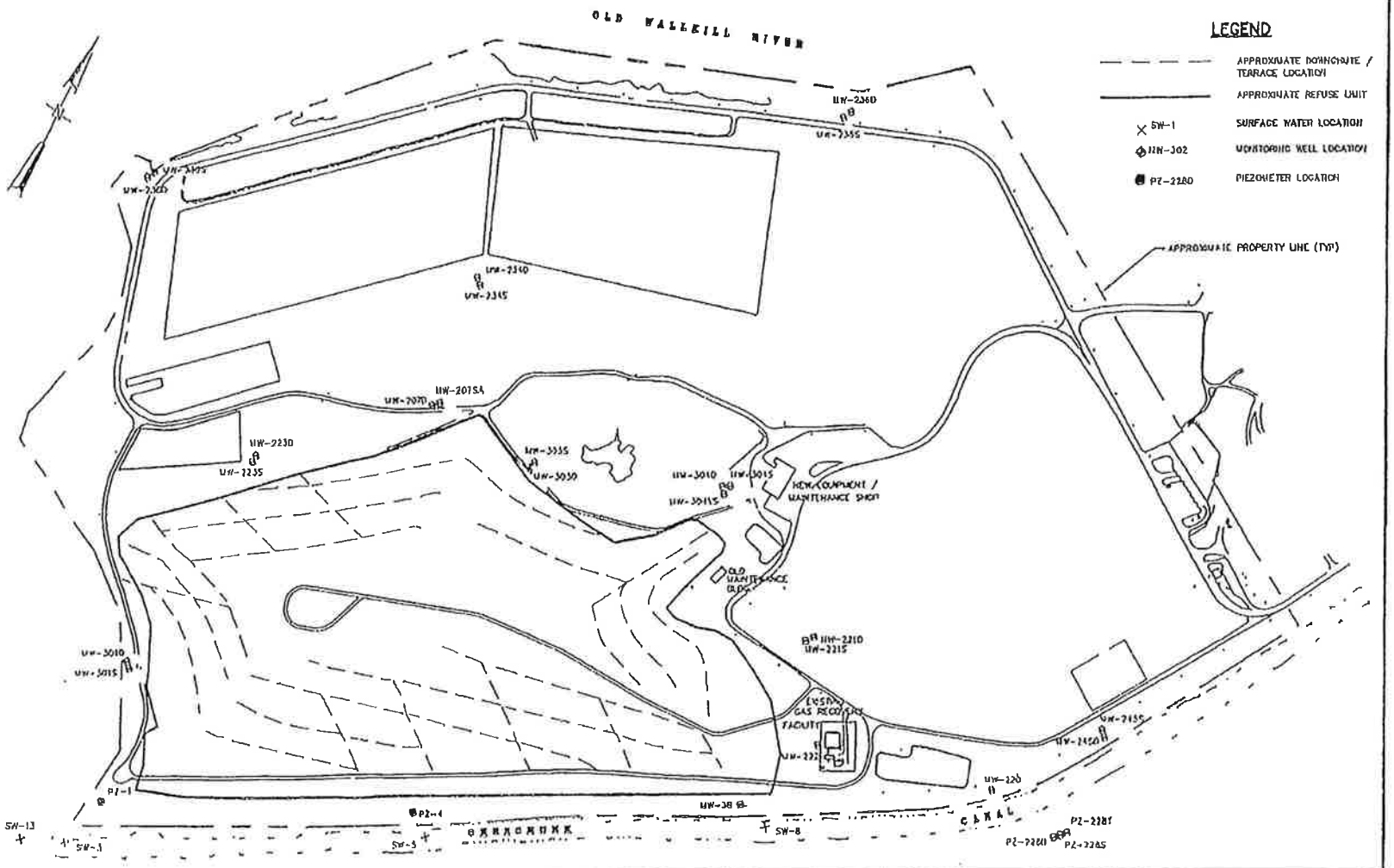
COMMENTS: Tank L-1 still has electrical problem and is not in operation at this time. Tank L-5 also needs to be repaired with a leak by the ladder rung.

CORRECTIVE ACTION TAKEN: Emails have been sent to vendor by mySECR but haven't heared back.

BY: [signature]

DATE: 2/15/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler ENVIRONMENTAL ENGINEERS & SCIENTISTS	ORANGE COUNTY LANDFILL TOWN OF GOSHEN, NEW YORK
SCALE: 1" = 600' DATE: 03/96 JOB No.: 2535	FIGURE 2A FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 3/15/19 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: 8/3/18			
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 Backfilled:_____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present — [x] No [ ] Yes *

30. Dead Animals present — [x] No [ ] Yes *

31. Oil slick on adjacent waters — [x] No [ ] Yes *

32. Damaged leachate manholes — [x] No [ ] Yes *

33. Leachate seeps — [x] No [ ] Yes Stain Color: _____

Length: _____

34. Leachate fluid — [ ] Puddle * [ ] Stream * [x] None

35. Gulls/scavenger birds present — [x] No [ ] Yes *

36. Other animal foraging evidence — [x] No [ ] Yes *

37. No smoking warnings — [x] Present [ ] Missing/Damaged

38. Survey Monuments — [x] Undisturbed [ ] Disturbed

39. Leachate Collection tanks and piping

L - 1	[ ] OK	[x] Problem *
L - 2	[x] OK	[ ] Problem *
L - 3	[x] OK	[ ] Problem *
L - 4	[x] OK	[ ] Problem *
L - 5	[ ] OK	[x] Problem *
L - 7	[x] OK	[ ] Problem *

35. Condensate Tanks

C - 1	[x] OK	[ ] Problem *
C – 2	[x] OK	[ ] Problem *
C - 3	[x] OK	[ ] Problem *
C – 4 (Maintenance Shop)	[x] OK	[ ] Problem *

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

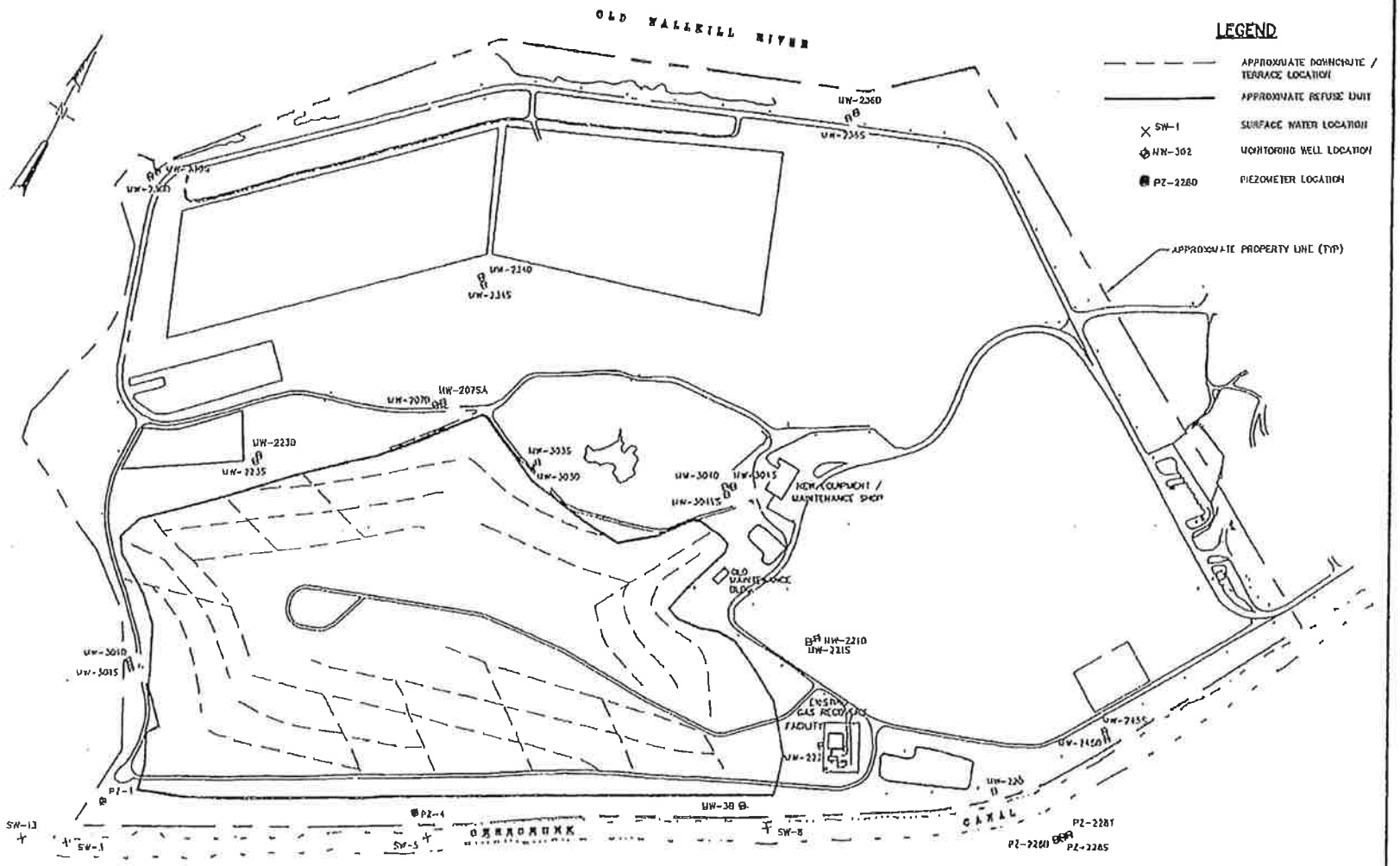
COMMENTS: TANK L-1 is not working due to an electrical issue Vendor has been notified but doesn't feel responsible. TANK C-5 also needs to be repaired with a leak by the ladder rung. I have forwarded pictures to the vendor showing problems.

CORRECTIVE ACTION TAKEN: I have e-mailed Vendor several times regarding the problems.

BY:

DATE: 3/15/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler ENVIRONMENTAL ENGINEERS & SCIENTISTS	ORANGE COUNTY LANDFILL TOWN OF GOSHEN, NEW YORK	
SCALE: 1" = 600'	DATE: 03/96 JOB No.: 2535	FIGURE 2A FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 4/16/19 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: 8/3/18			
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 Backfilled:_____
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: TANK L-1 still not repaired. The Vender will not fix the electrical issue driver Side S. I have done Several E-mails regarding L-1.

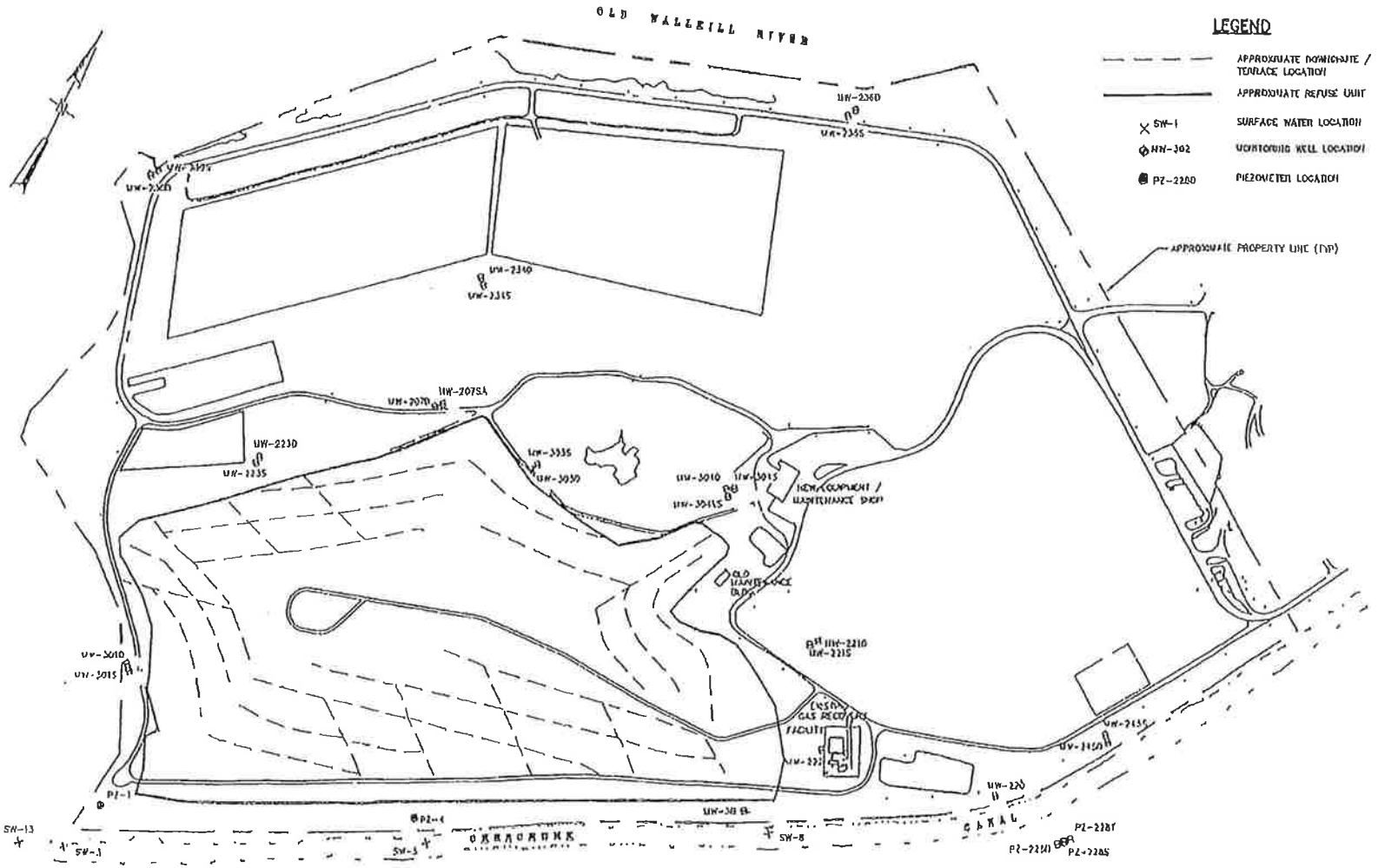
L-3 doesn't Seem to be pumping, needs to be looked at. Panel by transformer making a noise.

CORRECTIVE ACTION TAKEN: L-S has been welded a couple of times by ladder rung. The first time it didn't hold. Called Vendor Cook out again for a Second time as it was leaking again. Finally the third time they repaired it with a epoxy. Seems to be holding fine.

BY: [signature]

DATE: 4/16/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 5/15/19 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: 8/3/18			
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 Backfilled:_____
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: L-1 has been not working due to a bad transformer.

L-2 - pipe is seperated at collar

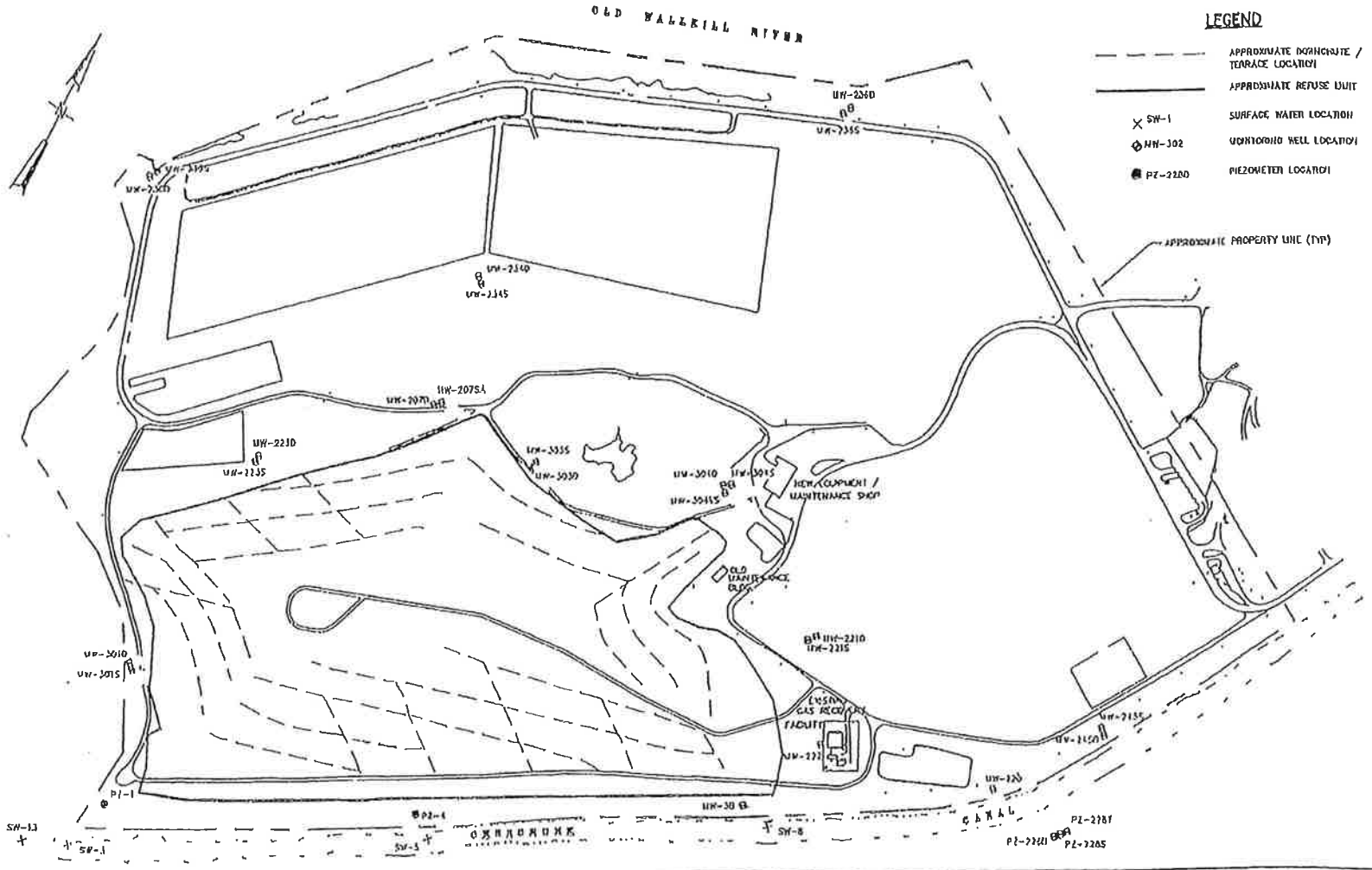
L-3 - is making a noise by panel box.

CORRECTIVE ACTION TAKEN: TAM Enterprises sent a tech to look at L-1, L-2 and L-3 with the problems. L-1 was determined to have a bad transformer, L-2 was fixed with fastening the Coupler by me. L-3 had a loose wire for pump.

BY: [signature]

DATE: 5/15/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

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: 6/12/19 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: 6/6/19			
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

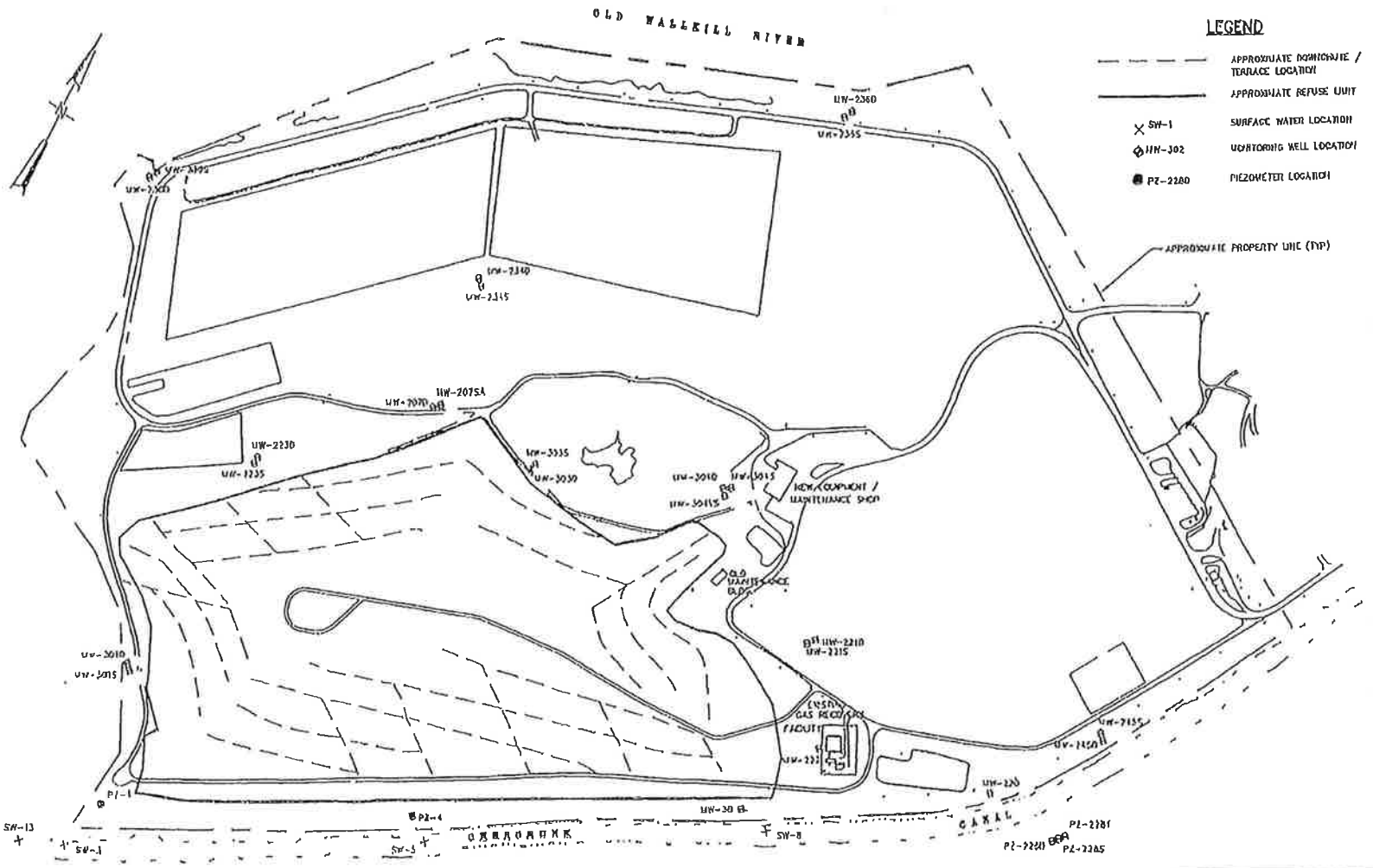
COMMENTS: L-1 has a problem at the transformer - Waiting on a new contractor for repair.

