design/construction solutions

February 12, 2019

Mr. David Chiusano
New York State Department of Environmental Conservation
Division of Environmental Remediation, Bureau E, Section A
625 Broadway
Albany, New York 12233
David.Chiusano@dec.ny.gov

RE: Submission of the 2018 Periodic Review Report
South Hill Dump, Town of Cortlandville, New York
CHA Project No.: 34236
NYSDEC Site No.: 712009

Dear Mr. Chiusano,

On behalf of the Town of Cortlandville, attached please find a copy of the revised 2018 Periodic Review Report for the South Hill Dump. The site was observed to be in overall good condition during the 2018 activities, with no observed erosion, scour, animal burrows or leachate. The Town mowed the landfill once in June 2018 after the first site inspection. CHA has recommended that the landfill be mowed twice in future years, once at the beginning of the growing season, and once toward the end. The most recent round of monitoring did confirm some exceedances of standards in groundwater and surface water. Therefore, it is recommended that the site monitoring program continue; however, based upon the limited changes in groundwater and surface water quality, CHA recommends that the groundwater/surface water/sediment monitoring event be reduced to once every 24-months, with the next round of sampling occurring in September 2020. No changes to the site-wide inspections, or operation and maintenance plans are recommended at this time. If the Department agrees to the proposed change to the monitoring frequency, please provide your written approval

If you have any questions, please do not hesitate to contact me at (315) 471-3920.

Sincerely,

Scott M. Smith, PE
Associate Vice President

SJM/sms

cc:
Mr. Richard Jones, NYSDOH richard.jones@health.ny.gov
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2018 PERIODIC REVIEW REPORT

South Hill Dump
Sommerville Road
Cortlandville, New York

New York State
Department of Environmental Conservation
Site Number: 712009

CHA Project Number: 34236

Prepared for:

Town of Cortlandville
Raymond G. Thorpe Municipal Building
3577 Terrace Road
Cortland, New York 13045

Prepared by:

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January 2019

Revised: February 2019

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Appendix B	Institutional & Engineering Controls Certification Forms
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LIST OF ACRONYMS & ABBREVIATIONS

CHA	CHA Consulting, Inc.
DCE	cis-1,2-Dichloroethylene
EC	Engineering Controls
FER	Final Engineering Report
IC	Institutional Controls
LTM	Long Term Monitoring
MACTEC	MACTEC Engineering and Consulting, P.C.
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PAH	Polyaromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PRR	Periodic Review Report
RI	Remedial Investigation
ROD	Record of Decision
SMP	Site Management Plan
SVOC	Semi-Volatile Organic Compound
TCE	Trichloroethene
TMP	Tax Map Parcel
TOGS	Technical & Operational Guidance Series
USEPA	Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 SITE OVERVIEW

The South Hill Dump inactive hazardous waste disposal site (Site) was remediated in accordance with the Record of Decision (ROD) dated January 2008. A detailed description of the remedial actions completed at the Site is discussed in Section 1.3. On December 5th, 2016, the Town of Cortlandville (Town) entered an Order on Consent (Index No. R7-20150122-34) with the New York State Department of Environmental Conservation (NYSDEC) to implement the Site Management Plan (SMP), approved by NYSDEC in November 2015. This Periodic Review Report (PRR) is the third sampling event since the completion of the remedy and is required as an element of the SMP developed for the Site and documents the groundwater monitoring event and site-wide inspection completed in 2018.

The Site is a 10.4-acre parcel located off of Sommerville Road in the Town of Cortlandville, Cortland County, New York and is identified as Tax Map Parcel (TMP) No. 109.00-01-02.000 on the Cortland County Tax Map. The Site is bounded by South Hill Road to the north and surrounded by forested land to the west, south, and east. Agricultural land is the primary land use along the north side of South Hill Road. A vicinity location map of the Site is included as Figure 1. An aerial image showing the boundaries of the Site is provided as Figure 2.

1.1 SITE BACKGROUND

The Site was reportedly used as a local waste disposal location by residents as early at 1949 and officially operated as an unlined solid waste disposal facility, controlled by the Town of Cortlandville, from approximately 1960 to 1972. Industrial and municipal wastes were accepted from the Town of Cortlandville, Town of Solon, and the Village of McGraw; however, access to the Site was reportedly unrestricted during this time. Site operations included pushing the waste over the working face of the landfill with cover material spread one or more times per week; however, prior to remedial action, various types of waste could be observed protruding from the surface of the landfill.

In 1990, the NYSDEC conducted a site-wide inspection and observed the presence of multiple drum carcasses as well as leachate seeps emanating from the landfill. During this inspection soil and leachate samples were collected, revealing the presence of chlorinated solvents and pesticides. In February 1991, the Site was assigned a Class 2 Hazardous Waste Site designation (sites considered to be a significant threat to the public health or environment - action required) based on the results of the 1990 site-wide inspection and the fact that laboratory analysis identified the presence of pesticides and chlorinated solvents. Based on findings from intermittent sampling events from 1991

through 1994, a Remedial Investigation (RI) was proposed. The RI was conducted by Parsons Engineering Science, Inc, under contract by the NYSDEC. RI field activities included:

- The excavation of test pits to determine the vertical extent of solid waste, collection of subsurface soil samples, and characterization of the shallow lithology;
- The collection of samples from leachate seeps and the intermittent stream on the southeastern most region of the Site; and
- The installation of soil borings and groundwater monitoring wells to facilitate the collection of subsurface soil samples (during the boring installation) and groundwater samples following the completion of the well installations.