ORRECTIVE ACTION TAKEN:

BY: [signature]

DATE: 6/12/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

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: 7/17/19 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: 7/11/19			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Liner 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 Backfilled:_____
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

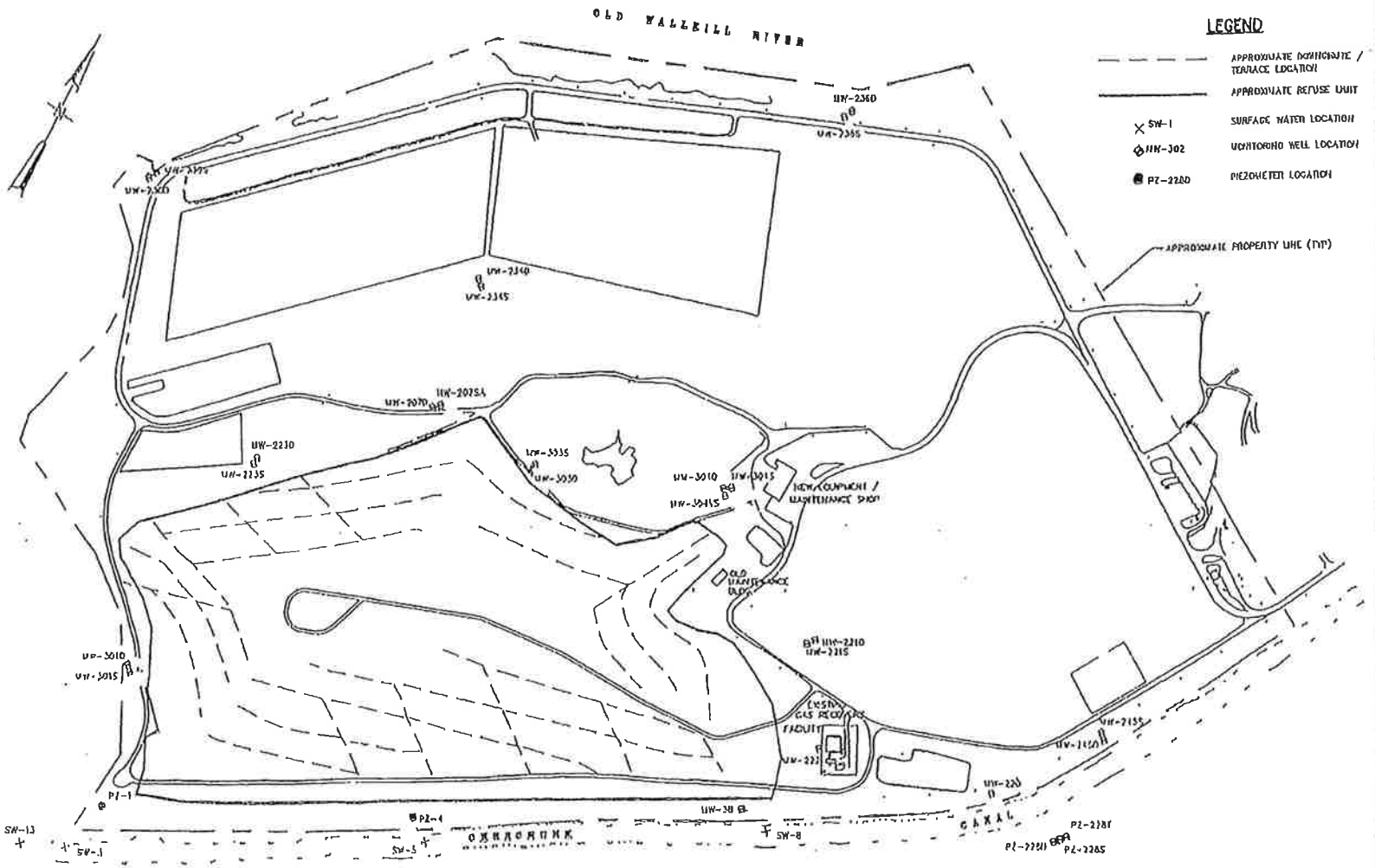
COMMENTS: L-1 transformer problem will be addressed by new Vendor TAM Enterprises.

CORRECTIVE ACTION TAKEN:

BY: [signature]

DATE: 7/17/19

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

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: 8/15/19 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 Backfilled:_____
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 *	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 *			

35. Condensate Tanks

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

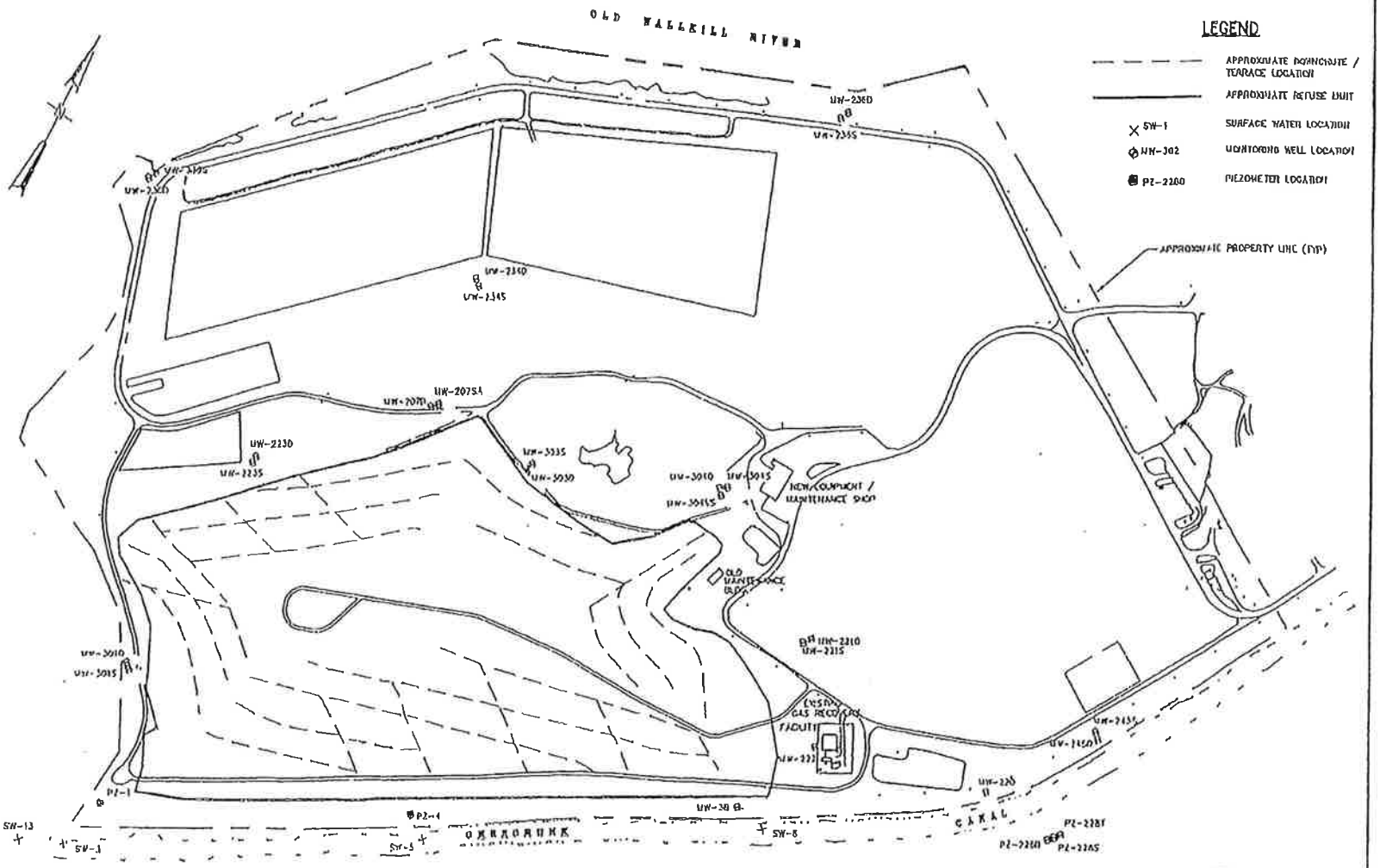
COMMENTS:

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

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns & Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

APPENDIX B

ORANGE COUNTY LEACHATE VOLUME COLLECTED FROM LEACHATE COLLECTION SYSTEM

Material Usage ALL SITES

From Date: 6/1/2018 to 12/31/2018
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/3/2019
Print Time: 1:44PM

Outgoing

Material: 048 Fred A. Cook Jr. Inc
Customer: 140 LEACH-MANHOLES/TANKS # 1-5

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
1717	6/13/18	2284977	5107.317 Gal	20.940 tn			$0.00	$0.00
1717	6/13/18	2285045	5134.146 Gal	21.050 tn			$0.00	$0.00
1717	6/25/18	2287426	980.488 Gal	4.020 tn			$0.00	$0.00
1717	6/27/18	2287843	2170.732 Gal	8.900 tn			$0.00	$0.00
1717	7/5/18	2289378	482.927 Gal	1.980 tn			$0.00	$0.00
1717	7/5/18	2289394	1787.805 Gal	7.330 tn			$0.00	$0.00
1717	7/16/18	2291600	2900.000 Gal	11.890 tn			$0.00	$0.00
1717	8/2/18	2294886	3119.512 Gal	12.790 tn			$0.00	$0.00
1715	8/7/18	2295792	6758.537 Gal	27.710 tn			$0.00	$0.00
1717	8/7/18	2295889	6404.878 Gal	26.260 tn			$0.00	$0.00
1717	8/8/18	2296030	6929.268 Gal	28.410 tn			$0.00	$0.00
1717	8/15/18	2297407	3597.561 Gal	14.750 tn			$0.00	$0.00
1717	8/22/18	2298739	2934.146 Gal	12.030 tn			$0.00	$0.00
1717	8/22/18	2298744	731.707 Gal	3.000 tn			$0.00	$0.00
1715	9/5/18	2301179	6943.902 Gal	28.470 tn			$0.00	$0.00
1717	9/5/18	2301348	2943.902 Gal	12.070 tn			$0.00	$0.00
1717	9/11/18	2302350	2156.098 Gal	8.840 tn			$0.00	$0.00
1717	9/11/18	2302411	5129.268 Gal	21.030 tn			$0.00	$0.00
1717	9/12/18	2302618	3002.439 Gal	12.310 tn			$0.00	$0.00
1717	9/18/18	2303637	3570.732 Gal	14.640 tn			$0.00	$0.00
1717	9/20/18	2303905	2348.780 Gal	9.630 tn			$0.00	$0.00
1715	10/12/18	2308315	6865.854 Gal	28.150 tn			$0.00	$0.00
1715	10/16/18	2308874	6846.341 Gal	28.070 tn			$0.00	$0.00
1715	10/16/18	2308947	6926.829 Gal	28.400 tn			$0.00	$0.00
1715	10/17/18	2309085	6821.951 Gal	27.970 tn			$0.00	$0.00
1715	10/18/18	2309269	6821.951 Gal	27.970 tn			$0.00	$0.00
1715	10/18/18	2309342	6834.146 Gal	28.020 tn			$0.00	$0.00
1715	10/19/18	2309494	6824.390 Gal	27.980 tn			$0.00	$0.00
1715	10/23/18	2310244	6829.268 Gal	28.000 tn			$0.00	$0.00
1715	10/23/18	2310325	6836.585 Gal	28.030 tn			$0.00	$0.00
1715	10/24/18	2310393	6785.366 Gal	27.820 tn			$0.00	$0.00
1715	10/24/18	2310441	6817.073 Gal	27.950 tn			$0.00	$0.00
1715	10/26/18	2310882	6851.220 Gal	28.090 tn			$0.00	$0.00
1715	10/26/18	2310980	6836.585 Gal	28.030 tn			$0.00	$0.00
1715	10/31/18	2311748	6790.244 Gal	27.840 tn			$0.00	$0.00
1715	11/2/18	2312175	6863.415 Gal	28.140 tn			$0.00	$0.00
1715	11/2/18	2312279	6870.732 Gal	28.170 tn			$0.00	$0.00
1715	11/6/18	2312860	6921.951 Gal	28.380 tn			$0.00	$0.00
1715	11/9/18	2313437	6775.610 Gal	27.780 tn			$0.00	$0.00
1715	11/9/18	2313543	6934.146 Gal	28.430 tn			$0.00	$0.00
1717	11/13/18	2313911	202.439 Gal	0.830 tn			$0.00	$0.00

Material Usage ALL SITES

From Date: 6/1/2018 to 12/31/2018
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/3/2019
Print Time: 1:45PM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
1715	11/14/18	2313992	6819.512 Gal	27.960 tn			$0.00	$0.00
1715	11/14/18	2314058	6843.902 Gal	28.060 tn			$0.00	$0.00
1717	11/15/18	2314427	2560.976 Gal	10.500 tn			$0.00	$0.00
1717	11/30/18	2316350	5075.610 Gal	20.810 tn			$0.00	$0.00
1717	11/30/18	2316426	5129.268 Gal	21.030 tn			$0.00	$0.00
1717	12/3/18	2316690	2778.049 Gal	11.390 tn			$0.00	$0.00
1717	12/4/18	2316992	1695.122 Gal	6.950 tn			$0.00	$0.00
1717	12/4/18	2317044	5151.220 Gal	21.120 tn			$0.00	$0.00
1715	12/11/18	2317943	6868.293 Gal	28.160 tn			$0.00	$0.00
1715	12/11/18	2317988	6856.098 Gal	28.110 tn			$0.00	$0.00
1715	12/11/18	2318057	6848.780 Gal	28.080 tn			$0.00	$0.00
1715	12/12/18	2318170	6829.268 Gal	28.000 tn			$0.00	$0.00
1715	12/12/18	2318238	6782.927 Gal	27.810 tn			$0.00	$0.00
1715	12/19/18	2319121	6946.341 Gal	28.480 tn			$0.00	$0.00
1715	12/19/18	2319185	6819.512 Gal	27.960 tn			$0.00	$0.00
1717	12/28/18	2320446	3475.610 Gal	14.250 tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			292870.729 Gal	1200.770 tn			$0.00	$0.00
Tickets: 57								
LEACH-MANHOLES/TANKS # 1-5 Totals			292870.729 Gal	1,200.770 tn			$0.00	$0.00
Tickets: 57								
Material: 049 Fred A. Cook Jr. Inc								
Customer: 140 LEACH-MANHOLE/TANK #7								
1717	7/11/18	2290680	4336.585 Gal	17.780 tn			$0.00	$0.00
1717	7/16/18	2291583	775.610 Gal	3.180 tn			$0.00	$0.00
1717	7/25/18	2293454	1778.049 Gal	7.290 tn			$0.00	$0.00
1717	8/1/18	2294782	951.220 Gal	3.900 tn			$0.00	$0.00
1717	8/2/18	2294877	1892.683 Gal	7.760 tn			$0.00	$0.00
1717	9/4/18	2300995	2478.049 Gal	10.160 tn			$0.00	$0.00
1717	9/4/18	2301024	2665.854 Gal	10.930 tn			$0.00	$0.00
1717	9/11/18	2302340	2926.829 Gal	12.000 tn			$0.00	$0.00
1717	9/20/18	2303893	2846.341 Gal	11.670 tn			$0.00	$0.00
1717	9/26/18	2305247	2402.439 Gal	9.850 tn			$0.00	$0.00
1717	10/18/18	2309372	819.512 Gal	3.360 tn			$0.00	$0.00
1715	11/6/18	2312795	6853.659 Gal	28.100 tn			$0.00	$0.00
1717	11/6/18	2312884	3231.707 Gal	13.250 tn			$0.00	$0.00
1717	11/13/18	2313883	2804.878 Gal	11.500 tn			$0.00	$0.00
1717	11/28/18	2316019	2356.098 Gal	9.660 tn			$0.00	$0.00
1717	12/3/18	2316689	2351.220 Gal	9.640 tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			41470.733 Gal	170.030 tn			$0.00	$0.00
Tickets: 16								
LEACH-MANHOLE/TANK #7 Totals			41470.733 Gal	170.030 tn			$0.00	$0.00
Tickets: 16								

Material Usage ALL SITES

From Date: 6/1/2018 to 12/31/2018
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/3/2019
Print Time: 1:45PM

Truck ID	Ticket Date	Ticket Number	Unit	Net		Material	Tax	Other	Total
Outgoing Totals				1370.800	tn			$0.00	$0.00
Tickets: 73									
In and Outbound Combined Totals				**1,370.80**		**$0.00**	**$0.00**	**$0.00**	**$0.00**
				0.00					

Total Leachate Removed per this generated report (OCST#1 & OCLF) = 334,341.462 Gallons
Note: Code 048 Refers to the OCLF leachate collection tanks
Code 049 Refers to the OCTS#1 leachate collection tank

Material Usage ALL SITES

From Date: 1/1/2019 to 8/31/2019
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/3/2019
Print Time: 11:56AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
Outgoing								
Material: 048		Fred A. Cook Jr. Inc						
Customer: 140		LEACH-MANHOLES/TANKS # 1-5						
1717	1/11/19	2322226	1063.415 Gal	4.360 tn			$0.00	$0.00
1715	1/16/19	2322687	6785.366 Gal	27.820 tn			$0.00	$0.00
1715	1/16/19	2322729	6982.927 Gal	28.630 tn			$0.00	$0.00
1715	1/29/19	2324085	780.488 Gal	3.200 tn			$0.00	$0.00
1715	2/6/19	2324925	6670.732 Gal	27.350 tn			$0.00	$0.00
1717	2/8/19	2325181	6795.122 Gal	27.860 tn			$0.00	$0.00
1717	2/21/19	2326570	1790.244 Gal	7.340 tn			$0.00	$0.00
1715	2/22/19	2326677	6839.024 Gal	28.040 tn			$0.00	$0.00
1717	2/22/19	2326704	3353.659 Gal	13.750 tn			$0.00	$0.00
1715	2/26/19	2327134	6897.561 Gal	28.280 tn			$0.00	$0.00
1715	2/26/19	2327194	6868.293 Gal	28.160 tn			$0.00	$0.00
1717	3/4/19	2327797	1936.585 Gal	7.940 tn			$0.00	$0.00
1717	3/5/19	2327803	6943.902 Gal	28.470 tn			$0.00	$0.00
1715	3/5/19	2327838	6756.098 Gal	27.700 tn			$0.00	$0.00
1715	3/6/19	2327930	6895.122 Gal	28.270 tn			$0.00	$0.00
1717	3/6/19	2327951	3975.610 Gal	16.300 tn			$0.00	$0.00
1715	3/6/19	2327966	6887.805 Gal	28.240 tn			$0.00	$0.00
1715	3/6/19	2328007	6934.146 Gal	28.430 tn			$0.00	$0.00
1715	3/23/19	2330389	6897.561 Gal	28.280 tn			$0.00	$0.00
1717	3/25/19	2330587	5156.098 Gal	21.140 tn			$0.00	$0.00
1717	3/25/19	2330655	5158.537 Gal	21.150 tn			$0.00	$0.00
1715	3/26/19	2330775	6900.000 Gal	28.290 tn			$0.00	$0.00
1715	3/26/19	2330844	6956.098 Gal	28.520 tn			$0.00	$0.00
1715	3/27/19	2330960	6995.122 Gal	28.680 tn			$0.00	$0.00
1715	3/27/19	2331030	6987.805 Gal	28.650 tn			$0.00	$0.00
1717	3/27/19	2331068	2280.488 Gal	9.350 tn			$0.00	$0.00
1715	3/29/19	2331348	6821.951 Gal	27.970 tn			$0.00	$0.00
1715	3/29/19	2331436	6912.195 Gal	28.340 tn			$0.00	$0.00
1717	4/3/19	2332158	6917.073 Gal	28.360 tn			$0.00	$0.00
1715	4/3/19	2332304	3126.829 Gal	12.820 tn			$0.00	$0.00
1715	5/6/19	2338285	6870.732 Gal	28.170 tn			$0.00	$0.00
1715	5/7/19	2338513	6890.244 Gal	28.250 tn			$0.00	$0.00
1717	5/11/19	2339285	5192.683 Gal	21.290 tn			$0.00	$0.00
1715	5/14/19	2339597	6812.195 Gal	27.930 tn			$0.00	$0.00
1715	5/14/19	2339654	6900.000 Gal	28.290 tn			$0.00	$0.00
1715	5/15/19	2339694	6912.195 Gal	28.340 tn			$0.00	$0.00
1715	5/15/19	2339737	6939.024 Gal	28.450 tn			$0.00	$0.00
1717	5/30/19	2342423	3860.976 Gal	15.830 tn			$0.00	$0.00
1717	6/4/19	2343397	2041.463 Gal	8.370 tn			$0.00	$0.00
1717	6/5/19	2343540	5080.488 Gal	20.830 tn			$0.00	$0.00
1717	6/5/19	2343609	5117.073 Gal	20.980 tn			$0.00	$0.00

Material Usage ALL SITES

From Date: 1/1/2019 to 8/31/2019
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/3/2019
Print Time: 11:57AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
1715	6/10/19	2344494	6704.878 Gal	27.490 tn			$0.00	$0.00
1717	6/10/19	2344575	5100.000 Gal	20.910 tn			$0.00	$0.00
1715	6/10/19	2344601	6795.122 Gal	27.860 tn			$0.00	$0.00
1717	6/11/19	2344824	4504.878 Gal	18.470 tn			$0.00	$0.00
1715	6/12/19	2344926	6785.366 Gal	27.820 tn			$0.00	$0.00
1715	6/12/19	2344981	6775.610 Gal	27.780 tn			$0.00	$0.00
1715	6/14/19	2345385	6643.902 Gal	27.240 tn			$0.00	$0.00
1715	6/14/19	2345480	6775.610 Gal	27.780 tn			$0.00	$0.00
1715	6/17/19	2345798	6439.024 Gal	26.400 tn			$0.00	$0.00
1715	6/17/19	2345888	6907.317 Gal	28.320 tn			$0.00	$0.00
1717	6/18/19	2345984	4697.561 Gal	19.260 tn			$0.00	$0.00
1715	6/18/19	2346025	6875.610 Gal	28.190 tn			$0.00	$0.00
1717	6/25/19	2347322	3924.390 Gal	16.090 tn			$0.00	$0.00
1717	6/25/19	2347400	6580.488 Gal	26.980 tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			314392.685 Gal	1289.010 tn			$0.00	$0.00
Tickets: 55								
Customer:	**772**	LEACH-MANHOLES/TANKS # 1-5						
04	7/11/19	2350394	3441.463 Gal	14.110 tn			$0.00	$0.00
22	7/11/19	2350474	4426.829 Gal	18.150 tn			$0.00	$0.00
56	7/11/19	2350497	7060.976 Gal	28.950 tn			$0.00	$0.00
71	7/12/19	2350614	4697.561 Gal	19.260 tn			$0.00	$0.00
71	7/12/19	2350627	1580.488 Gal	6.480 tn			$0.00	$0.00
51	7/12/19	2350773	4548.780 Gal	18.650 tn			$0.00	$0.00
22	7/12/19	2350799	4978.049 Gal	20.410 tn			$0.00	$0.00
71	7/15/19	2351051	6531.707 Gal	26.780 tn			$0.00	$0.00
22	7/15/19	2351189	2680.488 Gal	10.990 tn			$0.00	$0.00
22	7/15/19	2351221	1170.732 Gal	4.800 tn			$0.00	$0.00
22	7/26/19	2353094	1907.317 Gal	7.820 tn			$0.00	$0.00
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
TAM Enterprises, Inc. Totals			70245.014 Gal	289.910 tn			$0.00	$0.00
Tickets: 17								
LEACH-MANHOLES/TANKS # 1-5 Totals			384637.699 Gal	1,578.920 tn			$0.00	$0.00
Tickets: 72								
Material:	**049**	Fred A. Cook Jr. Inc						
Customer:	**140**	LEACH-MANHOLE/TANK #7						
1717	1/2/19	2320957	1658.537 Gal	6.800 tn			$0.00	$0.00
1717	1/25/19	2323763	2382.927 Gal	9.770 tn			$0.00	$0.00
1717	2/21/19	2326562	2926.829 Gal	12.000 tn			$0.00	$0.00

Material Usage ALL SITES

From Date: 1/1/2019 to 8/31/2019
From Material: 047 to 049
From Customer: 0 to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 9/3/2019
Print Time: 11:57AM

Truck ID	Ticket Date	Ticket Number	Unit	Net		Material	Tax	Other	Total
1715	3/4/19	2327786	2846.341 Gal	11.670	tn			$0.00	$0.00
1717	3/19/19	2329853	2624.390 Gal	10.760	tn			$0.00	$0.00
1717	4/17/19	2334831	1178.049 Gal	4.830	tn			$0.00	$0.00
1717	4/18/19	2335035	1541.463 Gal	6.320	tn			$0.00	$0.00
1717	4/25/19	2336348	1634.146 Gal	6.700	tn			$0.00	$0.00
1717	4/29/19	2337026	1624.390 Gal	6.660	tn			$0.00	$0.00
1717	5/14/19	2339646	2895.122 Gal	11.870	tn			$0.00	$0.00
1717	5/29/19	2342245	2860.976 Gal	11.730	tn			$0.00	$0.00
1717	6/4/19	2343389	1778.049 Gal	7.290	tn			$0.00	$0.00
1715	6/25/19	2347303	2926.829 Gal	12.000	tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			28878.048 Gal	118.400	tn			$0.00	$0.00
Tickets: 13									
Customer:	**772**	LEACH-MANHOLE/TANK #7							
04	7/11/19	2350393	2836.585 Gal	11.630	tn			$0.00	$0.00
22	7/26/19	2353089	2943.902 Gal	12.070	tn			$0.00	$0.00
11111	8/23/19	2358170	2880.096 Gal	12.010	tn			$0.00	$0.00
TAM Enterprises, Inc. Totals			8660.583 Gal	35.710	tn			$0.00	$0.00
Tickets: 3									
LEACH-MANHOLE/TANK #7 Totals			37538.631 Gal	154.110	tn			$0.00	$0.00
Tickets: 16									
Outgoing Totals				1733.030	tn			$0.00	$0.00
Tickets: 88									
In and Outbound Combined Totals				**1,733.03**		**$0.00**	**$0.00**	**$0.00**	**$0.00**
				0.00					

Total Leachate Removed per this generated report= 422,176.33 Gallons

Note: Code 048 Refers to the OCLF leachate collection tanks
Code 049 Refers to the OCTS#1 leachate collection tank

APPENDIX C

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: 75.0

Reporting Period: June 1, 2018 to August 8, 2019

	YES	NO
1. Is the information above correct?	X	
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?		X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X
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?		X

Box2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	X	
7. Are all ICs/ECs in place and functioning as designed?	X	

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.*
*As described in Section 4.2.2 of the Periodic Review Report, seeps have been investigated through work plans approved by NYSDEC pursuant to the Order on Consent

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 336007 **Box3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
16-1-1.1	1. C. Dept. Environ. Facilities Services	Monitoring Plan O&M Plan

Box4

Description of Engineering Controls

Parcel	Engineering Control
16-1-1.1	Cover System Leachate Collection

Engineering Control Details for Site No. 336007

Parcel: 16-1-1.1

This is a municipal landfill that has been capped under Title 3, with leachate collection and gas collection. Periodic groundwater monitoring and inspections and reporting in accordance with the 1997 OM &M plan (and updates thereto) are required.

Periodic Review Report (PRR) Certification Statements

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

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

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

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

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

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

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

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

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

YES NO

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 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.

Robert J. Gray, P.E. _____ at **2455-2459 Route 17M, P.O. Box 637, Goshen, N.Y. 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

11/14/19
Date

IC/EC CERTIFICATIONS

Box7

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.

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).

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

11/14/2019

Date

APPENDIX D

ANALYTICAL REPORT

ANALYTICAL REPORT

Lab Number:	L1935353
Client:	Sterling Environmental Eng 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:	08/26/19

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: L1935353
Report Date: 08/26/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1935353-01	MW-233S	WATER	NEW HAMPTON, NY	08/07/19 10:50	08/07/19
L1935353-02	MW-233D	WATER	NEW HAMPTON, NY	08/07/19 09:45	08/07/19
L1935353-03	PZ-4	WATER	NEW HAMPTON, NY	08/07/19 15:05	08/07/19
L1935353-04	MW-3B	WATER	NEW HAMPTON, NY	08/07/19 13:50	08/07/19
L1935353-05	MW-220	WATER	NEW HAMPTON, NY	08/07/19 12:55	08/07/19
L1935353-06	SW-5	WATER	NEW HAMPTON, NY	08/07/19 15:40	08/07/19
L1935353-07	MH-7	WATER	NEW HAMPTON, NY	08/07/19 16:00	08/07/19
L1935353-08	MH-15	WATER	NEW HAMPTON, NY	08/07/19 11:30	08/07/19
L1935353-09	TRIP BLANK 080719	WATER	NEW HAMPTON, NY	08/07/19 00:00	08/07/19
L1935353-10	DUP-080719	WATER	NEW HAMPTON, NY	08/07/19 00:00	08/07/19

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935353
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/26/19

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	**Lab Number:**	L1935353
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/26/19

Case Narrative (continued)

Report Submission

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

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

L1935353-01 through -09 and WG1273331-6/-7: The pH of the sample was less than two. It should be noted that 2-chloroethylvinyl ether breaks down under acidic conditions.

L1935353-07: The sample has elevated detection limits due to the dilution required by the sample matrix.

The WG1273331-6/-7 MS/MSD recoveries, performed on L1935353-02, are below the acceptance criteria for 2-chloroethylvinyl ether (0%/0%) due to the concentration of this compound falling below the reported detection limit.

Total Metals

The WG1272839-3/-4 MS/MSD recoveries for sodium (70%/140%), performed on L1935353-02, do not apply because the sample concentration is greater than four times the spike amount added.

Dissolved Metals

The WG1272846-3/-4 MS/MSD recoveries for calcium (148%/151%), performed on L1935353-02, do not apply because the sample concentration is greater than four times the spike amount added.

The WG1272846-3/-4 MS/MSD recoveries, performed on L1935353-02, are outside the acceptance criteria for magnesium (132%/139%). A post digestion spike was performed and was within acceptance criteria.

Nitrogen, Ammonia

The WG1271750-4 MS recovery (89%), performed on L1935353-02, is outside the acceptance criteria;

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935353
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Case Narrative (continued)

however, the associated LCS recovery is within criteria. No further action was taken.
WG1270102: A Matrix Spike was prepared with the sample batch, however, the native sample was not available for reporting; therefore, the Matrix Spike results could not be reported.

Nitrogen, Total Kjeldahl
WG1270144: A Matrix Spike was prepared with the sample batch, however, the native sample was not available for reporting; therefore, the Matrix Spike results could not be reported.

Phenolics, Total
The WG1275702-4 MS recovery (68%), performed on L1935353-02, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken.

Anions by Ion Chromatography
The WG1272055-3/-4 MS/MSD recoveries, performed on L1935353-02, are outside the acceptance criteria for chloride (80%/81%); however, the associated LCS recovery is within criteria. No further action was taken.
The WG1272446-3/-4 MS/MSD recoveries, performed on L1935353-02, are outside the acceptance criteria for bromide (117%/129%); 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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 08/26/19

ORGANICS

VOLATILES

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-01
Client ID: MW-233S
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 10:50
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 01:04
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	7.1		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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-01
Client ID: MW-233S
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 10:50
Date Received: 08/07/19
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	112		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-02
Client ID: MW-233D
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 09:45
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 01:29
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	3.4		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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-02
Client ID: MW-233D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 09:45
Date Received: 08/07/19
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	113		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-03
Client ID: PZ-4
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:05
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 01:55
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	2.0	J	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: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-03
Client ID: PZ-4
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:05
Date Received: 08/07/19
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	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-04
Client ID: MW-3B
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 13:50
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 02:20
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	2.1	J	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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-04
Client ID: MW-3B
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 13:50
Date Received: 08/07/19
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	112		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-05
Client ID: MW-220
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 12:55
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 02:46
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	1.2	J	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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-05
Client ID: MW-220
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 12:55
Date Received: 08/07/19
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	114		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-06
Client ID: SW-5
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:40
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 03:11
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	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	1.5	J	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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-06
Client ID: SW-5
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:40
Date Received: 08/07/19
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	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-07 D
Client ID: MH-7
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 16:00
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 03:37
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	17	J	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	9.9		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	8.0	J	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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-07 D
Client ID: MH-7
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 16:00
Date Received: 08/07/19
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	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-08
Client ID: MH-15
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 11:30
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 04:02
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	0.18	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	2.4	J	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	0.87	J	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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-08
Client ID: MH-15
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 11:30
Date Received: 08/07/19
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	114		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-09
Client ID: TRIP BLANK 080719
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 00:00
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 04:28
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	1.5	J	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: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-09
Client ID: TRIP BLANK 080719
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 00:00
Date Received: 08/07/19
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	114		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	97		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-10
Client ID: DUP-080719
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 00:00
Date Received: 08/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/16/19 21:01
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
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
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-10
Client ID: DUP-080719
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 00:00
Date Received: 08/07/19
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	115		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	114		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/15/19 22:05
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1273331-5					
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: L1935353
Report Date: 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/15/19 22:05
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1273331-5					
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	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/16/19 16:38
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1273845-5					
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: L1935353
Report Date: 08/26/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/16/19 16:38
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1273845-5					
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	111		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1273331-3 WG1273331-4								
Methylene chloride	100		92		70-130	8		20
1,1-Dichloroethane	120		100		70-130	18		20
Chloroform	120		100		70-130	18		20
2-Chloroethylvinyl ether	100		96		70-130	4		20
Carbon tetrachloride	100		89		63-132	12		20
1,2-Dichloropropane	120		100		70-130	18		20
Dibromochloromethane	95		83		63-130	13		20
1,1,2-Trichloroethane	110		99		70-130	11		20
Tetrachloroethene	110		96		70-130	14		20
Chlorobenzene	110		99		75-130	11		20
Trichlorofluoromethane	130		110		62-150	17		20
1,2-Dichloroethane	120		110		70-130	9		20
1,1,1-Trichloroethane	110		97		67-130	13		20
Bromodichloromethane	110		92		67-130	18		20
trans-1,3-Dichloropropene	93		80		70-130	15		20
cis-1,3-Dichloropropene	100		87		70-130	14		20
Bromoform	79		69		54-136	14		20
Benzene	110		99		70-130	11		20
Toluene	110		99		70-130	11		20
Ethylbenzene	110		99		70-130	11		20
Chloromethane	120		100		64-130	18		20
Bromomethane	84		82		39-139	2		20
Vinyl chloride	130		110		55-140	17		20

Lab Control Sample Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1273331-3 WG1273331-4								
Chloroethane	**140**	Q	120		55-138	15		20
1,1-Dichloroethene	110		99		61-145	11		20
trans-1,2-Dichloroethene	120		99		70-130	19		20
Trichloroethene	110		92		70-130	18		20
1,2-Dichlorobenzene	110		98		70-130	12		20
1,3-Dichlorobenzene	110		98		70-130	12		20
1,4-Dichlorobenzene	110		97		70-130	13		20
p/m-Xylene	115		100		70-130	14		20
o-Xylene	120		105		70-130	13		20
Dichlorodifluoromethane	120		100		36-147	18		20
1,1,1,2-Tetrachloroethane	100		88		64-130	13		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		112		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	100		101		70-130

Lab Control Sample Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1273845-3 WG1273845-4								
Methylene chloride	98		100		70-130	2		20
1,1-Dichloroethane	100		98		70-130	2		20
Chloroform	99		100		70-130	1		20
2-Chloroethylvinyl ether	94		95		70-130	1		20
Carbon tetrachloride	120		110		63-132	9		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	98		99		63-130	1		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	96		98		70-130	2		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	97		100		62-150	3		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	100		99		54-136	1		20
Benzene	110		100		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	110		98		64-130	12		20
Bromomethane	110		100		39-139	10		20
Vinyl chloride	100		100		55-140	0		20

Lab Control Sample Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1273845-3 WG1273845-4								
Chloroethane	110		86		55-138	**24**	Q	20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	110		100		70-130	10		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	110		100		70-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
Dichlorodifluoromethane	93		96		36-147	3		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	104		99		70-130
Dibromofluoromethane	100		99		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

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): 01-09 QC Batch ID: WG1273331-6 WG1273331-7 QC Sample: L1935353-02 Client ID: MW-233D												
Methylene chloride	ND	10	12	120		12	120		70-130	0		20
1,1-Dichloroethane	ND	10	13	130		13	130		70-130	0		20
Chloroform	ND	10	12	120		13	130		70-130	8		20
2-Chloroethylvinyl ether	ND	10	ND	**0**	Q	ND	**0**	Q	70-130	NC		20
Carbon tetrachloride	ND	10	11	110		11	110		63-132	0		20
1,2-Dichloropropane	ND	10	12	120		12	120		70-130	0		20
Dibromochloromethane	ND	10	9.6	96		10	100		63-130	4		20
1,1,2-Trichloroethane	ND	10	12	120		12	120		70-130	0		20
Tetrachloroethene	ND	10	11	110		11	110		70-130	0		20
Chlorobenzene	ND	10	12	120		12	120		75-130	0		20
Trichlorofluoromethane	ND	10	16	**160**	Q	17	**170**	Q	62-150	6		20
1,2-Dichloroethane	ND	10	13	130		14	**140**	Q	70-130	7		20
1,1,1-Trichloroethane	ND	10	12	120		12	120		67-130	0		20
Bromodichloromethane	ND	10	11	110		11	110		67-130	0		20
trans-1,3-Dichloropropene	ND	10	9.3	93		9.7	97		70-130	4		20
cis-1,3-Dichloropropene	ND	10	9.8	98		10	100		70-130	2		20
Bromoform	ND	10	8.0	80		8.5	85		54-136	6		20
Benzene	ND	10	12	120		12	120		70-130	0		20
Toluene	ND	10	12	120		12	120		70-130	0		20
Ethylbenzene	ND	10	12	120		12	120		70-130	0		20
Chloromethane	3.4	10	21	**176**	Q	22	**186**	Q	64-130	5		20
Bromomethane	ND	10	8.5	85		10	100		39-139	16		20
Vinyl chloride	ND	10	15	**150**	Q	15	**150**	Q	55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

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): 01-09 QC Batch ID: WG1273331-6 WG1273331-7 QC Sample: L1935353-02 Client ID: MW-233D												
Chloroethane	ND	10	18	**180**	Q	19	**190**	Q	55-138	5		20
1,1-Dichloroethene	ND	10	12	120		12	120		61-145	0		20
trans-1,2-Dichloroethene	ND	10	12	120		12	120		70-130	0		20
Trichloroethene	ND	10	11	110		12	120		70-130	9		20
1,2-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,3-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,4-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
p/m-Xylene	ND	20	24	120		24	120		70-130	0		20
o-Xylene	ND	20	24	120		24	120		70-130	0		20
Dichlorodifluoromethane	ND	10	12	120		13	130		36-147	8		20
1,1,1,2-Tetrachloroethane	ND	10	10	100		11	110		64-130	10		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		120		70-130
4-Bromofluorobenzene	104		105		70-130
Dibromofluoromethane	102		101		70-130
Toluene-d8	103		103		70-130