A feasibility study and remedial action were recommended in the RI Report due to the shallow depth to fractured bedrock at the Site, overall condition of the landfill at the time of the investigation, and analytical results confirming the presence of soil, surface water, and groundwater contamination. Following development of a feasibility study to evaluate remedial alternatives for the Site, MACTEC Engineering and Consulting, P.C. (MACTEC) conducted remedial actions at the Site in 2011 and 2012. A more detailed discussion of the Site remedial actions is provided in the SMP (MACTEC, 2015) and are summarized in Section 1.3 of this document. After the remedial actions were performed, the Site was reclassified as a Class 4 Inactive Hazardous Waste Site (Site Code 712009) designation (a site properly closed but requiring continued management) by the NYSDEC.

1.2 NATURE AND EXTENT OF CONTAMINATION

The following types of contaminants were identified on the Site during the RI and remedial actions:

- Volatile organic compounds (VOCs)
  - Trichloroethene
  - 1,2-dichloroethene
- Semi-volatile organic compounds (SVOCs)
  - Polyaromatic Hydrocarbons (PAHs)
- Polychlorinated biphenyls (PCBs)
- Heavy metals
  - Copper
  - Mercury
  - Nickel
  - Zinc
  - Cadmium

1.3 SUMMARY OF SITE REMEDY

The selected remedy for the Site included the following major components:

- Consolidation of waste from outside the proposed landfill boundary to within the landfill boundary;
- Installation of a sedimentation basin for additional erosion and sediment control;
- Grading of the landfill within the new boundary;
- Removal of bulk waste uncovered during grading and excavation of down-drain trenches;
- Installation of sloped benches and down-drains to reduce the likelihood of scour;
- Installation of landfill cover system, gas vents, perimeter access road waterbars to convey water across the Site roadways, and stormwater controls; and
- Seeding and mulching of vegetated areas.

In addition to the closure of the landfill, the Site remedy required that an Environmental Easement be placed on the property to (1) require compliance with the November 2015 SMP; (2) restrict the use of groundwater as a potable water source; (3) periodically certify the Institutional Controls/Engineering Controls (IC/ECs) are in place and unchanged, which is included in this PRR; and, (4) limit the use and development of the Site to closed and capped/covered landfill only. The Environmental Easement for the Site was executed by the NYSDEC on September 30, 2013, and recorded with the Cortland County Clerk on October 11, 2013, and included in Appendix C of the SMP. A Final Engineering Report (FER) was written and submitted to the NYSDEC by MACTEC in 2014.

1.4 SITE MANAGEMENT STATUS

This PRR was prepared by CHA Consulting, Inc. (CHA) to document the status of the controls, established by the SMP, during 2018. The SMP requirements include:

- An annual inspection of the ICs and ECs; and
- Long-term monitoring (LTM) of:
    - Groundwater;
    - Surface water; and
    - Sediment.

2.0 INSTITUTIONAL/ENGINEERING CONTROLS COMPLIANCE REPORT

ICs and ECs have been established to protect public health and the environment for future use of the Site. The IC/ECs are designed to:

- Prevent ingestion/direct contact with remaining contamination;
- Prevent inhalation of or exposure to contaminants volatilizing from remaining contamination;
- Prevent ingestion of groundwater with contaminant levels that exceed drinking water standards; and
- Prevent contact with or inhalation of volatiles from contaminated groundwater.

2.1 INSTITUTIONAL CONTROLS

ICs are required to implement, maintain and monitor the ECs, control disturbance of contamination to prevent future exposure, and limit the use of the Site to its current use as a capped/covered landfill. ICs must remain in place unless the Environmental Easement is amended or terminated. The ICs implemented under the SMP include:

- Compliance with the Environmental Easement;
- Operation and maintenance of the ECs as specified in Section 4.0 of the SMP;
- Inspection and certification of the ECs on a semi-annual basis (i.e. in the spring and the fall);
- Implementation of the long-term environmental monitoring as defined in Section 3.0 of the SMP;
- Protection and replacement, as necessary, of on-Site environmental monitoring devices; and
- Preparation of an annual report to regulatory agencies, as defined by the SMP.

2.2 ENGINGEERING CONTROLS

2.2.1 Landfill Cover System

The landfill cover prevents exposure to the remaining contamination at the Site. The cover consists of 18-inches of cover soil and 6-inches of vegetated topsoil for an overall cover thickness of 24-inches. In the event the landfill cover is penetrated, removed, or severely disturbed, an Excavation Plan included in Section 2.4 of the SMP, should be followed for restoration of the cover system.

2.2.2 Site Access Controls

Site access is controlled by a chain-link fence along South Hill Road and a locked gate at the vehicle entrance. A stone road provides access around the perimeter of the landfill boundary.

2.2.3 Surface Water Drainage Conveyance Controls

The perimeter access roads include waterbars to adequately convey surface water and prevent erosion of the stone road. Stone drainage pathways on the landfill cover convey surface water to a riprap-lined drainage swale along the eastern side of the landfill and ultimately to the stormwater detention basin on the southern side of the landfill. The stormwater detention basin outlet creates an intermittent flow of water that discharges to an unnamed stream which then discharges to Hoxie Gorge Creek.