METALS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-01
Client ID: MW-233S
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 10:50
Date Received: 08/07/19
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	0.0124		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Antimony, Total	0.00047	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00089		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Barium, Total	0.07195		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Boron, Total	0.014	J	mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:48	EPA 3005A	1,6010D	AB
Cadmium, Total	0.00024		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Calcium, Total	127		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:48	EPA 3005A	1,6010D	AB
Chromium, Total	0.00035	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00067		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Copper, Total	0.00374		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Iron, Total	0.167		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Magnesium, Total	33.3		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:48	EPA 3005A	1,6010D	AB
Manganese, Total	1.405		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Mercury, Total	0.00012	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:05	EPA 7470A	1,7470A	AL
Nickel, Total	0.00605		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Potassium, Total	2.14		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Selenium, Total	0.00403	J	mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Sodium, Total	1.53		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Zinc, Total	0.01039		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:23	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	455		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:48	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-01
Client ID: MW-233S
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 10:50
Date Received: 08/07/19
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	0.00372	J	mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00100	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00049		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05265		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.016	J	mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 22:58	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	0.00006	J	mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Calcium, Dissolved	125		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 22:58	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00104		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0309	J	mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	34.2		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 22:58	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.09386		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:31	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00087	J	mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.14		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00358	J	mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Sodium, Dissolved	1.57		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 09:38	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	453		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 22:58	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-02
Client ID: MW-233D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 09:45
Date Received: 08/07/19
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	0.0126		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Antimony, Total	0.00057	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00086		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Barium, Total	0.03874		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Boron, Total	0.084		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:01	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Calcium, Total	48.1		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:01	EPA 3005A	1,6010D	AB
Chromium, Total	0.00034	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Copper, Total	0.00098	J	mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Iron, Total	0.0972		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Lead, Total	0.00198		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Magnesium, Total	19.5		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:01	EPA 3005A	1,6010D	AB
Manganese, Total	0.02018		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Mercury, Total	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:00	EPA 7470A	1,7470A	AL
Nickel, Total	0.00090	J	mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Potassium, Total	1.78		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Sodium, Total	119.		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Zinc, Total	0.00850	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 10:42	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	200		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:01	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-02
Client ID: MW-233D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 09:45
Date Received: 08/07/19
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	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00252	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00075		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.03620		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.091		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 22:24	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Calcium, Dissolved	48.3		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 22:24	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00043	J	mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0202	J	mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	19.5		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 22:24	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.00167		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:25	EPA 7470A	1,7470A	AL
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Potassium, Dissolved	1.85		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Sodium, Dissolved	125.		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00028	J	mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00642	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 09:34	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	201		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 22:24	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-03
Client ID: PZ-4
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:05
Date Received: 08/07/19
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	1.04		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Antimony, Total	0.00116	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Arsenic, Total	0.09126		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Barium, Total	0.06547		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00022	J	mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Boron, Total	0.098		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:52	EPA 3005A	1,6010D	AB
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Calcium, Total	168		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:52	EPA 3005A	1,6010D	AB
Chromium, Total	0.00245		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00221		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Copper, Total	0.01016		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Iron, Total	8.44		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Lead, Total	0.01394		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Magnesium, Total	42.0		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:52	EPA 3005A	1,6010D	AB
Manganese, Total	0.5882		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Mercury, Total	0.00011	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:10	EPA 7470A	1,7470A	AL
Nickel, Total	0.00694		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Potassium, Total	3.62		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Sodium, Total	23.3		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00182	J	mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Zinc, Total	0.03925		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:28	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	593		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:52	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-03
Client ID: PZ-4
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:05
Date Received: 08/07/19
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	0.113		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00276	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00463		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.04888		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.108		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:02	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Calcium, Dissolved	153		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:02	EPA 3005A	1,6010D	AB
Chromium, Dissolved	0.00031	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00021	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00363		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.317		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00049	J	mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	40.8		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:02	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.1185		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00011	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:32	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00378		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Potassium, Dissolved	3.85		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Sodium, Dissolved	23.0		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00020	J	mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00924	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 10:29	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	549		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:02	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-04
Client ID: MW-3B
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 13:50
Date Received: 08/07/19
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	0.0263		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Arsenic, Total	0.04610		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Barium, Total	0.3793		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Boron, Total	0.163		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:56	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Calcium, Total	121		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:56	EPA 3005A	1,6010D	AB
Chromium, Total	0.00044	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00029	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Copper, Total	0.00046	J	mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Iron, Total	1.46		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Lead, Total	0.00066	J	mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Magnesium, Total	30.7		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:56	EPA 3005A	1,6010D	AB
Manganese, Total	0.8680		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Mercury, Total	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:12	EPA 7470A	1,7470A	AL
Nickel, Total	0.00485		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Potassium, Total	5.64		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Sodium, Total	49.3		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Zinc, Total	0.00567	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:33	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	428		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:56	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-04
Client ID: MW-3B
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 13:50
Date Received: 08/07/19
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	0.00661	J	mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00093	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.03731		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.3864		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.186		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:06	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Calcium, Dissolved	126		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:06	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00028	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.540		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00040	J	mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	32.3		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:06	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.9032		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:34	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00551		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Potassium, Dissolved	5.79		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Sodium, Dissolved	52.5		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00438	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 10:33	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	448		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:06	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-05
Client ID: MW-220
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 12:55
Date Received: 08/07/19
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	0.0500		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Arsenic, Total	0.05061		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Barium, Total	0.06625		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Boron, Total	0.026	J	mg/l	0.030	0.002	1	08/15/19 14:43	08/16/19 00:00	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Calcium, Total	137		mg/l	0.100	0.035	1	08/15/19 14:43	08/16/19 00:00	EPA 3005A	1,6010D	AB
Chromium, Total	0.00035	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00065		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Copper, Total	0.00045	J	mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Iron, Total	4.21		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Lead, Total	0.00340		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Magnesium, Total	39.0		mg/l	0.100	0.015	1	08/15/19 14:43	08/16/19 00:00	EPA 3005A	1,6010D	AB
Manganese, Total	0.8478		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Mercury, Total	0.00011	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:14	EPA 7470A	1,7470A	AL
Nickel, Total	0.00125	J	mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Potassium, Total	2.52		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Sodium, Total	11.8		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Zinc, Total	0.00508	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:37	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	504		mg/l	0.660	NA	1	08/15/19 14:43	08/16/19 00:00	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-05
Client ID: MW-220
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 12:55
Date Received: 08/07/19
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	0.00348	J	mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00057	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00330		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05660		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.029	J	mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 23:10	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Calcium, Dissolved	134		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 23:10	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00043	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.122		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	39.7		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 23:10	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.6907		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:36	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00115	J	mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.38		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Sodium, Dissolved	11.5		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00395	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 10:38	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	498		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 23:10	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-06
Client ID: SW-5
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 15:40
Date Received: 08/07/19
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	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00228		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Barium, Total	0.02869		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Boron, Total	0.023	J	mg/l	0.030	0.002	1	08/15/19 14:43	08/16/19 00:17	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Calcium, Total	46.3		mg/l	0.100	0.035	1	08/15/19 14:43	08/16/19 00:17	EPA 3005A	1,6010D	AB
Chromium, Total	0.00055	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00049	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Copper, Total	0.00275		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Iron, Total	0.778		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Lead, Total	0.00085	J	mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Magnesium, Total	15.2		mg/l	0.100	0.015	1	08/15/19 14:43	08/16/19 00:17	EPA 3005A	1,6010D	AB
Manganese, Total	0.1317		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Mercury, Total	0.00011	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:15	EPA 7470A	1,7470A	AL
Nickel, Total	0.00160	J	mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Potassium, Total	2.48		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Sodium, Total	49.2		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Zinc, Total	0.00545	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:42	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	178		mg/l	0.660	NA	1	08/15/19 14:43	08/16/19 00:17	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-07
Client ID: MH-7
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 16:00
Date Received: 08/07/19
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	0.673		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Antimony, Total	0.00301	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Arsenic, Total	0.02732		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Barium, Total	0.1703		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Boron, Total	2.35		mg/l	0.030	0.002	1	08/15/19 14:43	08/16/19 00:22	EPA 3005A	1,6010D	AB
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Calcium, Total	166		mg/l	0.100	0.035	1	08/15/19 14:43	08/16/19 00:22	EPA 3005A	1,6010D	AB
Chromium, Total	0.00986		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Cobalt, Total	0.01428		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Copper, Total	0.00611		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Iron, Total	21.2		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Lead, Total	0.00443		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Magnesium, Total	66.8		mg/l	0.100	0.015	1	08/15/19 14:43	08/16/19 00:22	EPA 3005A	1,6010D	AB
Manganese, Total	0.7446		mg/l	0.05000	0.02200	50	08/15/19 14:43	08/16/19 13:46	EPA 3005A	1,6020B	AM
Mercury, Total	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:17	EPA 7470A	1,7470A	AL
Nickel, Total	0.05720		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Potassium, Total	158.		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Sodium, Total	697.		mg/l	5.00	1.46	50	08/15/19 14:43	08/16/19 13:46	EPA 3005A	1,6020B	AM
Thallium, Total	0.00015	J	mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Vanadium, Total	0.01160		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Zinc, Total	0.04145		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:19	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	690		mg/l	0.660	NA	1	08/15/19 14:43	08/16/19 00:22	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-08
Client ID: MH-15
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 11:30
Date Received: 08/07/19
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	0.0255		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Antimony, Total	0.00145	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00355		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Barium, Total	0.07328		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Boron, Total	0.245		mg/l	0.030	0.002	1	08/15/19 14:43	08/16/19 00:26	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Calcium, Total	101		mg/l	0.100	0.035	1	08/15/19 14:43	08/16/19 00:26	EPA 3005A	1,6010D	AB
Chromium, Total	0.00107		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00130		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Copper, Total	0.00145		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Iron, Total	2.14		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Magnesium, Total	18.3		mg/l	0.100	0.015	1	08/15/19 14:43	08/16/19 00:26	EPA 3005A	1,6010D	AB
Manganese, Total	0.3430		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Mercury, Total	0.00011	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:19	EPA 7470A	1,7470A	AL
Nickel, Total	0.00542		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Potassium, Total	18.8		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Sodium, Total	60.4		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00204	J	mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:46	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	327		mg/l	0.660	NA	1	08/15/19 14:43	08/16/19 00:26	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Lab Number: L1935353
Project Number: 2010-15 (TASK 500)
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-10
Client ID: DUP-080719
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 00:00
Date Received: 08/07/19
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	0.0167		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Arsenic, Total	0.04727		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Barium, Total	0.4152		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Boron, Total	0.176		mg/l	0.030	0.002	1	08/15/19 14:43	08/16/19 00:30	EPA 3005A	1,6010D	AB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Calcium, Total	126		mg/l	0.100	0.035	1	08/15/19 14:43	08/16/19 00:30	EPA 3005A	1,6010D	AB
Chromium, Total	0.00025	J	mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00035	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Iron, Total	1.46		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Lead, Total	0.00052	J	mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Magnesium, Total	32.5		mg/l	0.100	0.015	1	08/15/19 14:43	08/16/19 00:30	EPA 3005A	1,6010D	AB
Manganese, Total	0.9184		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Mercury, Total	0.00012	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 23:21	EPA 7470A	1,7470A	AL
Nickel, Total	0.00583		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Potassium, Total	6.13		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Sodium, Total	53.9		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Zinc, Total	0.00472	J	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:51	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	450		mg/l	0.660	NA	1	08/15/19 14:43	08/16/19 00:30	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-10
Client ID: DUP-080719
Sample Location: NEW HAMPTON, NY
Date Collected: 08/07/19 00:00
Date Received: 08/07/19
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	0.00347	J	mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.03944		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.4154		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.191		mg/l	0.030	0.002	1	08/15/19 14:43	08/21/19 16:05	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Calcium, Dissolved	138		mg/l	0.100	0.035	1	08/15/19 14:43	08/21/19 16:05	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00029	J	mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.437		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	33.9		mg/l	0.100	0.015	1	08/15/19 14:43	08/21/19 16:05	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.9416		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00009	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:37	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.00525		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Potassium, Dissolved	6.09		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Sodium, Dissolved	54.1		mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 11:55	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	484		mg/l	0.660	NA	1	08/15/19 14:43	08/21/19 16:05	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

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): 01-08,10 Batch: WG1272834-1										
Boron, Total	ND		mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 22:36	1,6010D	AB
Calcium, Total	ND		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 22:36	1,6010D	AB
Magnesium, Total	ND		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 22:36	1,6010D	AB

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): 01-08,10 Batch: WG1272834-1										
Hardness	ND		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 22:36	1,6010D	AB

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): 01-08,10 Batch: WG1272839-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Antimony, Total	0.00045	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM

Project Name: ORANGE COUNTY LF **Lab Number:** L1935353

Project Number: 2010-15 (TASK 500) **Report Date:** 08/26/19

Method Blank Analysis
Batch Quality Control

Potassium, Total	ND	mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Selenium, Total	ND	mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Silver, Total	ND	mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Sodium, Total	ND	mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Thallium, Total	ND	mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 10:19	1,6020B	AM
Zinc, Total	ND	mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 10:19	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): 01-05,10 Batch: WG1272846-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Antimony, Dissolved	0.00155	J	mg/l	0.00400	0.00042	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Iron, Dissolved	0.0199	J	mg/l	0.0500	0.0191	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Sodium, Dissolved	0.0794	J	mg/l	0.100	0.0293	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/15/19 14:43	08/16/19 09:25	1,6020B	AM

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

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 Metals - Mansfield Lab for sample(s): 01-05,10 Batch: WG1272849-1										
Boron, Dissolved	0.003	J	mg/l	0.030	0.002	1	08/15/19 14:43	08/15/19 21:50	1,6010D	AB
Calcium, Dissolved	ND		mg/l	0.100	0.035	1	08/15/19 14:43	08/15/19 21:50	1,6010D	AB
Magnesium, Dissolved	ND		mg/l	0.100	0.015	1	08/15/19 14:43	08/15/19 21:50	1,6010D	AB

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): 01-05,10 Batch: WG1272849-1										
Hardness	ND		mg/l	0.660	NA	1	08/15/19 14:43	08/15/19 21:50	1,6010D	AB

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): 01-08,10 Batch: WG1273338-1										
Mercury, Total	0.00010	J	mg/l	0.00020	0.00009	1	08/16/19 11:41	08/19/19 22:56	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

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): 01-05,10 Batch: WG1273398-1										
Mercury, Dissolved	0.00009	J	mg/l	0.00020	0.00009	1	08/16/19 14:45	08/19/19 22:17	1,7470A	AL

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: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08,10 Batch: WG1272834-2								
Boron, Total	100		-		80-120	-		
Calcium, Total	94		-		80-120	-		
Magnesium, Total	98		-		80-120	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-08,10 Batch: WG1272834-2								
Hardness	96		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08,10 Batch: WG1272839-2					
Aluminum, Total	104	-	80-120	-	
Antimony, Total	105	-	80-120	-	
Arsenic, Total	106	-	80-120	-	
Barium, Total	111	-	80-120	-	
Beryllium, Total	106	-	80-120	-	
Cadmium, Total	117	-	80-120	-	
Chromium, Total	108	-	80-120	-	
Cobalt, Total	110	-	80-120	-	
Copper, Total	96	-	80-120	-	
Iron, Total	113	-	80-120	-	
Lead, Total	116	-	80-120	-	
Manganese, Total	109	-	80-120	-	
Nickel, Total	108	-	80-120	-	
Potassium, Total	104	-	80-120	-	
Selenium, Total	110	-	80-120	-	
Silver, Total	111	-	80-120	-	
Sodium, Total	109	-	80-120	-	
Thallium, Total	113	-	80-120	-	
Vanadium, Total	108	-	80-120	-	
Zinc, Total	118	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,10 Batch: WG1272846-2					
Aluminum, Dissolved	106	-	80-120	-	
Antimony, Dissolved	104	-	80-120	-	
Arsenic, Dissolved	114	-	80-120	-	
Barium, Dissolved	110	-	80-120	-	
Beryllium, Dissolved	110	-	80-120	-	
Cadmium, Dissolved	112	-	80-120	-	
Chromium, Dissolved	112	-	80-120	-	
Cobalt, Dissolved	113	-	80-120	-	
Copper, Dissolved	102	-	80-120	-	
Iron, Dissolved	120	-	80-120	-	
Lead, Dissolved	114	-	80-120	-	
Manganese, Dissolved	109	-	80-120	-	
Nickel, Dissolved	113	-	80-120	-	
Potassium, Dissolved	107	-	80-120	-	
Selenium, Dissolved	107	-	80-120	-	
Silver, Dissolved	110	-	80-120	-	
Sodium, Dissolved	113	-	80-120	-	
Thallium, Dissolved	110	-	80-120	-	
Vanadium, Dissolved	113	-	80-120	-	
Zinc, Dissolved	116	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,10 Batch: WG1272849-2					
Boron, Dissolved	107	-	80-120	-	
Calcium, Dissolved	96	-	80-120	-	
Magnesium, Dissolved	100	-	80-120	-	
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-05,10 Batch: WG1272849-2					
Hardness	99	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-08,10 Batch: WG1273338-2					
Mercury, Total	105	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,10 Batch: WG1273398-2					
Mercury, Dissolved	102	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

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): 01-08,10 QC Batch ID: WG1272834-7 WG1272834-8 QC Sample: L1935353-02 Client ID: MW-233D												
Boron, Total	0.084	1	1.11	103		1.10	102		75-125	1		20
Calcium, Total	48.1	10	57.0	89		57.7	96		75-125	1		20
Magnesium, Total	19.5	10	29.1	96		29.4	99		75-125	1		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-08,10 QC Batch ID: WG1272834-7 WG1272834-8 QC Sample: L1935353-02 Client ID: MW-233D												
Hardness	200	66.2	262	94		265	98		75-125	1		20

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

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): 01-08,10 QC Batch ID: WG1272839-3 WG1272839-4 QC Sample: L1935353-02 Client ID: MW-233D											
Aluminum, Total	0.0126	2	2.04	101		2.12	105		75-125	4	20
Antimony, Total	0.00057J	0.5	0.5209	104		0.5343	107		75-125	3	20
Arsenic, Total	0.00086	0.12	0.1333	110		0.1363	113		75-125	2	20
Barium, Total	0.03874	2	2.242	110		2.269	112		75-125	1	20
Beryllium, Total	ND	0.05	0.05292	106		0.05232	105		75-125	1	20
Cadmium, Total	ND	0.051	0.05886	115		0.05962	117		75-125	1	20
Chromium, Total	0.00034J	0.2	0.2102	105		0.2172	109		75-125	3	20
Cobalt, Total	ND	0.5	0.5407	108		0.5432	109		75-125	0	20
Copper, Total	0.00098J	0.25	0.2428	97		0.2506	100		75-125	3	20
Iron, Total	0.0972	1	1.25	115		1.26	116		75-125	1	20
Lead, Total	0.00198	0.51	0.5807	113		0.5882	115		75-125	1	20
Manganese, Total	0.02018	0.5	0.5657	109		0.5848	113		75-125	3	20
Nickel, Total	0.00090J	0.5	0.5234	105		0.5283	106		75-125	1	20
Potassium, Total	1.78	10	11.9	101		12.6	108		75-125	6	20
Selenium, Total	ND	0.12	0.132	110		0.143	119		75-125	8	20
Silver, Total	ND	0.05	0.05372	107		0.05388	108		75-125	0	20
Sodium, Total	119.	10	126	**70**	Q	133	**140**	Q	75-125	5	20
Thallium, Total	ND	0.12	0.1306	109		0.1334	111		75-125	2	20
Vanadium, Total	ND	0.5	0.5444	109		0.5539	111		75-125	2	20
Zinc, Total	0.00850J	0.5	0.5731	115		0.5942	119		75-125	4	20

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

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): 01-05,10 QC Batch ID: WG1272846-3 WG1272846-4 QC Sample: L1935353-02 Client ID: MW-233D									
Aluminum, Dissolved	ND	2	2.13	106	2.17	108	75-125	2	20
Antimony, Dissolved	0.00252J	0.5	0.5708	114	0.5974	119	75-125	5	20
Arsenic, Dissolved	0.00075	0.12	0.1347	112	0.1393	115	75-125	3	20
Barium, Dissolved	0.03620	2	2.234	110	2.298	113	75-125	3	20
Beryllium, Dissolved	ND	0.05	0.06025	120	0.05407	108	75-125	11	20
Cadmium, Dissolved	ND	0.051	0.05922	116	0.05885	115	75-125	1	20
Chromium, Dissolved	ND	0.2	0.2228	111	0.2260	113	75-125	1	20
Cobalt, Dissolved	ND	0.5	0.5577	112	0.5602	112	75-125	0	20
Copper, Dissolved	0.00043J	0.25	0.2528	101	0.2623	105	75-125	4	20
Iron, Dissolved	0.0202J	1	1.19	119	1.17	117	75-125	2	20
Lead, Dissolved	ND	0.51	0.5804	114	0.5936	116	75-125	2	20
Manganese, Dissolved	0.00167	0.5	0.5501	110	0.5568	111	75-125	1	20
Nickel, Dissolved	ND	0.5	0.5584	112	0.5452	109	75-125	2	20
Potassium, Dissolved	1.85	10	12.4	106	12.9	110	75-125	4	20
Selenium, Dissolved	ND	0.12	0.136	113	0.145	121	75-125	6	20
Silver, Dissolved	ND	0.05	0.05471	109	0.05560	111	75-125	2	20
Sodium, Dissolved	125.	10	134	90	135	100	75-125	1	20
Thallium, Dissolved	0.00028J	0.12	0.1306	109	0.1352	113	75-125	3	20
Vanadium, Dissolved	ND	0.5	0.5736	115	0.5714	114	75-125	0	20
Zinc, Dissolved	0.00642J	0.5	0.5867	117	0.6027	120	75-125	3	20

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

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): 01-05,10 QC Batch ID: WG1272849-3 WG1272849-4 QC Sample: L1935353-02 Client ID: MW-233D									
Boron, Dissolved	0.091	1	1.18	109	1.19	110	75-125	1	20
Calcium, Dissolved	48.3	10	58.0	97	57.0	87	75-125	2	20
Magnesium, Dissolved	19.5	10	29.1	96	28.8	93	75-125	1	20
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-05,10 QC Batch ID: WG1272849-3 WG1272849-4 QC Sample: L1935353-02 Client ID: MW-233D									
Hardness	201	66.2	264	95	261	91	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 01-08,10 QC Batch ID: WG1273338-3 WG1273338-4 QC Sample: L1935353-02 Client ID: MW-233D									
Mercury, Total	0.00010J	0.005	0.00470	94	0.00481	96	75-125	2	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,10 QC Batch ID: WG1273398-3 WG1273398-4 QC Sample: L1935353-02 Client ID: MW-233D									
Mercury, Dissolved	0.00010J	0.005	0.00494	99	0.00443	89	75-125	11	20

INORGANICS
&
MISCELLANEOUS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-01
Client ID: MW-233S
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 10:50
Date Received: 08/07/19
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	7.0		A.P.C.U.	5.0	5.0	1	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	309.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	550		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:49	1,9010C/9012B	LH
Nitrogen, Ammonia	0.104		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:06	44,350.1	AT
Nitrogen, Nitrate	15.		mg/l	0.50	0.16	5	-	08/08/19 10:08	44,353.2	MR
Nitrogen, Total Kjeldahl	0.119	J	mg/l	0.300	0.066	1	08/08/19 18:30	08/08/19 22:53	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	6.0	J	mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:37	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	3.76		mg/l	0.500	0.114	1	-	08/11/19 15:34	121,5310C	AG
Phenolics, Total	0.015	J	mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:32	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 07:59	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/19 20:24	44,300.0	AT
Chloride	1.15		mg/l	0.500	0.083	1	-	08/14/19 04:27	44,300.0	DS
Sulfate	135.		mg/l	10.0	4.54	10	-	08/14/19 03:59	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-02
Client ID: MW-233D
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 09:45
Date Received: 08/07/19
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	ND		A.P.C.U.	5.0	5.0	1	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	181.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	550		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:52	1,9010C/9012B	LH
Nitrogen, Ammonia	0.046	J	mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:11	44,350.1	AT
Nitrogen, Nitrate	0.048	J	mg/l	0.10	0.033	1	-	08/08/19 10:09	44,353.2	MR
Nitrogen, Total Kjeldahl	0.153	J	mg/l	0.300	0.066	1	08/12/19 21:00	08/13/19 21:20	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:38	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	0.617		mg/l	0.500	0.114	1	-	08/11/19 15:58	121,5310C	AG
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:33	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:00	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	3.91		mg/l	0.500	0.132	10	-	08/13/19 23:32	44,300.0	AT
Chloride	109.		mg/l	5.00	0.839	10	-	08/14/19 04:36	44,300.0	DS
Sulfate	128.		mg/l	10.0	4.54	10	-	08/14/19 04:36	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-03
Client ID: PZ-4
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 15:05
Date Received: 08/07/19
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	30		A.P.C.U.	25	25.	5	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	476.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	690		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:55	1,9010C/9012B	LH
Nitrogen, Ammonia	0.113		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:08	44,350.1	AT
Nitrogen, Nitrate	0.74		mg/l	0.10	0.033	1	-	08/08/19 09:51	44,353.2	MR
Nitrogen, Total Kjeldahl	0.616		mg/l	0.300	0.066	1	08/08/19 18:30	08/08/19 22:55	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	84.		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:38	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	1.74		mg/l	0.500	0.114	1	-	08/11/19 16:22	121,5310C	AG
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:36	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:00	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.757		mg/l	0.050	0.013	1	-	08/13/19 21:01	44,300.0	AT
Chloride	43.4		mg/l	2.50	0.420	5	-	08/14/19 04:46	44,300.0	DS
Sulfate	105.		mg/l	5.00	2.27	5	-	08/14/19 04:46	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-04
Client ID: MW-3B
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 13:50
Date Received: 08/07/19
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	47		A.P.C.U.	5.0	5.0	1	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	505.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	630		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:56	1,9010C/9012B	LH
Nitrogen, Ammonia	5.48		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:09	44,350.1	AT
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	08/08/19 09:52	44,353.2	MR
Nitrogen, Total Kjeldahl	6.26		mg/l	0.300	0.066	1	08/08/19 18:30	08/08/19 22:56	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:38	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	3.30		mg/l	0.500	0.114	1	-	08/11/19 16:39	121,5310C	AG
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:39	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:00	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.737		mg/l	0.050	0.013	1	-	08/13/19 21:11	44,300.0	AT
Chloride	49.8		mg/l	2.50	0.420	5	-	08/14/19 04:55	44,300.0	DS
Sulfate	33.9		mg/l	5.00	2.27	5	-	08/14/19 04:55	44,300.0	DS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-05
Client ID: MW-220
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/07/19 12:55
Date Received: 08/07/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	170		A.P.C.U.	20	20.	4	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	433.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	620		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:58	1,9010C/9012B	LH
Nitrogen, Ammonia	0.106		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:10	44,350.1	AT
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	08/08/19 09:54	44,353.2	MR
Nitrogen, Total Kjeldahl	0.275	J	mg/l	0.300	0.066	1	08/08/19 18:30	08/08/19 22:57	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:38	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	2.20		mg/l	0.500	0.114	1	-	08/11/19 17:01	121,5310C	AG
Phenolics, Total	0.007	J	mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:39	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:00	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/19 21:20	44,300.0	AT
Chloride	17.0		mg/l	2.50	0.420	5	-	08/14/19 05:05	44,300.0	DS
Sulfate	123.		mg/l	5.00	2.27	5	-	08/14/19 05:05	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-06
Client ID: SW-5
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 15:40
Date Received: 08/07/19
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	80		A.P.C.U.	10	10.	2	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	154.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	330		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:59	1,9010C/9012B	LH
Nitrogen, Ammonia	0.120		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:33	44,350.1	AT
Nitrogen, Nitrate	1.1		mg/l	0.10	0.033	1	-	08/08/19 09:59	44,353.2	MR
Nitrogen, Total Kjeldahl	0.842		mg/l	0.300	0.066	1	08/08/19 18:30	08/08/19 22:58	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	16.		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:38	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	7.15		mg/l	0.500	0.114	1	-	08/11/19 17:20	121,5310C	AG
Phenolics, Total	0.007	J	mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:08	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:00	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.326		mg/l	0.050	0.013	1	-	08/13/19 21:30	44,300.0	AT
Chloride	69.3		mg/l	2.50	0.420	5	-	08/14/19 05:14	44,300.0	DS
Sulfate	22.1		mg/l	5.00	2.27	5	-	08/14/19 05:14	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-07
Client ID: MH-7
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 16:00
Date Received: 08/07/19
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	470		A.P.C.U.	50	50.	10	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	2310		mg CaCO3/L	10.0	NA	5	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	3000		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 13:00	1,9010C/9012B	LH
Nitrogen, Ammonia	342.		mg/l	7.50	2.40	100	08/08/19 16:09	08/08/19 22:34	44,350.1	AT
Nitrogen, Nitrate	0.10		mg/l	0.10	0.033	1	-	08/08/19 10:00	44,353.2	MR
Nitrogen, Total Kjeldahl	356.		mg/l	30.0	6.60	100	08/08/19 18:30	08/08/19 23:02	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	550		mg/l	100	27.	10	08/09/19 21:15	08/09/19 23:38	44,410.4	TL
BOD, 5 day	30.		mg/l	10	NA	5	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	144.		mg/l	20.0	4.56	40	-	08/11/19 17:37	121,5310C	AG
Phenolics, Total	0.022	J	mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:09	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:02	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	13.6		mg/l	1.25	0.330	25	-	08/13/19 23:42	44,300.0	AT
Chloride	1030		mg/l	50.0	8.39	100	-	08/15/19 19:22	44,300.0	AT
Sulfate	90.6		mg/l	1.00	0.454	1	-	08/14/19 05:24	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-08
Client ID: MH-15
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 11:30
Date Received: 08/07/19
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	95		A.P.C.U.	10	10.	2	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	430.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	550		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 13:01	1,9010C/9012B	LH
Nitrogen, Ammonia	18.5		mg/l	0.750	0.240	10	08/08/19 16:09	08/08/19 22:35	44,350.1	AT
Nitrogen, Nitrate	7.2		mg/l	0.10	0.033	1	-	08/08/19 10:01	44,353.2	MR
Nitrogen, Total Kjeldahl	22.2		mg/l	3.00	0.660	10	08/08/19 18:30	08/08/19 23:03	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	16.		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:39	44,410.4	TL
BOD, 5 day	6.7		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	13.6		mg/l	1.00	0.228	2	-	08/11/19 19:46	121,5310C	AG
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:10	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:02	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.839		mg/l	0.050	0.013	1	-	08/13/19 22:26	44,300.0	AT
Chloride	58.8		mg/l	12.5	2.10	25	-	08/14/19 05:52	44,300.0	DS
Sulfate	15.9		mg/l	1.00	0.454	1	-	08/14/19 05:42	44,300.0	DS

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

Lab Number: L1935353
Report Date: 08/26/19

SAMPLE RESULTS

Lab ID: L1935353-10
Client ID: DUP-080719
Sample Location: NEW HAMPTON, NY

Date Collected: 08/07/19 00:00
Date Received: 08/07/19
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	-	08/08/19 07:37	121,2120B	MR
Alkalinity, Total	516.		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
Solids, Total Dissolved	630		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 13:02	1,9010C/9012B	LH
Nitrogen, Ammonia	5.79		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:36	44,350.1	AT
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	08/08/19 10:03	44,353.2	MR
Nitrogen, Total Kjeldahl	6.44		mg/l	0.300	0.066	1	08/08/19 18:30	08/08/19 23:04	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:39	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
Total Organic Carbon	3.33		mg/l	0.500	0.114	1	-	08/11/19 20:10	121,5310C	AG
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:40	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 08:03	1,7196A	JT
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.692		mg/l	0.050	0.013	1	-	08/13/19 22:36	44,300.0	AT
Chloride	50.5		mg/l	12.5	2.10	25	-	08/14/19 06:29	44,300.0	DS
Sulfate	33.2		mg/l	1.00	0.454	1	-	08/14/19 06:20	44,300.0	DS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

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): 01-08,10 Batch: WG1269926-1										
Solids, Total Dissolved	ND		mg/l	10	3.1	1	-	08/08/19 08:50	121,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1269931-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/08/19 07:15	08/08/19 07:58	1,7196A	JT
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1269996-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	08/08/19 09:07	44,353.2	MR
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1270029-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	08/08/19 09:24	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1270037-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/08/19 09:50	08/08/19 12:42	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01,03-08,10 Batch: WG1270102-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	08/08/19 16:09	08/08/19 22:02	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 01,03-08,10 Batch: WG1270144-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	0.022	1	08/08/19 18:30	08/08/19 22:50	4,351.3/.1 (M)	AT
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1270335-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	08/08/19 00:15	08/13/19 21:10	121,5210B	RM
General Chemistry - Westborough Lab for sample(s): 06-08 Batch: WG1270594-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 11:56	4,420.1	BR
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1270794-1										
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:37	44,410.4	TL
General Chemistry - Westborough Lab for sample(s): 01-08,10 Batch: WG1271123-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	08/11/19 14:57	121,5310C	AG
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1271489-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	0.022	1	08/12/19 21:00	08/13/19 21:09	4,351.3/.1 (M)	AT
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1271750-1										
Nitrogen, Ammonia	0.024	J	mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:08	44,350.1	AT
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-08,10 Batch: WG1272055-1										
Chloride	ND		mg/l	0.500	0.083	1	-	08/14/19 00:59	44,300.0	DS
Sulfate	ND		mg/l	1.00	0.454	1	-	08/14/19 00:59	44,300.0	DS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935353
Report Date: 08/26/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-08,10 Batch: WG1272446-1										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/19 16:50	44,300.0	AT
Anions by Ion Chromatography - Westborough Lab for sample(s): 07 Batch: WG1273135-1										
Chloride	ND		mg/l	0.500	0.083	1	-	08/15/19 18:16	44,300.0	AT
Sulfate	ND		mg/l	1.00	0.454	1	-	08/15/19 18:16	44,300.0	AT
General Chemistry - Westborough Lab for sample(s): 01-05,10 Batch: WG1275702-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/22/19 14:55	08/23/19 08:30	4,420.1	BR

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1269926-2								
Solids, Total Dissolved	90		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1269931-2								
Chromium, Hexavalent	108		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1269996-2								
Nitrogen, Nitrate	104		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1270029-2								
Alkalinity, Total	101		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1270037-2 WG1270037-3								
Cyanide, Total	106		102		85-115	4		20
General Chemistry - Westborough Lab Associated sample(s): 01,03-08,10 Batch: WG1270102-2								
Nitrogen, Ammonia	98		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01,03-08,10 Batch: WG1270144-2								
Nitrogen, Total Kjeldahl	100		-		78-122	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1270335-2					
BOD, 5 day	94	-	85-115	-	20
General Chemistry - Westborough Lab Associated sample(s): 06-08 Batch: WG1270594-2					
Phenolics, Total	96	-	70-130	-	
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1270794-2					
Chemical Oxygen Demand	95	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1271123-2					
Total Organic Carbon	104	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1271489-2					
Nitrogen, Total Kjeldahl	94	-	78-122	-	
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1271750-2					
Nitrogen, Ammonia	94	-	90-110	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1272055-2					
Chloride	98	-	90-110	-	
Sulfate	100	-	90-110	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935353

Report Date: 08/26/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1272446-2					
Bromide	98	-	90-110	-	
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 07 Batch: WG1273135-2					
Chloride	99	-	90-110	-	
Sulfate	98	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-05,10 Batch: WG1275702-2					
Phenolics, Total	90	-	70-130	-	

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

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): 01-08,10 QC Batch ID: WG1269931-3 WG1269931-4 QC Sample: L1935353-02 Client ID: MW-233D												
Chromium, Hexavalent	ND	0.1	0.106	106		0.105	105		85-115	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1269996-4 QC Sample: L1935353-02 Client ID: MW-233D												
Nitrogen, Nitrate	0.048J	4	4.3	108		-	-		83-113	-		6
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270029-4 QC Sample: L1935353-02 Client ID: MW-233D												
Alkalinity, Total	181.	100	281	100		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270037-4 WG1270037-5 QC Sample: L1935353-02 Client ID: MW-233D												
Cyanide, Total	ND	0.2	0.199	100		0.219	110		80-120	10		20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270335-4 QC Sample: L1935353-02 Client ID: MW-233D												
BOD, 5 day	ND	100	89	89		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 06-08 QC Batch ID: WG1270594-4 QC Sample: L1935324-01 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.30	75		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270794-3 QC Sample: L1935353-02 Client ID: MW-233D												
Chemical Oxygen Demand	ND	47.6	50	105		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1271123-4 QC Sample: L1935353-02 Client ID: MW-233D												
Total Organic Carbon	0.617	4	4.33	93		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1271489-4 QC Sample: L1935353-02 Client ID: MW-233D												
Nitrogen, Total Kjeldahl	0.153J	8	7.37	92		-	-		77-111	-		24

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

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): 02 QC Batch ID: WG1271750-4 QC Sample: L1935353-02 Client ID: MW-233D											
Nitrogen, Ammonia	0.046J	4	3.55	**89**	Q	-	-		90-110	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1272055-3 WG1272055-4 QC Sample: L1935353-02 Client ID: MW-233D											
Chloride	109.	40	141	**80**	Q	141	**81**	Q	90-110	0	18
Sulfate	128.	80	207	98		207	99		90-110	0	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1272446-3 WG1272446-4 QC Sample: L1935353-02 Client ID: MW-233D											
Bromide	3.91	4	8.59	**117**	Q	9.07	**129**	Q	90-110	5	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 07 QC Batch ID: WG1273135-3 QC Sample: L1936720-03 Client ID: MS Sample											
Chloride	139.	40	172	**83**	Q	-	-		90-110	-	18
Sulfate	27.6	8	34.8	90		-	-		90-110	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-05,10 QC Batch ID: WG1275702-4 QC Sample: L1935353-02 Client ID: MW-233D											
Phenolics, Total	ND	0.4	0.27	**68**	Q	-	-		70-130	-	20

Lab Duplicate Analysis
Batch Quality Control

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

Lab Number: L1935353
Report Date: 08/26/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1269926-3 QC Sample: L1935353-02 Client ID: MW-233D						
Solids, Total Dissolved	550	520	mg/l	6		10
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1269931-5 QC Sample: L1935353-02 Client ID: MW-233D						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1269945-1 QC Sample: L1935353-02 Client ID: MW-233D						
Color, Apparent	ND	ND	A.P.C.U.	NC		
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1269996-3 QC Sample: L1935353-02 Client ID: MW-233D						
Nitrogen, Nitrate	0.048J	0.064J	mg/l	NC		6
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270029-3 QC Sample: L1935353-02 Client ID: MW-233D						
Alkalinity, Total	181.	181	mg CaCO3/L	0		10
General Chemistry - Westborough Lab Associated sample(s): 01,03-08,10 QC Batch ID: WG1270102-3 QC Sample: L1935353-10 Client ID: DUP-080719						
Nitrogen, Ammonia	5.79	5.99	mg/l	3		20
General Chemistry - Westborough Lab Associated sample(s): 01,03-08,10 QC Batch ID: WG1270144-3 QC Sample: L1935353-10 Client ID: DUP-080719						
Nitrogen, Total Kjeldahl	6.44	6.46	mg/l	0		24
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270335-3 QC Sample: L1935353-02 Client ID: MW-233D						
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: L1935353
Report Date: 08/26/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 06-08 QC Batch ID: WG1270594-3 QC Sample: L1935324-01 Client ID: DUP Sample					
Phenolics, Total	ND	0.014J	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1270794-4 QC Sample: L1935353-02 Client ID: MW-233D					
Chemical Oxygen Demand	ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1271123-3 QC Sample: L1935353-02 Client ID: MW-233D					
Total Organic Carbon	0.617	0.604	mg/l	2	20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1271489-3 QC Sample: L1935353-02 Client ID: MW-233D					
Nitrogen, Total Kjeldahl	0.153J	0.189J	mg/l	NC	24
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1271750-3 QC Sample: L1935353-02 Client ID: MW-233D					
Nitrogen, Ammonia	0.046J	0.047J	mg/l	NC	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 07 QC Batch ID: WG1273135-4 QC Sample: L1936720-03 Client ID: DUP Sample					
Sulfate	27.6	27.6	mg/l	0	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 07 QC Batch ID: WG1273135-4 QC Sample: L1936720-03 Client ID: DUP Sample					
Chloride	139.	145	mg/l	4	18
General Chemistry - Westborough Lab Associated sample(s): 01-05,10 QC Batch ID: WG1275702-3 QC Sample: L1935353-02 Client ID: MW-233D					
Phenolics, Total	ND	0.009J	mg/l	NC	20

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

Lab Number: L1935353
Report Date: 08/26/19

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(*)
L1935353-01A	Vial HCl preserved	F	NA		4.4	Y	Absent		NYTCL-8260(14)
L1935353-01B	Vial HCl preserved	F	NA		4.4	Y	Absent		NYTCL-8260(14)
L1935353-01C	Vial HCl preserved	F	NA		4.4	Y	Absent		NYTCL-8260(14)
L1935353-01D	Vial H2SO4 preserved	F	NA		4.4	Y	Absent		TOC-5310(28)
L1935353-01E	Vial H2SO4 preserved	F	NA		4.4	Y	Absent		TOC-5310(28)
L1935353-01F	Plastic 250ml unpreserved	F	7	7	4.4	Y	Absent		-
L1935353-01G	Plastic 250ml unpreserved/No Headspace	F	NA		4.4	Y	Absent		ALK-T-2320(14)
L1935353-01H	Plastic 250ml unpreserved	F	7	7	4.4	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-01I	Plastic 250ml HNO3 preserved	F	<2	<2	4.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-01J	Amber 250ml unpreserved	F	7	7	4.4	Y	Absent		COLOR-A-2120(2)
L1935353-01K	Plastic 250ml NaOH preserved	F	>12	>12	4.4	Y	Absent		TCN-9010(14)
L1935353-01L	Plastic 500ml H2SO4 preserved	F	<2	<2	4.4	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-01M	Amber 1000ml H2SO4 preserved	F	<2	<2	4.4	Y	Absent		NY-TPHENOL-420(28)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-01N	Plastic 950ml unpreserved	F	NA		4.4	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-01X	Plastic 120ml HNO3 preserved Filtrates	F	NA		4.4	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935353-02A	Vial HCl preserved	F	NA		4.4	Y	Absent		NYTCL-8260(14)
L1935353-02A1	Vial HCl preserved	D	NA		4.0	Y	Absent		NYTCL-8260(14)
L1935353-02A2	Vial HCl preserved	D	NA		4.0	Y	Absent		NYTCL-8260(14)
L1935353-02B	Vial HCl preserved	F	NA		4.4	Y	Absent		NYTCL-8260(14)
L1935353-02B1	Vial HCl preserved	D	NA		4.0	Y	Absent		NYTCL-8260(14)
L1935353-02B2	Vial HCl preserved	D	NA		4.0	Y	Absent		NYTCL-8260(14)
L1935353-02C	Vial HCl preserved	F	NA		4.4	Y	Absent		NYTCL-8260(14)
L1935353-02C1	Vial HCl preserved	D	NA		4.0	Y	Absent		NYTCL-8260(14)
L1935353-02C2	Vial HCl preserved	D	NA		4.0	Y	Absent		NYTCL-8260(14)
L1935353-02D	Vial H2SO4 preserved	F	NA		4.4	Y	Absent		TOC-5310(28)
L1935353-02D1	Vial H2SO4 preserved	D	NA		4.0	Y	Absent		TOC-5310(28)
L1935353-02D2	Vial H2SO4 preserved	D	NA		4.0	Y	Absent		TOC-5310(28)
L1935353-02E	Vial H2SO4 preserved	F	NA		4.4	Y	Absent		TOC-5310(28)
L1935353-02E1	Vial H2SO4 preserved	D	NA		4.0	Y	Absent		TOC-5310(28)
L1935353-02E2	Vial H2SO4 preserved	D	NA		4.0	Y	Absent		TOC-5310(28)
L1935353-02F	Plastic 250ml unpreserved	F	<2	<2	4.4	Y	Absent		-
L1935353-02F1	Plastic 250ml unpreserved	D	7	7	4.0	Y	Absent		-
L1935353-02F2	Plastic 250ml unpreserved	D	7	7	4.0	Y	Absent		-
L1935353-02G	Plastic 250ml unpreserved/No Headspace	F	NA		4.4	Y	Absent		ALK-T-2320(14)
L1935353-02G1	Plastic 250ml unpreserved/No Headspace	D	NA		4.0	Y	Absent		ALK-T-2320(14)
L1935353-02G2	Plastic 250ml unpreserved/No Headspace	D	NA		4.0	Y	Absent		ALK-T-2320(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-02H	Plastic 250ml unpreserved	F	7	7	4.4	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-02H1	Plastic 250ml unpreserved	D	7	7	4.0	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-02H2	Plastic 250ml unpreserved	D	7	7	4.0	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-02I	Plastic 250ml HNO3 preserved	F	<2	<2	4.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-02I1	Plastic 250ml HNO3 preserved	D	<2	<2	4.0	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-02I2	Plastic 250ml HNO3 preserved	D	<2	<2	4.0	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-02J	Amber 250ml unpreserved	F	7	7	4.4	Y	Absent		COLOR-A-2120(2)
L1935353-02J1	Amber 250ml unpreserved	D	7	7	4.0	Y	Absent		COLOR-A-2120(2)
L1935353-02J2	Amber 250ml unpreserved	D	7	7	4.0	Y	Absent		COLOR-A-2120(2)
L1935353-02K	Plastic 250ml NaOH preserved	F	>12	>12	4.4	Y	Absent		TCN-9010(14)
L1935353-02K1	Plastic 250ml NaOH preserved	D	>12	>12	4.0	Y	Absent		TCN-9010(14)
L1935353-02K2	Plastic 250ml NaOH preserved	D	>12	>12	4.0	Y	Absent		TCN-9010(14)
L1935353-02L	Plastic 500ml H2SO4 preserved	F	<2	<2	4.4	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-02L1	Plastic 500ml H2SO4 preserved	D	<2	<2	4.0	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-02L2	Plastic 500ml H2SO4 preserved	D	<2	<2	4.0	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-02M	Amber 1000ml H2SO4 preserved	F	7	7	4.4	Y	Absent		NY-TPHENOL-420(28)
L1935353-02M1	Amber 1000ml H2SO4 preserved	D	<2	<2	4.0	Y	Absent		NY-TPHENOL-420(28)
L1935353-02M2	Amber 1000ml H2SO4 preserved	D	<2	<2	4.0	Y	Absent		NY-TPHENOL-420(28)
L1935353-02N	Plastic 950ml unpreserved	F	7	7	4.4	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-02N1	Plastic 950ml unpreserved	D	7	7	4.0	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-02N2	Plastic 950ml unpreserved	D	7	7	4.0	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-02X	Plastic 120ml HNO3 preserved Filtrates	F	NA		4.4	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935353-02X1	Plastic 120ml HNO3 preserved Filtrates	F	NA		4.4	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1935353-03A	Vial HCl preserved	C	NA		2.8	Y	Absent		NYTCL-8260(14)
L1935353-03B	Vial HCl preserved	C	NA		2.8	Y	Absent		NYTCL-8260(14)
L1935353-03C	Vial HCl preserved	C	NA		2.8	Y	Absent		NYTCL-8260(14)
L1935353-03D	Vial H2SO4 preserved	C	NA		2.8	Y	Absent		TOC-5310(28)
L1935353-03E	Vial H2SO4 preserved	C	NA		2.8	Y	Absent		TOC-5310(28)
L1935353-03F	Plastic 250ml unpreserved	C	7	7	2.8	Y	Absent		-
L1935353-03G	Plastic 250ml unpreserved/No Headspace	C	NA		2.8	Y	Absent		ALK-T-2320(14)
L1935353-03H	Plastic 250ml unpreserved	C	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)