2.2.4 Landfill Gas Vents

Seven passive landfill gas vents were installed to collect potential landfill gas for direct venting to the atmosphere. These gas vents reduce the potential for accumulation and migration of landfill gas in the subsurface.

2.3 2018 IC/EC INSPECTION

In accordance with the SMP, CHA performed Site inspections on June 7th and October 24th, 2018. The landfill inspection forms associated with each inspection are included in Appendix A. The results of the inspection indicate the following:

- Landfill cover was in relatively good condition; there was no evidence of scour or erosion, however, the grass was overgrown during both site inspections. The Town mowed the landfill after the initial inspection, on June 18th and 19th (shown in the Appendix A Site Inspection Logs), however they did not come out for a second mowing prior to the end of the season;
- Landfill gas vents were in good condition;
- Monitoring wells were in good condition;
- No large saplings, animal burrows, or leachate seeps were observed during the site inspections;
- The eastern drainage swale was in good condition; and
- No leachate seeps were observed.

At the conclusion of the field activities, CHA recommended that the landfill be mowed twice per year in order to promote healthy vegetative growth, reduce mold, and discourage growth of

undesirable vegetation. The mowing is recommended to occur at the beginning of the season (June) and towards the end of the growing season (September).

In addition to the landfill inspections, CHA performed an inspection of the monitoring well network. The results from this inspection indicate that the monitoring wells were in generally good condition, and no repairs are recommended as a result of the 2018 inspections. However, CHA noted that MW-3SR2 and MW-3BR2 are flush mounted wells and the casings have been completely filled by surface water.

2.4 IC/EC CERTIFICATION

The IC and EC Certification Forms are included in Appendix B. ECs, consisting of the soil cover system, Site access controls, surface water conveyance system, and landfill gas vents were in place and functioning properly during the reporting period. These controls have been and continue to be effective in preventing exposure of the public to remaining contaminants in soil and groundwater at the Site. The SMP is being implemented and based on this review, the remedy continues to be protective of public health and/or the environment and compliant with the decision document. At this time, it is recommended that all controls for the Site remain in place. However, following a discussion with NYSDEC on the groundwater monitoring, CHA is recommending reducing the groundwater, sediment and surface water sampling frequency from one round of sampling every 15 months to one round of sampling every 24 months.

3.0 MONITORING PLAN COMPLIANCE REPORT

3.1 COMPONENTS OF THE MONITORING PLAN

Components of the monitoring plan include:

- Synoptic water level measurements from the 11 groundwater monitoring wells on Site. Monitoring wells are set in clusters with screens in the shallow overburden soils and bedrock;
- Groundwater sampling;
- Surface water sampling;
- Seep sampling (if observed); and
- Sediment sampling.

Samples were collected and sent to Alpha Analytical, Inc. (Alpha) for analysis of one or more of the parameters below, as detailed in the following sections:

- VOCs via United States Environmental Protection Agency (USEPA) Method 8260C;
- PCBs via USEPA method 8082; and/or
- Metals via USEPA method 6010C.

3.2 MONITORING COMPLETED DURING REPORTING PERIOD

Monitoring activities were performed October 24, 2018 and are summarized in the following sections.

3.2.1 Groundwater Elevation Monitoring and Flow Direction

Groundwater water level measurements were collected from each of the 11 groundwater monitoring wells shown on Figure 3. Groundwater levels in most wells were slightly elevated compared to the 2017 monitoring event and are presented in Table 1. The groundwater flow direction for the overburden and bedrock wells are depicted on the Groundwater Potentiometric Maps included as Figures 4 and 5, respectively. Groundwater at the Site generally flows to the southeast across the Site.

3.2.2 Groundwater Sampling

Groundwater samples were collected in accordance with the SMP using “no purge” passive collection bags from the 11 monitoring wells located on the Site as shown on Figure 3. Groundwater results were compared to the Technical and Operational Guidance Series (TOGS) 1.1.1 New York

State (NYS) Class GA Ambient Water Quality Standards for VOCs and metals (PCBs were not sampled in monitoring wells). The laboratory analytical results from the groundwater sampling event are shown in detections only table in Table 2 and are summarized below.

VOCs:

- Results for VOCs and metals are slightly elevated compared to the 2017 sampling event.
- VOCs were not detected in the upgradient monitoring wells; MW-1S and MW-1B.
- 4-Methyl-2-pentanone and acetone were detected in MW-2B at estimated concentrations and do not exceed TOGS 1.1.1.
- Cis-1,2-dichlorothene (DCE) was detected in two (2) of the downgradient monitoring wells; MW-3SR2 and MW-3BR2 at concentrations of 0.024 mg/L and 0.0092 mg/L, respectively, both of which exceed the TOGS 1.1.1 criteria of 0.005 mg/L. These detections are consistent with the previous monitoring events for MW-3SR2, and slightly elevated for MW-3BR2.
- Trichloroethene (TCE) was detected in four (4) of the downgradient wells; MW-3SR, MW-3SR2, MW-3BR, and MW-4B. The detections exceed the TOGS 1.1.1 criteria (0.005 mg/L) in MW-3SR2 (0.16 mg/L) and MW-3BR2 (0.083 mg/L), which is consistent with the 2017 monitoring event.

Metals:

- Several metals were detected in both of upgradient wells MW-1S and MW-1B, however only iron exceeded TOGS 1.1.1, at concentrations of 1.06 and 0.606 mg/L, respectively, compared to the standard of 0.3 mg/L during the 2018 sampling event.
- Antimony exceeded TOGS 1.1.1 (a standard of 0.003 mg/L) in MW-2B and MW-3BR, both at estimated concentrations of 0.013 and 0.011 mg/L, respectively.
- Iron was detected above TOGS 1.1.1 in all eleven monitoring wells.
- Manganese was exceeded TOGS 1.1.1 in MW-2B, MW-2S, MW-3SR, MW-3BR, MW-3BR2, and MW-4B.
- Sodium was detected exceeding TOGS 1.1.1 in MW-2S.

The complete laboratory analytical package is included in Appendix C.

3.2.3 Surface Water Sampling

One surface water sample was collected from the stormwater detention basin outfall, located at the southern side of the Site (Figure 3). The surface water sample was collected for laboratory analysis

of VOCs, PCBs, and metals and compared to NYSDEC Class C surface water criteria (NYSDEC, 2008b). Results from this sampling event are summarized in Table 3 and as follows:

- VOCs and PCBs were not detected.
- Several metals were detected; however, concentrations did not exceed the NYSDEC Class C surface water criteria.

Results from this sampling event were determined to be consistent with historical sampling results. The complete laboratory analytical data package is included in Appendix C.

3.2.4 Seep Sampling

Leachate seeps were observed on the surface of the landfill during the remedial action in 2012 and were addressed via excavating saturated soil and solid waste in the seep areas and replacing the materials with borrow material and a geosynthetic geogrid. During the 2013 landfill inspection, minor groundwater seeps remained. Though the seeps were relatively minor in 2013, compared to 2012, a requirement to sample observed seeps, if any, was added to the SMP.

At the time of the 2018 fieldwork, there were no active seeps observed, and therefore, no leachate seep sample was collected.

3.2.5 Sediment Sampling

A sediment sample was not collected from the storm water detention basin outfall during the October 2018 event due to the amount of water observed within the outfall. Attempt will be made to collect a sediment sample during the next monitoring event.

4.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

The Site was observed to be in overall good condition at the time of the 2018 activities. Specific observations include:

- Landfill mowing occurred after the initial June 7th site inspection. Mowing was completed by the Town of Cortlandville on June 18th and 19th. During the second site inspection the grass was overgrown. CHA recommends that mowing occur twice per year.
- CHA did not observe evidence of erosion, scour, animal burrows, large saplings, or leachate seeps during the site inspections. The landfill appeared to be in relatively good condition.
- Groundwater level measurements were slightly elevated compared to the 2017 monitoring event; however, groundwater flow direction in both, shallow and overburden wells, remains consistent towards the southeast.
- Groundwater results indicated slightly elevated concentrations of some VOCs and metals when compared with the previous sampling events. In summary, only two VOCs (TCE and DCE) were detected above applicable standards in the groundwater samples, while heavy metals were detected above standards in all monitoring wells sampled.
- The surface water sample indicated consistent trends with previous monitoring events.
- No leachate or sediment samples were collected.