*Values in parentheses indicate holding time in days

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

Lab Number: L1935353
Report Date: 08/26/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-03I	Plastic 250ml HNO3 preserved	C	<2	<2	2.8	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-03J	Amber 250ml unpreserved	C	7	7	2.8	Y	Absent		COLOR-A-2120(2)
L1935353-03K	Plastic 250ml NaOH preserved	C	>12	>12	2.8	Y	Absent		TCN-9010(14)
L1935353-03L	Plastic 500ml H2SO4 preserved	C	<2	<2	2.8	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-03M	Amber 1000ml H2SO4 preserved	C	<2	<2	2.8	Y	Absent		NY-TPHENOL-420(28)
L1935353-03N	Plastic 950ml unpreserved	C	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-03X	Plastic 120ml HNO3 preserved Filtrates	C	NA		2.8	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935353-04A	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-04B	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-04C	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-04D	Vial H2SO4 preserved	B	NA		2.3	Y	Absent		TOC-5310(28)
L1935353-04E	Vial H2SO4 preserved	B	NA		2.3	Y	Absent		TOC-5310(28)
L1935353-04F	Plastic 250ml unpreserved	B	NA		2.3	Y	Absent		-
L1935353-04G	Plastic 250ml unpreserved/No Headspace	B	NA		2.3	Y	Absent		ALK-T-2320(14)
L1935353-04H	Plastic 250ml unpreserved	B	7	7	2.3	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)

*Values in parentheses indicate holding time in days

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

Lab Number: L1935353
Report Date: 08/26/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-04I	Plastic 250ml HNO3 preserved	B	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-04J	Amber 250ml unpreserved	B	7	7	2.3	Y	Absent		COLOR-A-2120(2)
L1935353-04K	Plastic 250ml NaOH preserved	B	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1935353-04L	Plastic 500ml H2SO4 preserved	B	<2	<2	2.3	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-04M	Amber 1000ml H2SO4 preserved	B	<2	<2	2.3	Y	Absent		NY-TPHENOL-420(28)
L1935353-04N	Plastic 950ml unpreserved	B	7	7	2.3	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-04X	Plastic 120ml HNO3 preserved Filtrates	B	NA		2.3	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935353-05A	Vial HCl preserved	A	NA		5.1	Y	Absent		NYTCL-8260(14)
L1935353-05B	Vial HCl preserved	A	NA		5.1	Y	Absent		NYTCL-8260(14)
L1935353-05C	Vial HCl preserved	A	NA		5.1	Y	Absent		NYTCL-8260(14)
L1935353-05D	Vial H2SO4 preserved	A	NA		5.1	Y	Absent		TOC-5310(28)
L1935353-05E	Vial H2SO4 preserved	A	NA		5.1	Y	Absent		TOC-5310(28)
L1935353-05F	Plastic 250ml unpreserved	A	7	7	5.1	Y	Absent		-
L1935353-05G	Plastic 250ml unpreserved/No Headspace	A	NA		5.1	Y	Absent		ALK-T-2320(14)
L1935353-05H	Plastic 250ml unpreserved	A	7	7	5.1	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)

*Values in parentheses indicate holding time in days

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

Lab Number: L1935353
Report Date: 08/26/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-05I	Plastic 250ml HNO3 preserved	A	<2	<2	5.1	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-05J	Amber 250ml unpreserved	A	7	7	5.1	Y	Absent		COLOR-A-2120(2)
L1935353-05K	Plastic 250ml NaOH preserved	A	>12	>12	5.1	Y	Absent		TCN-9010(14)
L1935353-05L	Plastic 500ml H2SO4 preserved	A	<2	<2	5.1	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-05M	Amber 1000ml H2SO4 preserved	A	<2	<2	5.1	Y	Absent		NY-TPHENOL-420(28)
L1935353-05N	Plastic 950ml unpreserved	A	7	7	5.1	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-05X	Plastic 120ml HNO3 preserved Filtrates	A	NA		5.1	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935353-06A	Vial HCl preserved	C	NA		2.8	Y	Absent		NYTCL-8260(14)
L1935353-06B	Vial HCl preserved	C	NA		2.8	Y	Absent		NYTCL-8260(14)
L1935353-06C	Vial HCl preserved	C	NA		2.8	Y	Absent		NYTCL-8260(14)
L1935353-06D	Vial H2SO4 preserved	C	NA		2.8	Y	Absent		TOC-5310(28)
L1935353-06E	Vial H2SO4 preserved	C	NA		2.8	Y	Absent		TOC-5310(28)
L1935353-06G	Plastic 250ml unpreserved/No Headspace	C	NA		2.8	Y	Absent		ALK-T-2320(14)
L1935353-06H	Plastic 250ml unpreserved	C	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-06I	Plastic 250ml HNO3 preserved	C	<2	<2	2.8	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-06J	Amber 250ml unpreserved	C	7	7	2.8	Y	Absent		COLOR-A-2120(2)
L1935353-06K	Plastic 250ml NaOH preserved	C	>12	>12	2.8	Y	Absent		TCN-9010(14)
L1935353-06L	Plastic 500ml H2SO4 preserved	C	<2	<2	2.8	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-06M	Amber 1000ml H2SO4 preserved	C	<2	<2	2.8	Y	Absent		NY-TPHENOL-420(28)
L1935353-06N	Plastic 950ml unpreserved	C	7	7	2.8	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-07A	Vial HCl preserved	E	NA		5.6	Y	Absent		NYTCL-8260(14)
L1935353-07B	Vial HCl preserved	E	NA		5.6	Y	Absent		NYTCL-8260(14)
L1935353-07C	Vial HCl preserved	E	NA		5.6	Y	Absent		NYTCL-8260(14)
L1935353-07D	Vial H2SO4 preserved	E	NA		5.6	Y	Absent		TOC-5310(28)
L1935353-07E	Vial H2SO4 preserved	E	NA		5.6	Y	Absent		TOC-5310(28)
L1935353-07G	Plastic 250ml unpreserved/No Headspace	E	NA		5.6	Y	Absent		ALK-T-2320(14)
L1935353-07H	Plastic 250ml unpreserved	E	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-07I	Plastic 250ml HNO3 preserved	E	<2	<2	5.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-07J	Amber 250ml unpreserved	E	7	7	5.6	Y	Absent		COLOR-A-2120(2)
L1935353-07K	Plastic 250ml NaOH preserved	E	>12	>12	5.6	Y	Absent		TCN-9010(14)
L1935353-07L	Plastic 500ml H2SO4 preserved	E	<2	<2	5.6	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-07M	Amber 1000ml H2SO4 preserved	E	<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)

Lab Number: L1935353
Report Date: 08/26/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-07N	Plastic 950ml unpreserved	E	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-08A	Vial HCl preserved	E	NA		5.6	Y	Absent		NYTCL-8260(14)
L1935353-08B	Vial HCl preserved	E	NA		5.6	Y	Absent		NYTCL-8260(14)
L1935353-08C	Vial HCl preserved	E	NA		5.6	Y	Absent		NYTCL-8260(14)
L1935353-08D	Vial H2SO4 preserved	E	NA		5.6	Y	Absent		TOC-5310(28)
L1935353-08E	Vial H2SO4 preserved	E	NA		5.6	Y	Absent		TOC-5310(28)
L1935353-08G	Plastic 250ml unpreserved/No Headspace	E	NA		5.6	Y	Absent		ALK-T-2320(14)
L1935353-08H	Plastic 250ml unpreserved	E	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-08I	Plastic 250ml HNO3 preserved	E	<2	<2	5.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-08J	Amber 250ml unpreserved	E	7	7	5.6	Y	Absent		COLOR-A-2120(2)
L1935353-08K	Plastic 250ml NaOH preserved	E	>12	>12	5.6	Y	Absent		TCN-9010(14)
L1935353-08L	Plastic 500ml H2SO4 preserved	E	<2	<2	5.6	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-08M	Amber 1000ml H2SO4 preserved	E	<2	<2	5.6	Y	Absent		NY-TPHENOL-420(28)
L1935353-08N	Plastic 950ml unpreserved	E	7	7	5.6	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-09A	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-09B	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-10A	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-10B	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-10C	Vial HCl preserved	B	NA		2.3	Y	Absent		NYTCL-8260(14)
L1935353-10D	Vial H2SO4 preserved	B	NA		2.3	Y	Absent		TOC-5310(28)
L1935353-10E	Vial H2SO4 preserved	B	NA		2.3	Y	Absent		TOC-5310(28)
L1935353-10F	Plastic 250ml unpreserved	B	7	7	2.3	Y	Absent		-

*Values in parentheses indicate holding time in days

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

Lab Number: L1935353
Report Date: 08/26/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935353-10G	Plastic 250ml unpreserved/No Headspace	B	NA		2.3	Y	Absent		ALK-T-2320(14)
L1935353-10H	Plastic 250ml unpreserved	B	7	7	2.3	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-10I	Plastic 250ml HNO3 preserved	B	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935353-10J	Amber 250ml unpreserved	B	7	7	2.3	Y	Absent		COLOR-A-2120(2)
L1935353-10K	Plastic 250ml NaOH preserved	B	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1935353-10L	Plastic 500ml H2SO4 preserved	B	<2	<2	2.3	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935353-10M	Amber 1000ml H2SO4 preserved	B	<2	<2	2.3	Y	Absent		NY-TPHENOL-420(28)
L1935353-10N	Plastic 950ml unpreserved	B	7	7	2.3	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935353-10X	Plastic 120ml HNO3 preserved Filtrates	B	NA		2.3	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)

*Values in parentheses indicate holding time in days

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935353
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/26/19

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

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

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935353
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/26/19

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.

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.

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 using acetone as a solvent.

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.

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.

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	**Lab Number:**	L1935353
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/26/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.

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
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.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 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.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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 1 of

Date Rec'd in Lab: 8/8/19

ALPHA Job #: L1935353

Client Information
Client: Sterling Environmental Engineerin
Address: 24 Wade Rd
Latham, NY 12110
Phone: 518-456-4900
Fax: 518-456-3532
Email: mar.wilams@sterlingenvironmenta

Project Information
Project Name: Orange County LF
Project Location: ~~Orange County NY~~ New Hampton, NY
Project #: 2010-15 (Task 500)
(Use Project name as Project #) ☐
Project Manager: Mark Williams /C. Fox
ALPHAQuote #:

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

Deliverables
☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

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

Billing Information
☒ Same as Client Info
PO #

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

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
mark.williams@sterlingenvironmental.com Baseline-*88 Regs*

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TOC	Hexcr,TDS,SO4,BOD,BR, Cl, NO3, Color	Cl, NO3, Color, TURB, Dissolved Total Metals (6 NYTCL Metals)	Total Metals (88 regs)	COD,TKN, NH3	NYTCL 8260	TCN-9010	ALK-T-2320 No Headspac	Sample Specific Comments	Total Bottles
35353-01	MW-233S	8/7/19	1050	Water	PWS	X	X	X	X	X	X	X	X		14
02	MW-233D		945												14
03	PZ-4		1505												14
04	MW-3B		1350												14
05	MW-220		1255												14
06	~~MW-245S~~ PWS SW-5		1540					↓							14
07	~~MW-245D~~ PWS MH-7		1600												13
08	MH-15		1130												13
															13
09	Trip Blank 080719	—	—	Lab Water	—						X				2

Container Type: V P P- P P V P P
Preservative: D A A- C D B E A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
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

Relinquished By:	Date/Time	Received By:	Date/Time
	8/7/19 1650	AAL	8.7.19 16:50
	8.7.19 18:00		8/8/19 2000
AAL 8/8/19 0915			8/8/19 0900

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.

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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 1 of

Date Rec'd in Lab: 8/18/19

ALPHA Job #: L1935353

Project Information

Project Name: Orange County LF
Project Location: ~~Orange County NY~~ New Hampton, NY
Project #: 2010-15 (Task 500)
(Use Project name as Project #) ☐
Project Manager: Mark Williams K. Fox
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information

Client: Sterling Environmental Engineerin
Address: 24 Wade Rd
Latham, NY 12110
Phone: 518-456-4900
Fax: 518-456-3532
Email: mark.williams@sterlingenvironme

Deliverables

☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Regulatory Requirement

☒ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

mark.williams@sterlingenvironmental.com *Baseline 88 Regs*

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TOC	Hexcr,TDS,SO4,BOD,BR CL NO3 Color	~~CL, NO3, Color,~~ TURB	Dissolved total Metals (88 regs)	Total Metals (88 regs)	COD,TKN, NH3	NYTCL 8260 (88 Regs)	TCN-9010	ALK-T-2320 No Headspace	Sample Specific Comments	Total Bottles
35353-02	~~SW-5~~ (PWS) MS-233D	8/7/19	950	Water	PWS	X	X	X	X	X	X	X	X			14
02	~~SW-8~~ (PWS) MSD-233D	↓	955	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			14
-10	~~SW-13~~ (PWS) DUP 080719	↓	—	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			14
	~~MH-7~~ (PWS)															
	~~MH-15~~ (PWS)															
Container Type						V	P	P	P	P	V	P	P			
Preservative						D	A	A	C	D	B	E	A			

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
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

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	8/7/19 1650	[signature] AAL	8-7-19 16:50
[signature]	8-7-19 18:00	[signature] AAL	8/7/19 20:00
[signature] AAL	8/8/19 0040	[signature]	8/8/19 00:40

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.

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

ANALYTICAL REPORT

Lab Number:	L1935761
Client:	Sterling Environmental Eng 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:	08/21/19

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: L1935761
Report Date: 08/21/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1935761-01	MW-245S	WATER	NEW HAMPTON, NY	08/08/19 10:40	08/08/19
L1935761-02	MW-245D	WATER	NEW HAMPTON, NY	08/08/19 09:40	08/08/19
L1935761-03	SW-13	WATER	NEW HAMPTON, NY	08/08/19 11:20	08/08/19
L1935761-04	SW-8	WATER	NEW HAMPTON, NY	08/08/19 11:05	08/08/19
L1935761-05	SEEP080819	WATER	NEW HAMPTON, NY	08/08/19 12:30	08/08/19
L1935761-06	TB080819	WATER	NEW HAMPTON, NY	08/08/19 00:00	08/08/19

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935761
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/21/19

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	**Lab Number:**	L1935761
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/21/19

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.

Total Metals

The WG1272973-3 MS recovery for calcium (60%), performed on L1935761-01, does not apply because the sample concentration is greater than four times the spike amount added.

BOD, 5 day

L1935761-05 was 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.

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:  Amita Naik

Title: Technical Director/Representative Date: 08/21/19

ORGANICS

VOLATILES

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-01
Client ID: MW-245S
Sample Location: NEW HAMPTON, NY

Date Collected: 08/08/19 10:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 11:38
Analyst: KJD

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: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-01
Client ID: MW-245S
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 10:40
Date Received: 08/08/19
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	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	107		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-02
Client ID: MW-245D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 09:40
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:00
Analyst: KJD

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	0.98	J	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: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-02
Client ID: MW-245D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 09:40
Date Received: 08/08/19
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	113		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	109		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-03
Client ID: SW-13
Sample Location: NEW HAMPTON, NY

Date Collected: 08/08/19 11:20
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:22
Analyst: KJD

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: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-03
Client ID: SW-13
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 11:20
Date Received: 08/08/19
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	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	106		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-04
Client ID: SW-8
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 12:44
Analyst: KJD

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: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-04
Client ID: SW-8
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 11:05
Date Received: 08/08/19
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	117		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-05
Client ID: SEEP080819
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 12:30
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 11:16
Analyst: KJD

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: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-05
Client ID: SEEP080819
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 12:30
Date Received: 08/08/19
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	111		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-06
Client ID: TB080819
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 00:00
Date Received: 08/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 08/19/19 10:54
Analyst: KJD

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: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-06
Client ID: TB080819
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 00:00
Date Received: 08/08/19
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	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	100		70-130

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 10:32
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1274262-5					
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: L1935761
Report Date: 08/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/19/19 10:32
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1274262-5					
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	102		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1274262-3 WG1274262-4								
Methylene chloride	98		95		70-130	3		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	100		100		70-130	0		20
2-Chloroethylvinyl ether	95		92		70-130	3		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		99		70-130	1		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	96		98		70-130	2		20
Tetrachloroethene	90		89		70-130	1		20
Chlorobenzene	100		99		75-130	1		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		98		70-130	2		20
cis-1,3-Dichloropropene	98		97		70-130	1		20
Bromoform	99		100		54-136	1		20
Benzene	100		100		70-130	0		20
Toluene	98		96		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		100		64-130	10		20
Bromomethane	100		97		39-139	3		20
Vinyl chloride	100		100		55-140	0		20

Lab Control Sample Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1274262-3 WG1274262-4								
Chloroethane	110		97		55-138	13		20
1,1-Dichloroethene	97		95		61-145	2		20
trans-1,2-Dichloroethene	92		100		70-130	8		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	110		100		70-130	10		20
1,4-Dichlorobenzene	100		100		70-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
Dichlorodifluoromethane	95		91		36-147	4		20
1,1,1,2-Tetrachloroethane	100		99		64-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		99		70-130
Toluene-d8	99		97		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	97		100		70-130

METALS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-01
Client ID: MW-245S
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/08/19 10:40
Date Received: 08/08/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.375		mg/l	0.0100	0.00327	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Arsenic, Total	0.02071		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Barium, Total	0.07048		mg/l	0.00050	0.00017	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Boron, Total	0.026	J	mg/l	0.030	0.002	1	08/15/19 19:30	08/20/19 12:05	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Calcium, Total	129		mg/l	0.100	0.035	1	08/15/19 19:30	08/20/19 12:05	EPA 3005A	1,6010D	LC
Chromium, Total	0.00136		mg/l	0.00100	0.00017	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00057		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Copper, Total	0.00126		mg/l	0.00100	0.00038	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Iron, Total	1.57		mg/l	0.0500	0.0191	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Lead, Total	0.00098	J	mg/l	0.00100	0.00034	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Magnesium, Total	32.8		mg/l	0.100	0.015	1	08/15/19 19:30	08/20/19 12:05	EPA 3005A	1,6010D	LC
Manganese, Total	1.462		mg/l	0.00100	0.00044	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/19/19 16:00	08/20/19 16:01	EPA 7470A	1,7470A	GD
Nickel, Total	0.00163	J	mg/l	0.00200	0.00055	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Potassium, Total	2.16		mg/l	0.100	0.0309	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Sodium, Total	41.2		mg/l	0.150	0.0293	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Zinc, Total	0.00447	J	mg/l	0.01000	0.00341	1	08/15/19 19:30	08/19/19 14:37	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	456		mg/l	0.660	NA	1	08/15/19 19:30	08/20/19 12:05	EPA 3005A	1,6010D	LC

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-01
Client ID: MW-245S
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/08/19 10:40
Date Received: 08/08/19
Field Prep: Not Specified

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	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01120		mg/l	0.00050	0.00016	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06605		mg/l	0.00050	0.00017	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.026	J	mg/l	0.030	0.002	1	08/19/19 11:35	08/20/19 02:46	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Calcium, Dissolved	128		mg/l	0.100	0.035	1	08/19/19 11:35	08/21/19 16:07	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00029	J	mg/l	0.00050	0.00016	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0536		mg/l	0.0500	0.0191	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	31.7		mg/l	0.100	0.015	1	08/19/19 11:35	08/21/19 16:07	EPA 3005A	1,6010D	AB
Manganese, Dissolved	1.402		mg/l	0.00100	0.00044	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/19/19 14:52	08/20/19 18:09	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00066	J	mg/l	0.00200	0.00055	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.10		mg/l	0.100	0.0309	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Sodium, Dissolved	41.9		mg/l	0.150	0.0293	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/19/19 11:35	08/19/19 18:13	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	450		mg/l	0.660	NA	1	08/19/19 11:35	08/21/19 16:07	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-02
Client ID: MW-245D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 09:40
Date Received: 08/08/19
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	0.0136		mg/l	0.0100	0.00327	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Antimony, Total	0.00044	J	mg/l	0.00400	0.00042	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00366		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Barium, Total	0.09246		mg/l	0.00050	0.00017	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Boron, Total	0.048		mg/l	0.030	0.002	1	08/15/19 19:30	08/20/19 12:47	EPA 3005A	1,6010D	LC
Cadmium, Total	0.00011	J	mg/l	0.00020	0.00005	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Calcium, Total	75.0		mg/l	0.100	0.035	1	08/15/19 19:30	08/20/19 12:47	EPA 3005A	1,6010D	LC
Chromium, Total	0.00114		mg/l	0.00100	0.00017	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Iron, Total	1.45		mg/l	0.0500	0.0191	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Lead, Total	0.00110		mg/l	0.00100	0.00034	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Magnesium, Total	26.9		mg/l	0.100	0.015	1	08/15/19 19:30	08/20/19 12:47	EPA 3005A	1,6010D	LC
Manganese, Total	0.1435		mg/l	0.00100	0.00044	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/19/19 16:00	08/20/19 16:03	EPA 7470A	1,7470A	GD
Nickel, Total	0.00100	J	mg/l	0.00200	0.00055	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Potassium, Total	3.88		mg/l	0.100	0.0309	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Sodium, Total	52.1		mg/l	0.150	0.0293	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Zinc, Total	0.01389		mg/l	0.01000	0.00341	1	08/15/19 19:30	08/19/19 14:42	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	298		mg/l	0.660	NA	1	08/15/19 19:30	08/20/19 12:47	EPA 3005A	1,6010D	LC

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-02
Client ID: MW-245D
Sample Location: NEW HAMPTON, NY
Date Collected: 08/08/19 09:40
Date Received: 08/08/19
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	0.00412	J	mg/l	0.0100	0.00327	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00071	J	mg/l	0.00400	0.00042	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00317		mg/l	0.00050	0.00016	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.08438		mg/l	0.00050	0.00017	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Boron, Dissolved	0.048		mg/l	0.030	0.002	1	08/19/19 11:35	08/20/19 02:50	EPA 3005A	1,6010D	AB
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Calcium, Dissolved	73.9		mg/l	0.100	0.035	1	08/19/19 11:35	08/21/19 16:11	EPA 3005A	1,6010D	AB
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00107		mg/l	0.00100	0.00038	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.201		mg/l	0.0500	0.0191	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	26.1		mg/l	0.100	0.015	1	08/19/19 11:35	08/21/19 16:11	EPA 3005A	1,6010D	AB
Manganese, Dissolved	0.1388		mg/l	0.00100	0.00044	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/19/19 14:52	08/20/19 18:10	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00071	J	mg/l	0.00200	0.00055	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Potassium, Dissolved	3.82		mg/l	0.100	0.0309	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Sodium, Dissolved	51.7		mg/l	0.150	0.0293	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/19/19 11:35	08/19/19 19:03	EPA 3005A	1,6020B	AM
Dissolved Hardness by SM 2340B - Mansfield Lab											
Hardness	292		mg/l	0.660	NA	1	08/19/19 11:35	08/21/19 16:11	EPA 3005A	1,6010D	AB

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-03
Client ID: SW-13
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/08/19 11:20
Date Received: 08/08/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.417		mg/l	0.0100	0.00327	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00239		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Barium, Total	0.02943		mg/l	0.00050	0.00017	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Boron, Total	0.025	J	mg/l	0.030	0.002	1	08/15/19 19:30	08/20/19 12:51	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Calcium, Total	49.5		mg/l	0.100	0.035	1	08/15/19 19:30	08/20/19 12:51	EPA 3005A	1,6010D	LC
Chromium, Total	0.00078	J	mg/l	0.00100	0.00017	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00055		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Copper, Total	0.00296		mg/l	0.00100	0.00038	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Iron, Total	1.07		mg/l	0.0500	0.0191	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Lead, Total	0.00072	J	mg/l	0.00100	0.00034	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Magnesium, Total	15.7		mg/l	0.100	0.015	1	08/15/19 19:30	08/20/19 12:51	EPA 3005A	1,6010D	LC
Manganese, Total	0.1417		mg/l	0.00100	0.00044	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/19/19 16:00	08/20/19 16:04	EPA 7470A	1,7470A	GD
Nickel, Total	0.00177	J	mg/l	0.00200	0.00055	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Potassium, Total	2.59		mg/l	0.100	0.0309	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Sodium, Total	45.3		mg/l	0.150	0.0293	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00160	J	mg/l	0.00500	0.00157	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Zinc, Total	0.00628	J	mg/l	0.01000	0.00341	1	08/15/19 19:30	08/19/19 14:46	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	188		mg/l	0.660	NA	1	08/15/19 19:30	08/20/19 12:51	EPA 3005A	1,6010D	LC

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-04
Client ID: SW-8
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/08/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.369		mg/l	0.0100	0.00327	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00228		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Barium, Total	0.02970		mg/l	0.00050	0.00017	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Boron, Total	0.026	J	mg/l	0.030	0.002	1	08/15/19 19:30	08/20/19 12:55	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Calcium, Total	49.0		mg/l	0.100	0.035	1	08/15/19 19:30	08/20/19 12:55	EPA 3005A	1,6010D	LC
Chromium, Total	0.00072	J	mg/l	0.00100	0.00017	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00057		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Copper, Total	0.00278		mg/l	0.00100	0.00038	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Iron, Total	1.01		mg/l	0.0500	0.0191	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Lead, Total	0.00065	J	mg/l	0.00100	0.00034	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Magnesium, Total	15.6		mg/l	0.100	0.015	1	08/15/19 19:30	08/20/19 12:55	EPA 3005A	1,6010D	LC
Manganese, Total	0.1347		mg/l	0.00100	0.00044	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/19/19 16:00	08/20/19 16:06	EPA 7470A	1,7470A	GD
Nickel, Total	0.00184	J	mg/l	0.00200	0.00055	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Potassium, Total	2.59		mg/l	0.100	0.0309	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Sodium, Total	44.7		mg/l	0.150	0.0293	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00161	J	mg/l	0.00500	0.00157	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Zinc, Total	0.00612	J	mg/l	0.01000	0.00341	1	08/15/19 19:30	08/19/19 14:51	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	187		mg/l	0.660	NA	1	08/15/19 19:30	08/20/19 12:55	EPA 3005A	1,6010D	LC

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-05
Client ID: SEEP080819
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/08/19 12:30
Date Received: 08/08/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13.6		mg/l	0.0100	0.00327	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Antimony, Total	0.00043	J	mg/l	0.00400	0.00042	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Arsenic, Total	0.2078		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Barium, Total	0.6886		mg/l	0.00050	0.00017	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00105		mg/l	0.00050	0.00010	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Boron, Total	0.165		mg/l	0.030	0.002	1	08/15/19 19:30	08/20/19 12:59	EPA 3005A	1,6010D	LC
Cadmium, Total	0.00054		mg/l	0.00020	0.00005	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Calcium, Total	142		mg/l	0.100	0.035	1	08/15/19 19:30	08/20/19 12:59	EPA 3005A	1,6010D	LC
Chromium, Total	0.02076		mg/l	0.00100	0.00017	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Cobalt, Total	0.02115		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Copper, Total	0.06615		mg/l	0.00100	0.00038	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Iron, Total	43.9		mg/l	0.0500	0.0191	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Lead, Total	0.03210		mg/l	0.00100	0.00034	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Magnesium, Total	52.6		mg/l	0.100	0.015	1	08/15/19 19:30	08/20/19 12:59	EPA 3005A	1,6010D	LC
Manganese, Total	2.968		mg/l	0.00100	0.00044	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/19/19 16:00	08/20/19 16:08	EPA 7470A	1,7470A	GD
Nickel, Total	0.04256		mg/l	0.00200	0.00055	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Potassium, Total	14.1		mg/l	0.100	0.0309	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Selenium, Total	0.00481	J	mg/l	0.00500	0.00173	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Sodium, Total	42.9		mg/l	0.150	0.0293	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Thallium, Total	0.00014	J	mg/l	0.00050	0.00014	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Vanadium, Total	0.02255		mg/l	0.00500	0.00157	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Zinc, Total	0.1692		mg/l	0.01000	0.00341	1	08/15/19 19:30	08/19/19 14:55	EPA 3005A	1,6020B	AM
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	571		mg/l	0.660	NA	1	08/15/19 19:30	08/20/19 12:59	EPA 3005A	1,6010D	LC

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 Batch: WG1272964-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Iron, Total	0.0227	J	mg/l	0.0500	0.0191	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Sodium, Total	ND		mg/l	0.150	0.0293	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	08/15/19 19:30	08/19/19 12:17	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	08/15/19 19:30	08/19/19 12:17	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): 01-05 Batch: WG1272973-1										
Boron, Total	ND		mg/l	0.030	0.002	1	08/15/19 19:30	08/20/19 11:57	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	08/15/19 19:30	08/20/19 11:57	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	08/15/19 19:30	08/20/19 11:57	1,6010D	LC

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 Batch: WG1272973-1										
Hardness	ND		mg/l	0.660	NA	1	08/15/19 19:30	08/20/19 11:57	1,6010D	LC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1274022-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Antimony, Dissolved	0.00049	J	mg/l	0.00400	0.00042	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Sodium, Dissolved	0.0739	J	mg/l	0.150	0.0293	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	08/19/19 11:35	08/19/19 17:32	1,6020B	AM

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

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 Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1274089-1										
Boron, Dissolved	0.002	J	mg/l	0.030	0.002	1	08/19/19 11:35	08/20/19 01:29	1,6010D	AB
Calcium, Dissolved	ND		mg/l	0.100	0.035	1	08/19/19 11:35	08/21/19 15:38	1,6010D	AB
Magnesium, Dissolved	ND		mg/l	0.100	0.015	1	08/19/19 11:35	08/21/19 15:38	1,6010D	AB

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): 01-02 Batch: WG1274089-1										
Hardness	ND		mg/l	0.660	NA	1	08/19/19 11:35	08/21/19 15:38	1,6010D	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1274092-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	08/19/19 14:52	08/20/19 18:00	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 Batch: WG1274114-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	08/19/19 16:00	08/20/19 15:39	1,7470A	GD

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: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1272964-2								
Aluminum, Total	115		-		80-120	-		
Antimony, Total	109		-		80-120	-		
Arsenic, Total	109		-		80-120	-		
Barium, Total	112		-		80-120	-		
Beryllium, Total	112		-		80-120	-		
Cadmium, Total	116		-		80-120	-		
Chromium, Total	109		-		80-120	-		
Cobalt, Total	109		-		80-120	-		
Copper, Total	104		-		80-120	-		
Iron, Total	113		-		80-120	-		
Lead, Total	113		-		80-120	-		
Manganese, Total	110		-		80-120	-		
Nickel, Total	110		-		80-120	-		
Potassium, Total	110		-		80-120	-		
Selenium, Total	117		-		80-120	-		
Silver, Total	107		-		80-120	-		
Sodium, Total	108		-		80-120	-		
Thallium, Total	103		-		80-120	-		
Vanadium, Total	113		-		80-120	-		
Zinc, Total	114		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1272973-2					
Boron, Total	106	-	80-120	-	
Calcium, Total	100	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-05 Batch: WG1272973-2					
Hardness	100	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1274022-2					
Aluminum, Dissolved	111	-	80-120	-	
Antimony, Dissolved	94	-	80-120	-	
Arsenic, Dissolved	109	-	80-120	-	
Barium, Dissolved	108	-	80-120	-	
Beryllium, Dissolved	101	-	80-120	-	
Cadmium, Dissolved	111	-	80-120	-	
Chromium, Dissolved	102	-	80-120	-	
Cobalt, Dissolved	102	-	80-120	-	
Copper, Dissolved	96	-	80-120	-	
Iron, Dissolved	110	-	80-120	-	
Lead, Dissolved	111	-	80-120	-	
Manganese, Dissolved	103	-	80-120	-	
Nickel, Dissolved	100	-	80-120	-	
Potassium, Dissolved	110	-	80-120	-	
Selenium, Dissolved	116	-	80-120	-	
Silver, Dissolved	101	-	80-120	-	
Sodium, Dissolved	109	-	80-120	-	
Thallium, Dissolved	107	-	80-120	-	
Vanadium, Dissolved	104	-	80-120	-	
Zinc, Dissolved	107	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1274089-2					
Boron, Dissolved	111	-	80-120	-	
Calcium, Dissolved	103	-	80-120	-	
Magnesium, Dissolved	105	-	80-120	-	
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 Batch: WG1274089-2					
Hardness	104	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1274092-2					
Mercury, Dissolved	91	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1274114-2					
Mercury, Total	102	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 QC Batch ID: WG1272964-3 QC Sample: L1935465-01 Client ID: MS Sample												
Aluminum, Total	0.182	2	2.44	113		-	-		75-125	-		20
Antimony, Total	0.0005J	0.5	0.5390	108		-	-		75-125	-		20
Arsenic, Total	0.00244	0.12	0.1345	110		-	-		75-125	-		20
Barium, Total	0.0029	2	2.220	111		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05558	111		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05756	113		-	-		75-125	-		20
Chromium, Total	0.0009J	0.2	0.2167	108		-	-		75-125	-		20
Cobalt, Total	ND	0.5	0.5432	109		-	-		75-125	-		20
Copper, Total	0.0037	0.25	0.2622	103		-	-		75-125	-		20
Iron, Total	0.341	1	1.53	119		-	-		75-125	-		20
Lead, Total	0.0005J	0.51	0.5833	114		-	-		75-125	-		20
Manganese, Total	0.0428	0.5	0.5999	111		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.5389	108		-	-		75-125	-		20
Potassium, Total	2.13	10	13.0	109		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.141	118		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05408	108		-	-		75-125	-		20
Sodium, Total	3.66	10	14.2	105		-	-		75-125	-		20
Thallium, Total	ND	0.12	0.1259	105		-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.5464	109		-	-		75-125	-		20
Zinc, Total	0.02656	0.5	0.5914	113		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 QC Batch ID: WG1272973-3 QC Sample: L1935761-01 Client ID: MW-245S										
Boron, Total	0.026J	1	1.14	114		-	-	75-125	-	20
Calcium, Total	129	10	135	**60**	Q	-	-	75-125	-	20
Magnesium, Total	32.8	10	42.3	95		-	-	75-125	-	20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1272973-3 QC Sample: L1935761-01 Client ID: MW-245S										
Hardness	456	66.2	510	82		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

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): 01-02 QC Batch ID: WG1274022-3 QC Sample: L1933728-01 Client ID: MS Sample										
Aluminum, Dissolved	0.118	2	2.35	112		-	-	75-125	-	20
Antimony, Dissolved	0.00108J	0.5	0.5153	103		-	-	75-125	-	20
Arsenic, Dissolved	0.00174	0.12	0.1333	110		-	-	75-125	-	20
Barium, Dissolved	0.0132	2	2.178	108		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05255	105		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05856	115		-	-	75-125	-	20
Chromium, Dissolved	0.00028J	0.2	0.2089	104		-	-	75-125	-	20
Cobalt, Dissolved	0.0002J	0.5	0.5266	105		-	-	75-125	-	20
Copper, Dissolved	0.00160	0.25	0.2521	100		-	-	75-125	-	20
Iron, Dissolved	0.159	1	2.31	**215**	Q	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5650	111		-	-	75-125	-	20
Manganese, Dissolved	0.0243	0.5	0.5521	106		-	-	75-125	-	20
Nickel, Dissolved	0.00166J	0.5	0.5136	103		-	-	75-125	-	20
Potassium, Dissolved	3.83	10	15.5	117		-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.128	107		-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05190	104		-	-	75-125	-	20
Sodium, Dissolved	21.7	10	33.0	113		-	-	75-125	-	20
Thallium, Dissolved	0.00018J	0.12	0.1285	107		-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5316	106		-	-	75-125	-	20
Zinc, Dissolved	0.00419J	0.5	0.5417	108		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

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): 01-02 QC Batch ID: WG1274089-3 QC Sample: L1900008-111 Client ID: MS Sample									
Boron, Dissolved	0.028J	1	1.12	112	-	-	75-125	-	20
Calcium, Dissolved	23.6	10	33.4	98	-	-	75-125	-	20
Magnesium, Dissolved	4.93	10	14.9	100	-	-	75-125	-	20
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1274089-3 QC Sample: L1900008-111 Client ID: MS Sample									
Hardness	79.1	66.2	145	100	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1274092-3 WG1274092-4 QC Sample: L1936456-21 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00480	96	0.00472	94	75-125	2	20
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1274114-3 WG1274114-4 QC Sample: L1936456-21 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00496	99	0.00494	99	75-125	0	20

Lab Duplicate Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1272964-4 QC Sample: L1935465-01 Client ID: DUP Sample						
Arsenic, Total	0.00244	0.00252	mg/l	3		20
Zinc, Total	0.02656	0.02567	mg/l	3		20
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1272973-4 QC Sample: L1935761-01 Client ID: MW-245S						
Boron, Total	0.026J	0.026J	mg/l	NC		20
Calcium, Total	129	129	mg/l	0		20
Magnesium, Total	32.8	33.0	mg/l	1		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1272973-4 QC Sample: L1935761-01 Client ID: MW-245S						
Hardness	456	458	mg/l	0		20

Lab Duplicate Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1274022-4 QC Sample: L1933728-01 Client ID: DUP Sample					
Antimony, Dissolved	0.00108J	0.00131J	mg/l	NC	20
Arsenic, Dissolved	0.00174	0.00166	mg/l	5	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	0.00028J	0.00029J	mg/l	NC	20
Copper, Dissolved	0.00160	0.00170	mg/l	6	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	0.00166J	0.00160J	mg/l	NC	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	0.00018J	0.00053	mg/l	NC	20
Zinc, Dissolved	0.00419J	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1274089-4 QC Sample: L1900008-111 Client ID: DUP Sample					
Boron, Dissolved	0.028J	0.027J	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1274089-4 QC Sample: L1900008-111 Client ID: DUP Sample					
Calcium, Dissolved	23.6	22.9	mg/l	3	20
Magnesium, Dissolved	4.93	4.76	mg/l	4	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1274089-4 QC Sample: L1900008-111 Client ID: DUP Sample					
Hardness	79.1	76.7	mg/l	3	20

INORGANICS
&
MISCELLANEOUS

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

Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-01
Client ID: MW-245S
Sample Location: NEW HAMPTON, NY

Date Collected: 08/08/19 10:40
Date Received: 08/08/19
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	-	08/09/19 07:43	121,2120B	MR
Alkalinity, Total	355.		mg CaCO3/L	2.00	NA	1	-	08/09/19 09:51	121,2320B	BR
Solids, Total Dissolved	650		mg/l	10	3.1	1	-	08/09/19 08:30	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/12/19 12:30	08/12/19 15:24	1,9010C/9012B	LH
Nitrogen, Ammonia	0.166		mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:24	44,350.1	AT
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	08/09/19 08:40	44,353.2	MR
Nitrogen, Total Kjeldahl	0.244	J	mg/l	0.300	0.066	1	08/12/19 21:00	08/13/19 21:23	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:39	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/09/19 10:00	08/14/19 09:55	121,5210B	TE
Total Organic Carbon	2.35		mg/l	0.500	0.114	1	-	08/12/19 08:46	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:13	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/09/19 06:30	08/09/19 07:02	1,7196A	MA
Anions by Ion Chromatography - Westborough Lab										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/19 18:34	44,300.0	AT
Chloride	52.9		mg/l	5.00	0.839	10	-	08/14/19 03:02	44,300.0	DS
Sulfate	128.		mg/l	10.0	4.54	10	-	08/14/19 03:02	44,300.0	DS

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

Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-02
Client ID: MW-245D
Sample Location: NEW HAMPTON, NY