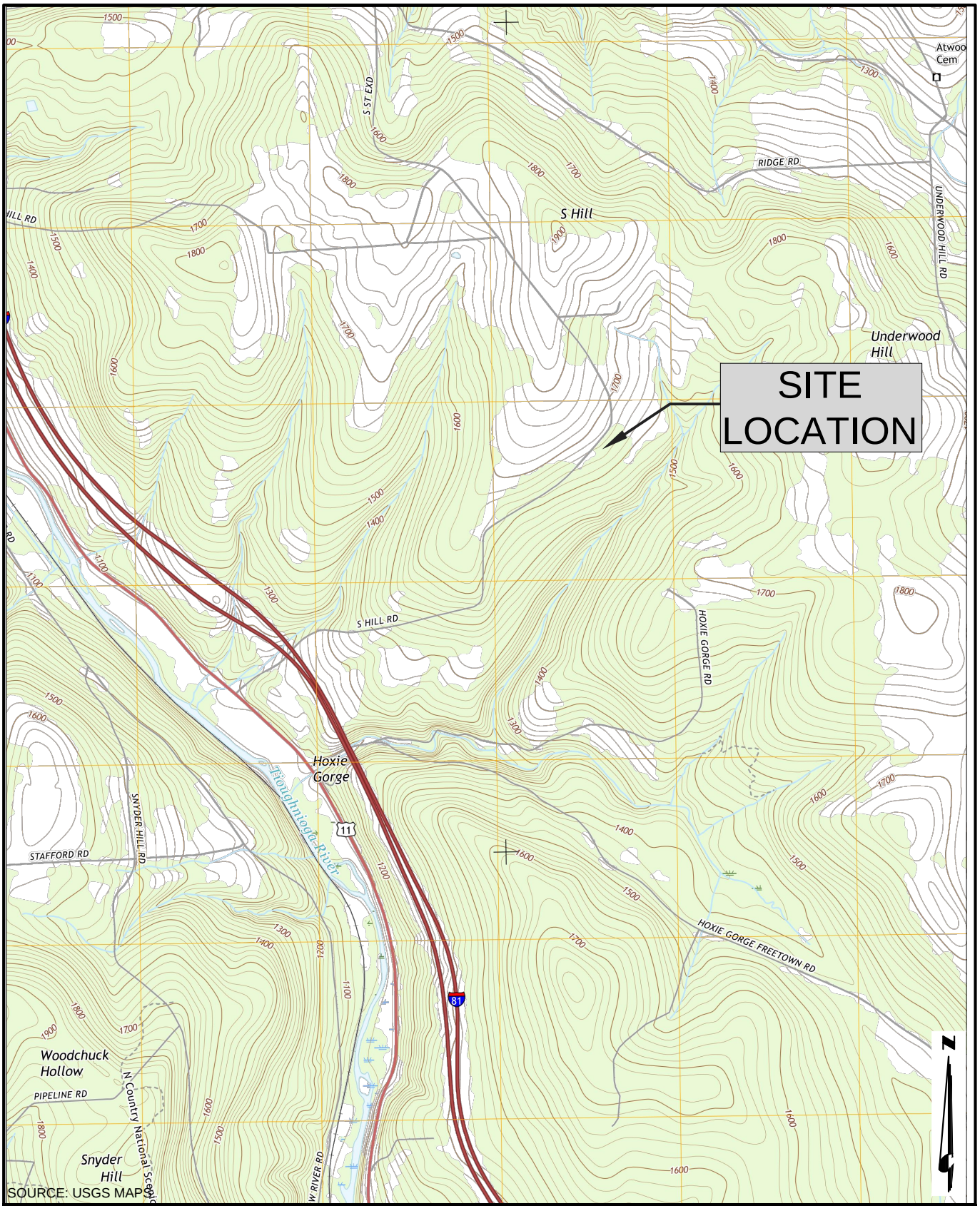
Evaluation of Remedy Performance, Effectiveness & Protectiveness

Provided that the ICs and ECs established for the Site remain in place, and are maintained, it is expected that the remedy will continue to be effective in protecting human health and the environment. The results of the sampling event summarized above indicate that the remedy continues to be effective.

Recommendations

It is recommended that the current Site ICs and ECs remain in place, and the ECs continue to be inspected and monitored. The most recent round of monitoring did confirm some exceedances of standards in groundwater and surface water. Therefore, it is recommended that the site monitoring program continue; however, CHA recommends that the groundwater, surface water, and sediment monitoring frequency be reduced to once every 24-months, with the next round of sampling occurring in September 2020. No changes to the site inspections, or operation and maintenance plans are recommended at this time. CHA also recommends that the Town mow the landfill twice per year in order to promote healthy vegetative growth, reduce mold, and discourage growth of undesirable vegetation. The next mowing is anticipated in the spring of 2019.

FIGURES



SOURCE: USGS MAPS

CHA
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Syracuse, NY 13202
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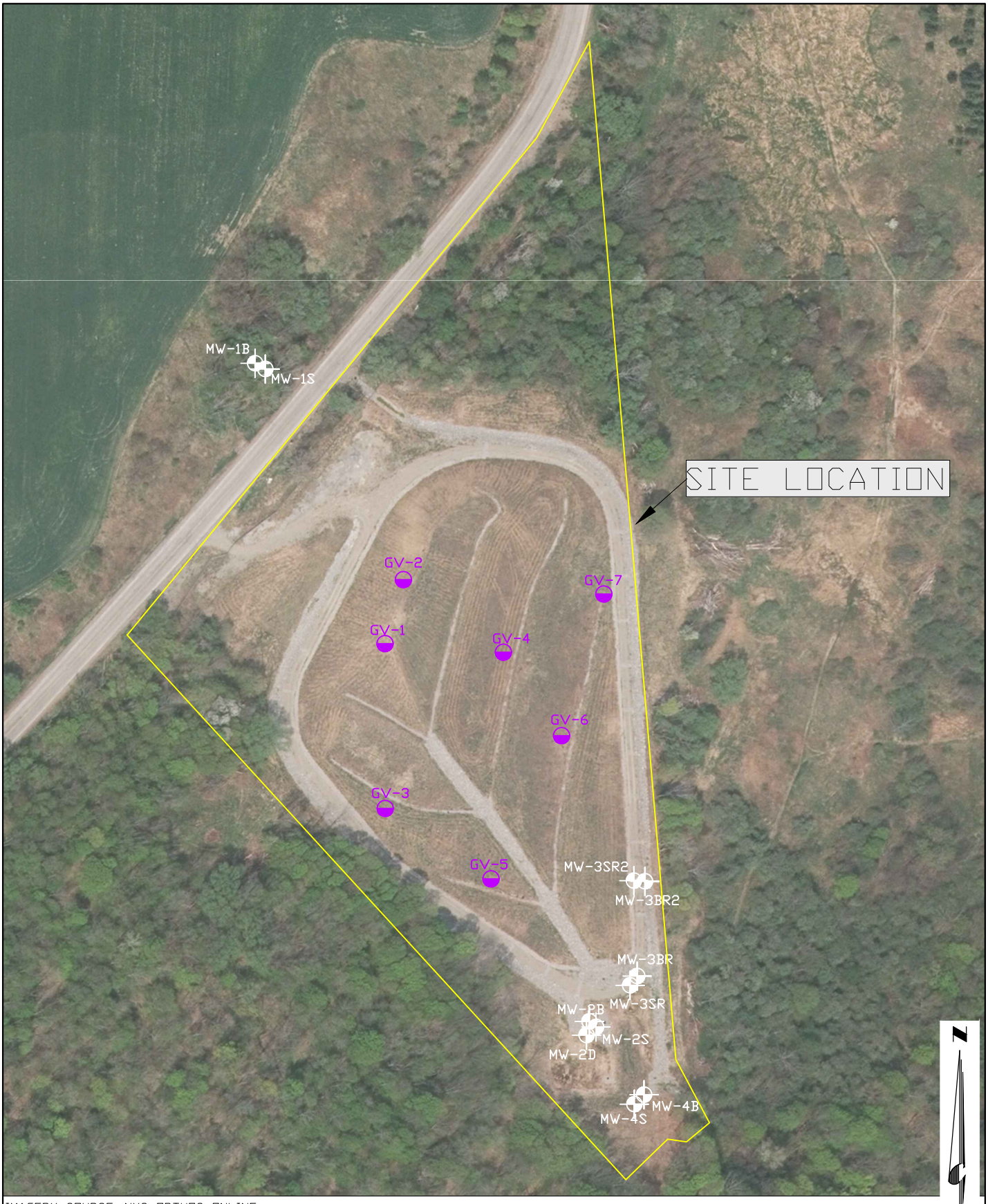
SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
PERIODIC REVIEW REPORT
SITE LOCATION MAP

PROJECT NO. 34236

DATE: 12/2018

FIGURE 1



IMAGERY SOURCE: NYS ORTHOS ONLINE

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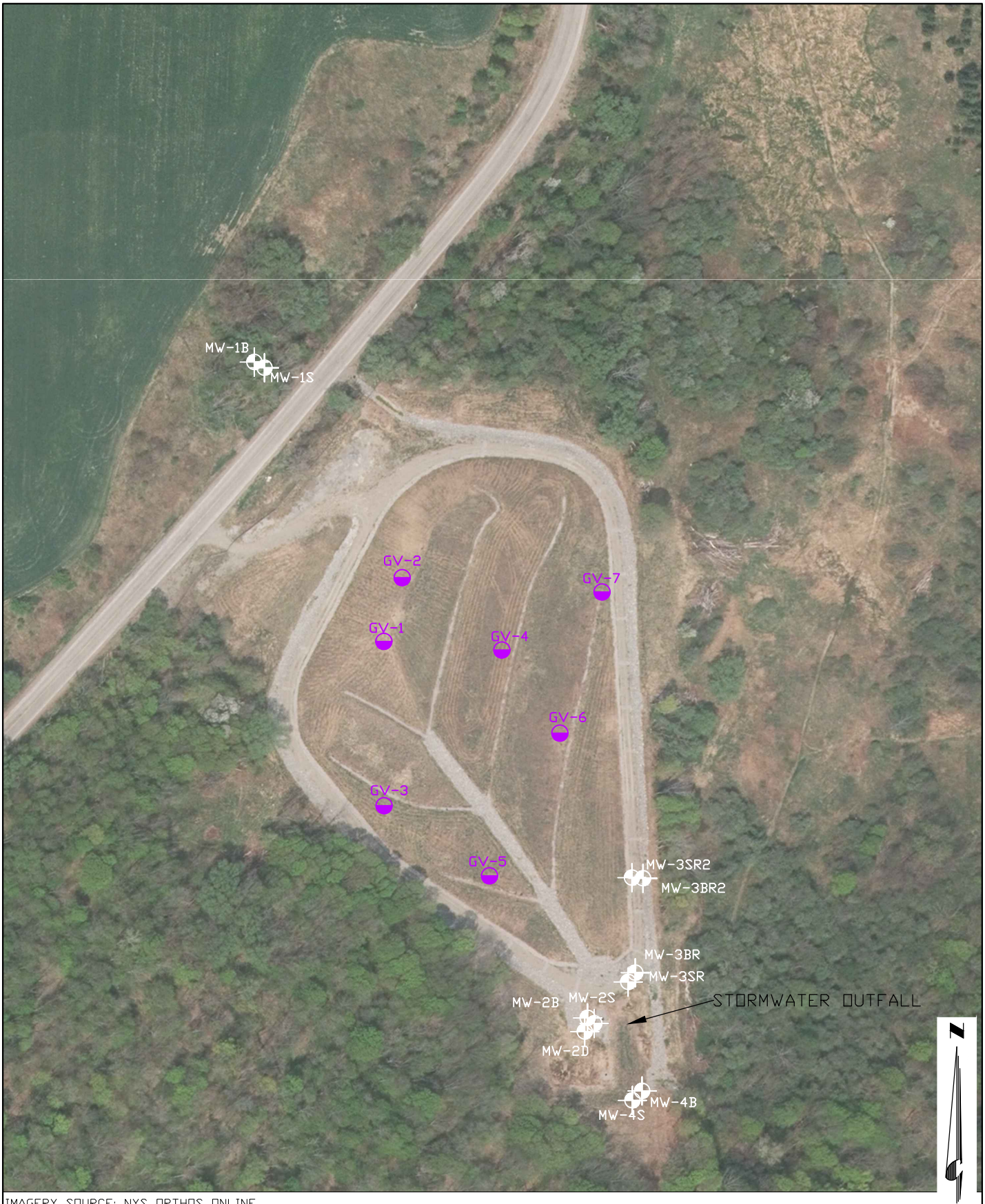
SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
PERIODIC REVIEW REPORT
SITE AERIAL