Date Collected: 08/08/19 09:40
Date Received: 08/08/19
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	23		A.P.C.U.	5.0	5.0	1	-	08/09/19 07:43	121,2120B	MR
Alkalinity, Total	280.		mg CaCO3/L	2.00	NA	1	-	08/09/19 09:51	121,2320B	BR
Solids, Total Dissolved	500		mg/l	10	3.1	1	-	08/09/19 08:30	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/19 11:35	08/13/19 14:51	1,9010C/9012B	LH
Nitrogen, Ammonia	6.86		mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:23	44,350.1	AT
Nitrogen, Nitrate	0.31		mg/l	0.10	0.033	1	-	08/09/19 08:44	44,353.2	MR
Nitrogen, Total Kjeldahl	6.88		mg/l	0.300	0.066	1	08/12/19 21:00	08/13/19 21:24	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:39	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/09/19 10:00	08/14/19 09:55	121,5210B	TE
Total Organic Carbon	1.33		mg/l	0.500	0.114	1	-	08/14/19 06:54	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:14	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/09/19 06:30	08/09/19 07:09	1,7196A	MA
Anions by Ion Chromatography - Westborough Lab										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/19 18:43	44,300.0	AT
Chloride	30.1		mg/l	2.50	0.420	5	-	08/14/19 03:11	44,300.0	DS
Sulfate	105.		mg/l	5.00	2.27	5	-	08/14/19 03:11	44,300.0	DS

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

Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-03
Client ID: SW-13
Sample Location: NEW HAMPTON, NY

Date Collected: 08/08/19 11:20
Date Received: 08/08/19
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	55		A.P.C.U.	10	10.	2	-	08/09/19 07:43	121,2120B	MR
Alkalinity, Total	152.		mg CaCO3/L	2.00	NA	1	-	08/09/19 09:51	121,2320B	BR
Solids, Total Dissolved	350		mg/l	10	3.1	1	-	08/09/19 08:30	121,2540C	DW
Cyanide, Total	0.001	J	mg/l	0.005	0.001	1	08/13/19 11:35	08/13/19 14:52	1,9010C/9012B	LH
Nitrogen, Ammonia	0.145		mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:22	44,350.1	AT
Nitrogen, Nitrate	1.0		mg/l	0.10	0.033	1	-	08/09/19 08:45	44,353.2	MR
Nitrogen, Total Kjeldahl	0.908		mg/l	0.300	0.066	1	08/12/19 21:00	08/13/19 21:24	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	21.		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:40	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/09/19 10:00	08/14/19 09:55	121,5210B	TE
Total Organic Carbon	8.63		mg/l	0.500	0.114	1	-	08/14/19 06:54	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:17	4,420.1	BR
Chromium, Hexavalent	0.004	J	mg/l	0.010	0.003	1	08/09/19 06:30	08/09/19 07:10	1,7196A	MA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.402		mg/l	0.050	0.013	1	-	08/13/19 18:53	44,300.0	AT
Chloride	66.6		mg/l	2.50	0.420	5	-	08/14/19 03:21	44,300.0	DS
Sulfate	23.3		mg/l	5.00	2.27	5	-	08/14/19 03:21	44,300.0	DS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-04
Client ID: SW-8
Sample Location: NEW HAMPTON, NY
Sample Depth:
Matrix: Water

Date Collected: 08/08/19 11:05
Date Received: 08/08/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Color, Apparent	85		A.P.C.U.	10	10.	2	-	08/09/19 07:43	121,2120B	MR
Alkalinity, Total	152.		mg CaCO3/L	2.00	NA	1	-	08/09/19 09:51	121,2320B	BR
Solids, Total Dissolved	350		mg/l	10	3.1	1	-	08/09/19 08:30	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/19 11:35	08/13/19 14:55	1,9010C/9012B	LH
Nitrogen, Ammonia	0.135		mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:21	44,350.1	AT
Nitrogen, Nitrate	1.0		mg/l	0.10	0.033	1	-	08/09/19 08:47	44,353.2	MR
Nitrogen, Total Kjeldahl	0.743		mg/l	0.300	0.066	1	08/12/19 21:00	08/13/19 21:25	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	21.		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:40	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	08/09/19 10:00	08/14/19 09:55	121,5210B	TE
Total Organic Carbon	8.73		mg/l	0.500	0.114	1	-	08/14/19 06:54	121,5310C	DW
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/14/19 04:32	08/14/19 08:14	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/09/19 06:30	08/09/19 07:10	1,7196A	MA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.406		mg/l	0.050	0.013	1	-	08/13/19 19:02	44,300.0	AT
Chloride	66.6		mg/l	2.50	0.420	5	-	08/14/19 03:30	44,300.0	DS
Sulfate	23.2		mg/l	5.00	2.27	5	-	08/14/19 03:30	44,300.0	DS

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

Lab Number: L1935761
Report Date: 08/21/19

SAMPLE RESULTS

Lab ID: L1935761-05
Client ID: SEEP080819
Sample Location: NEW HAMPTON, NY

Date Collected: 08/08/19 12:30
Date Received: 08/08/19
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.	50	50.	10	-	08/09/19 07:43	121,2120B	MR
Alkalinity, Total	605.		mg CaCO3/L	4.00	NA	2	-	08/09/19 09:51	121,2320B	BR
Solids, Total Dissolved	600		mg/l	10	3.1	1	-	08/09/19 08:30	121,2540C	DW
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/19 11:35	08/13/19 14:56	1,9010C/9012B	LH
Nitrogen, Ammonia	12.2		mg/l	0.150	0.048	2	08/13/19 15:19	08/15/19 21:20	44,350.1	AT
Nitrogen, Nitrate	0.17		mg/l	0.10	0.033	1	-	08/09/19 08:48	44,353.2	MR
Nitrogen, Total Kjeldahl	14.6		mg/l	0.300	0.066	1	08/12/19 21:00	08/13/19 21:26	4,351.3/.1 (M)	AT
Chemical Oxygen Demand	350		mg/l	100	27.	10	08/09/19 21:15	08/09/19 23:40	44,410.4	TL
BOD, 5 day	ND		mg/l	20	NA	10	08/09/19 10:00	08/14/19 09:55	121,5210B	TE
Total Organic Carbon	5.47		mg/l	0.500	0.114	1	-	08/14/19 06:54	121,5310C	DW
Phenolics, Total	0.014	J	mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:19	4,420.1	BR
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/09/19 06:30	08/09/19 07:10	1,7196A	MA
Anions by Ion Chromatography - Westborough Lab										
Bromide	0.467		mg/l	0.050	0.013	1	-	08/13/19 19:12	44,300.0	AT
Chloride	42.9		mg/l	0.500	0.083	1	-	08/14/19 06:58	44,300.0	DS
Sulfate	5.32		mg/l	1.00	0.454	1	-	08/14/19 06:58	44,300.0	DS

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 Batch: WG1270431-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	08/09/19 07:10	44,353.2	MR
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1270446-1										
Solids, Total Dissolved	7.0	J	mg/l	10	3.1	1	-	08/09/19 08:30	121,2540C	DW
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1270460-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	08/09/19 06:30	08/09/19 06:57	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1270538-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	08/09/19 10:00	08/14/19 09:55	121,5210B	TE
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1270565-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	08/09/19 09:51	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-03,05 Batch: WG1270596-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/09/19 09:09	08/09/19 12:12	4,420.1	BR
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1270794-1										
Chemical Oxygen Demand	ND		mg/l	10	2.7	1	08/09/19 21:15	08/09/19 23:37	44,410.4	TL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1271230-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	08/12/19 08:46	121,5310C	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1271313-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/12/19 12:30	08/12/19 15:39	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1271489-1										
Nitrogen, Total Kjeldahl	ND		mg/l	0.300	0.022	1	08/12/19 21:00	08/13/19 21:09	4,351.3/.1 (M)	AT
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG1271717-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	08/13/19 11:35	08/13/19 14:22	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1271750-1										
Nitrogen, Ammonia	0.024	J	mg/l	0.075	0.024	1	08/13/19 15:19	08/15/19 21:08	44,350.1	AT
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-05 Batch: WG1272054-1										
Chloride	ND		mg/l	0.500	0.083	1	-	08/14/19 00:59	44,300.0	DS
Sulfate	ND		mg/l	1.00	0.454	1	-	08/14/19 00:59	44,300.0	DS
General Chemistry - Westborough Lab for sample(s): 04 Batch: WG1272085-1										
Phenolics, Total	ND		mg/l	0.030	0.006	1	08/14/19 04:32	08/14/19 08:11	4,420.1	BR

Project Name: ORANGE COUNTY LF
Project Number: 2010-15 (TASK 500)
Lab Number: L1935761
Report Date: 08/21/19

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): 02-05 Batch: WG1272103-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	08/14/19 06:54	121,5310C	DW
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-05 Batch: WG1272447-1										
Bromide	ND		mg/l	0.050	0.013	1	-	08/13/19 17:09	44,300.0	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1270431-2								
Nitrogen, Nitrate	108		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1270446-2								
Solids, Total Dissolved	104		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1270460-2								
Chromium, Hexavalent	99		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1270538-2								
BOD, 5 day	92		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1270565-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-03,05 Batch: WG1270596-2								
Phenolics, Total	88		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1270794-2								
Chemical Oxygen Demand	95		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1271230-2					
Total Organic Carbon	101	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1271313-2 WG1271313-3					
Cyanide, Total	109	108	85-115	1	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1271489-2					
Nitrogen, Total Kjeldahl	94	-	78-122	-	
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG1271717-2 WG1271717-3					
Cyanide, Total	106	106	85-115	0	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1271750-2					
Nitrogen, Ammonia	94	-	90-110	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-05 Batch: WG1272054-2					
Chloride	98	-	90-110	-	
Sulfate	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 04 Batch: WG1272085-2					
Phenolics, Total	76	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: ORANGE COUNTY LF

Project Number: 2010-15 (TASK 500)

Lab Number: L1935761

Report Date: 08/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG1272103-2					
Total Organic Carbon	108	-	90-110	-	
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-05 Batch: WG1272447-2					
Bromide	98	-	90-110	-	

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

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): 01-05 QC Batch ID: WG1270431-4 QC Sample: L1935761-01 Client ID: MW-245S												
Nitrogen, Nitrate	ND	4	4.1	102		-	-		83-113	-		6
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270460-4 QC Sample: L1935761-01 Client ID: MW-245S												
Chromium, Hexavalent	ND	0.1	0.098	98		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270538-4 QC Sample: L1935761-01 Client ID: MW-245S												
BOD, 5 day	ND	100	63	63		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270565-4 QC Sample: L1935741-02 Client ID: MS Sample												
Alkalinity, Total	57.4	100	160	103		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-03,05 QC Batch ID: WG1270596-4 QC Sample: L1900008-59 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.30	75		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270794-3 QC Sample: L1935353-02 Client ID: MS Sample												
Chemical Oxygen Demand	ND	47.6	50	105		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1271230-4 QC Sample: L1934469-01 Client ID: MS Sample												
Total Organic Carbon	14.7	80	82.7	85		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1271313-4 WG1271313-5 QC Sample: L1935927-03 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.192	96		0.194	97		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1271489-4 QC Sample: L1935353-02 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	0.153J	8	7.37	92		-	-		77-111	-		24

Matrix Spike Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

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): 02-05 QC Batch ID: WG1271717-4 WG1271717-5 QC Sample: L1935927-05 Client ID: MS Sample										
Cyanide, Total	ND	0.2	0.199	100		0.202	101	80-120	1	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1271750-4 QC Sample: L1935353-02 Client ID: MS Sample										
Nitrogen, Ammonia	0.046J	4	3.55	**89**	Q	-	-	90-110	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1272054-3 QC Sample: L1936254-01 Client ID: MS Sample										
Chloride	345.	100	442	97		-	-	90-110	-	18
Sulfate	75.9	200	284	103		-	-	90-110	-	20
General Chemistry - Westborough Lab Associated sample(s): 04 QC Batch ID: WG1272085-4 QC Sample: L1935761-04 Client ID: SW-8										
Phenolics, Total	ND	0.4	0.28	70		-	-	70-130	-	20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1272103-4 QC Sample: L1936166-01 Client ID: MS Sample										
Total Organic Carbon	9.15	16	26.8	110		-	-	80-120	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1272447-3 QC Sample: L1936078-01 Client ID: MS Sample										
Bromide	ND	0.4	0.627	**157**	Q	-	-	90-110	-	20

Lab Duplicate Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270431-3 QC Sample: L1935761-01 Client ID: MW-245S						
Nitrogen, Nitrate	ND	0.044J	mg/l	NC		6
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270445-1 QC Sample: L1935761-05 Client ID: SEEP080819						
Color, Apparent	130	140	A.P.C.U.	7		
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270446-3 QC Sample: L1935761-01 Client ID: MW-245S						
Solids, Total Dissolved	650	640	mg/l	2		10
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270460-3 QC Sample: L1935761-01 Client ID: MW-245S						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270538-3 QC Sample: L1935761-01 Client ID: MW-245S						
BOD, 5 day	ND	ND	mg/l	NC		35
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270565-3 QC Sample: L1935741-01 Client ID: DUP Sample						
Alkalinity, Total	42.5	42.3	mg CaCO3/L	0		10
General Chemistry - Westborough Lab Associated sample(s): 01-03,05 QC Batch ID: WG1270596-3 QC Sample: L1900008-59 Client ID: DUP Sample						
Phenolics, Total	ND	0.014J	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1270794-4 QC Sample: L1935353-02 Client ID: DUP Sample						
Chemical Oxygen Demand	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1271230-3 QC Sample: L1934469-01 Client ID: DUP Sample						
Total Organic Carbon	14.7	15.3	mg/l	4		20

Lab Duplicate Analysis
Batch Quality Control

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

Lab Number: L1935761
Report Date: 08/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1271489-3 QC Sample: L1935353-02 Client ID: DUP Sample					
Nitrogen, Total Kjeldahl	0.153J	0.189J	mg/l	NC	24
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1271750-3 QC Sample: L1935353-02 Client ID: DUP Sample					
Nitrogen, Ammonia	0.046J	0.047J	mg/l	NC	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1272054-4 QC Sample: L1936254-01 Client ID: DUP Sample					
Chloride	345.	348	mg/l	1	18
Sulfate	75.9	77.1	mg/l	2	20
General Chemistry - Westborough Lab Associated sample(s): 04 QC Batch ID: WG1272085-3 QC Sample: L1935761-04 Client ID: SW-8					
Phenolics, Total	ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG1272103-3 QC Sample: L1936166-01 Client ID: DUP Sample					
Total Organic Carbon	9.15	10.1	mg/l	10	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1272447-4 QC Sample: L1936078-01 Client ID: DUP Sample					
Bromide	ND	0.143	mg/l	NC	20

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

Lab Number: L1935761
Report Date: 08/21/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935761-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-01D	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-01E	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-01F	Plastic 250ml unpreserved/No Headspace	A	NA		3.5	Y	Absent		ALK-T-2320(14)
L1935761-01G	Plastic 250ml unpreserved	A	7	7	3.5	Y	Absent		-
L1935761-01H	Plastic 250ml unpreserved	A	7	7	3.5	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-01I	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935761-01J	Plastic 250ml NaOH preserved	A	>12	>12	3.5	Y	Absent		TCN-9010(14)
L1935761-01K	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		COLOR-A-2120(2)
L1935761-01L	Plastic 500ml H2SO4 preserved	A	<2	<2	3.5	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935761-01M	Plastic 950ml unpreserved	A	7	7	3.5	Y	Absent		SO4-300(28),CL-300(28),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-01N	Amber 1000ml H2SO4 preserved	A	<2	<2	3.5	Y	Absent		NY-TPHENOL-420(28)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935761-01W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.5	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935761-02A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-02B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-02C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-02D	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-02E	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-02F	Plastic 250ml unpreserved/No Headspace	A	NA		3.5	Y	Absent		ALK-T-2320(14)
L1935761-02G	Plastic 250ml unpreserved	A	7	7	3.5	Y	Absent		-
L1935761-02H	Plastic 250ml unpreserved	A	7	7	3.5	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-02I	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935761-02J	Plastic 250ml NaOH preserved	A	>12	>12	3.5	Y	Absent		TCN-9010(14)
L1935761-02K	Amber 250ml unpreserved	A	7	7	3.5	Y	Absent		COLOR-A-2120(2)
L1935761-02L	Plastic 500ml H2SO4 preserved	A	<2	<2	3.5	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935761-02M	Plastic 950ml unpreserved	A	7	7	3.5	Y	Absent		SO4-300(28),CL-300(28),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-02N	Amber 1000ml H2SO4 preserved	A	<2	<2	3.5	Y	Absent		NY-TPHENOL-420(28)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935761-02W	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.5	Y	Absent		B-SI(180),CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),ZN-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),HARDS(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),MG-SI(180),SB-6020S(180),AL-6020S(180),CA-SI(180),CD-6020S(180),HG-S(28)
L1935761-03A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-03B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-03C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-03D	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-03E	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-03F	Plastic 250ml unpreserved/No Headspace	B	NA		2.9	Y	Absent		ALK-T-2320(14)
L1935761-03G	Plastic 250ml unpreserved	B	7	7	2.9	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-03H	Plastic 250ml HNO3 preserved	B	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935761-03I	Plastic 250ml NaOH preserved	B	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1935761-03J	Amber 250ml unpreserved	B	7	7	2.9	Y	Absent		COLOR-A-2120(2)
L1935761-03K	Plastic 500ml H2SO4 preserved	B	<2	<2	2.9	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935761-03L	Plastic 950ml unpreserved	B	7	7	2.9	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-03M	Amber 1000ml H2SO4 preserved	B	<2	<2	2.9	Y	Absent		NY-TPHENOL-420(28)
L1935761-04A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-04B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-04C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-04D	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935761-04E	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-04F	Plastic 250ml unpreserved/No Headspace	B	NA		2.9	Y	Absent		ALK-T-2320(14)
L1935761-04G	Plastic 250ml unpreserved	B	7	7	2.9	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-04H	Plastic 250ml HNO3 preserved	B	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935761-04I	Plastic 250ml NaOH preserved	B	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1935761-04J	Amber 250ml unpreserved	B	7	7	2.9	Y	Absent		COLOR-A-2120(2)
L1935761-04K	Plastic 500ml H2SO4 preserved	B	<2	<2	2.9	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935761-04L	Plastic 950ml unpreserved	B	7	7	2.9	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-04M	Amber 1000ml H2SO4 preserved	B	<2	<2	2.9	Y	Absent		NY-TPHENOL-420(28)
L1935761-05A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-05B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-05C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)
L1935761-05D	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-05E	Vial H2SO4 preserved	A	NA		3.5	Y	Absent		TOC-5310(28)
L1935761-05F	Plastic 250ml unpreserved/No Headspace	C	NA		3.2	Y	Absent		ALK-T-2320(14)
L1935761-05G	Plastic 250ml unpreserved	C	7	7	3.2	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-05H	Plastic 250ml HNO3 preserved	C	<2	<2	3.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),B-TI(180),PB-6020T(180),BE-6020T(180),MN-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),CA-TI(180),CO-6020T(180),HARDT(180)
L1935761-05I	Plastic 250ml NaOH preserved	C	>12	>12	3.2	Y	Absent		TCN-9010(14)

*Values in parentheses indicate holding time in days

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

Lab Number: L1935761
Report Date: 08/21/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1935761-05J	Amber 250ml unpreserved	C	7	7	3.2	Y	Absent		COLOR-A-2120(2)
L1935761-05K	Plastic 500ml H2SO4 preserved	C	<2	<2	3.2	Y	Absent		TKN-351(28),COD-410-LOW(28),NH3-350(28)
L1935761-05L	Plastic 950ml unpreserved	C	7	7	3.2	Y	Absent		SO4-300(28),CL-300(28),HEXCR-7196(1),BOD-5210(2),BR-300(28),NO3-353(2),TDS-2540(7)
L1935761-05M	Amber 1000ml H2SO4 preserved	C	<2	<2	3.2	Y	Absent		NY-TPHENOL-420(28)
L1935761-06A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935761
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/21/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
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

Project Name:	ORANGE COUNTY LF	**Lab Number:**	L1935761
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/21/19

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.

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.

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 using acetone as a solvent.

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.

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.

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	**Lab Number:**	L1935761
Project Number:	2010-15 (TASK 500)	**Report Date:**	08/21/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.

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
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.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 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.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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 1 of 1

Date Rec'd in Lab: 08/08/19

ALPHA Job #: L1935761

Client Information

Client: Sterling Environmental Engineerin
Address: 24 Wade Rd
Latham, NY 12110
Phone: 518-456-4900
Fax: 518-456-3532
Email: mar.wilams@sterlingenvironment

Project Information

Project Name: Orange County LF
Project Location: ~~Orange County NY~~ NEW HAMPTON, NY
Project #: 2010-15 (Task 500)
(Use Project name as Project #) ☐
Project Manager: Mark Williams / C. Fox
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Billing Information

☒ Same as Client Info
PO #

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: NA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

mark.williams@sterlingenvironmental.com Baseline-*88 Regs*

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TOC	Hexcr,TDS,SO4,BOD,BR Cl, NO3, Color	~~Cl, NO3, Color, TURB~~ Dissolved Total Metals (22 mets)	Total Metals (88 regs)	COD,TKN, NH3	NYTCL 8260	TCN-9010	ALK-T-2320 No Headspac	Sample Specific Comments	Total # Bottles
3576-01	~~MW-233S~~ MW-245S	8/8/19	1040	Water	AC/BS	X	X	X	X	X	X	X	X		14
-02	~~MW-233D~~ MW-245D	8/8/19	0940					X							14
-03	~~PZ4~~ SW-13		1120												13
-04	~~MW-5~~ SW-8		1105												13
-05	~~MW-220~~ SEEP080819		1230												13
	~~MW-245S~~ one														
	~~MW-245D~~														
-06	one ~~Trip Blanks~~ TB080819	8/8/19	—	Lab Water	—						X			1	2

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

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

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

Container Type	V	P	P	P	P	V	P	P
Preservative	D	A	A	C	D	B	E	A

Relinquished By:	Date/Time	Received By:	Date/Time
	8/8/19 2000		8/9/19 22
	8/8/19 2215		

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.

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