PROJECT NO. 34236

DATE: 12/2018

FIGURE 2



IMAGERY SOURCE: NYS ORTHOS ONLINE

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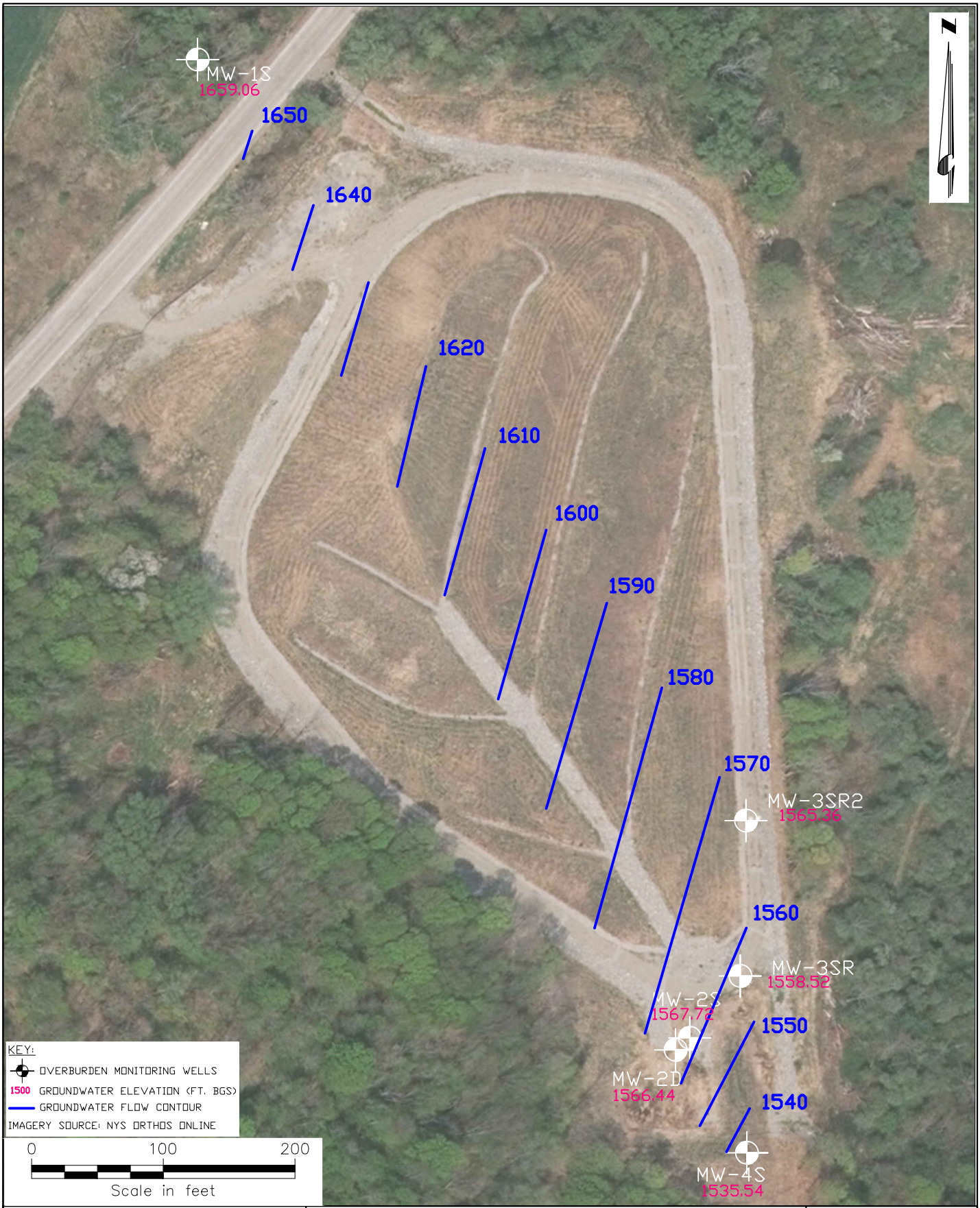
SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
MONITORING WELL AND GAS VENT LOCATION MAP

PROJECT NO. 34236

DATE: 12/2018

FIGURE 3



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SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
GROUNDWATER POTENTIOMETRIC MAP
OVERBURDEN WELLS ONLY

PROJECT NO. 34236

DATE: 12/2018

FIGURE 4

CHA
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SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
GROUNDWATER POTENTIOMETRIC MAP
BEDROCK WELLS ONLY

PROJECT NO. 34236

DATE: 12/2018

FIGURE 5

TABLES

Table 1
Groundwater Elevation Data
South Hill Dump
2018 Periodic Review Report

Well ID	Casing Elevation (ft)	Riser Elevation (ft)	Ground Elevation (ft)	Measuring Point	Total depth of well (ft)	Comments	Screen (ft, bgs)	Groundwater Elevation (ft) 2017	Groundwater Elevation (ft) 2018
MW-1S	1670.85	1670.95	1668.10	TOR	17.90	2-inch Overburden	5'-15'	1659.34	1659.06
MW-1B	1671.65	1671.35	1668.50	TOR	37.90	2-inch Bedrock	25'-35'	1648.40	1648.96
MW-2B	1574.85	No Riser	1573.40	TOC	44	3-inch Open Hole Bedrock	Open from 31.5'-41.5'	1565.18	1566.02
MW-2D	1576.30	1575.00	1572.00	TOR	27.00	2-inch Overburden	14'-24'	1566.64	1566.44
MW-2S	1575.40	1575.45	1572.60	TOR	12.90	2-inch Overburden	5'-10'	1567.83	1567.72
MW-3BR	1562.61	No Riser	1559.83	TOC	43.90	3-inch Open Hole Bedrock	Open from 31'-41'	1553.69	1553.57
MW-3SR	1563.68	1563.04	1561.35	TOR	25.30	2-inch Overburden	19'-24'	1558.71	1558.52
MW-3BR2	1565.25	No Riser	1565.61	TOR	24.49	4-inch Open Hole Bedrock	Open from 14'-26'	1564.71	1565.25
MW-3SR2	Flush	1565.76	1566.02	TOR	11.04	2-inch Overburden	6'-11'	1564.47	1565.36
MW-4B	1545.45	No Riser	1541.90	TOC	48.40	3-inch Open Hole Bedrock	Open from 36.6'-46.6'	1517.37	1517.34
MW-4S	1545.45	1545.40	1542.60	TOR	18.80	2-inch Overburden	6'-16'	1535.65	1535.54

Notes:

All casing, riser and ground elevation data taken from Field Activities Report Site Management Media Sampling and Landfill Inspection, MACTEC January 2018

Table 2
Groundwater Monitoring Well Results - Detected Compounds Only
South Hill Dump
2018 Periodic Review Report

LOCATION			MW-1S		MW-1B		MW-2B	
SAMPLING DATE			7/5/2017	10/24/2018	7/5/2017	10/24/2018	7/6/2017	10/24/2018
	TOGS 1.1.1	Units	Upgradient				Downgradient	
Volatile Organics								
4-Methyl-2-pentanone		mg/l						0.0025 J
Acetone	0.05	mg/l						0.002 J
cis-1,2-Dichloroethene	0.005	mg/l						
Trichloroethene	0.005	mg/l						
Total Metals								
Aluminum, Total		mg/l	4.4	0.594	0.3	0.406		0.0375
Antimony, Total	0.003	mg/l		0.00049 J		0.00055 J	**0.013 J**	
Arsenic, Total	0.025	mg/l		0.00042 J		0.00037 J		
Barium, Total	1	mg/l	0.05	0.04037	0.017	0.02331	0.12	0.1491
Beryllium, Total	0.003	mg/l						
Cadmium, Total	0.005	mg/l						0.00008 J
Calcium, Total		mg/l	16.1	33.6	17.6	21.4	32.3	38.3
Chromium, Total	0.05	mg/l	0.0044	0.00142		0.00084 J		0.00301
Cobalt, Total		mg/l	0.0015 J	0.00062		0.00035 J		0.00137
Copper, Total	0.2	mg/l	0.0031 J	0.0011		0.00094 J	0.02 J	0.01101
Iron, Total	0.3	mg/l	**3.9 J**	**1.06**	**0.32 J**	**0.606**	**159 J**	**370**
Lead, Total	0.025	mg/l	0.0041 J	0.00104		0.00053 J	0.0034 J	0.0004 J
Magnesium, Total	35	mg/l	4.4	7.72	4	4.85	7	8.56
Manganese, Total	0.3	mg/l	0.07 J	0.06476	0.013 J	0.03983	**1 J**	**1.59**
Nickel, Total	0.1	mg/l	0.0038 J	0.00139 J		0.00088 J	0.0065 J	0.00827
Potassium, Total		mg/l	1.7	0.943	0.71	0.708	0.84	1.32
Silver, Total	0.05	mg/l						
Sodium, Total	20	mg/l	6.1	15.8	6.8	7.42	4.2	5.65
Thallium, Total	0.0005	mg/l						
Vanadium, Total		mg/l	0.0042 J				0.0022 J	
Zinc, Total	2	mg/l	0.011	0.01006		0.01091	0.0015 J	0.01298

Notes:
Samples were collected by CHA Consulting, Inc. October 2018
Samples were analyzed by Alpha Analytical
Samples were compared to the New York TOGS 1.1.1 Ambient Water Quality Standards and Guidance Criteria, Class GA
Highlighted and bold parameters exceed TOGS 1.1.1
J - Estimated value

CHA design/construction solutions

Table 2
Groundwater Monitoring Well Results - Detected Compounds Only
South Hill Dump
2018 Periodic Review Report

LOCATION			MW-2D		MW-2S		MW-3SR	
SAMPLING DATE			7/6/2017	10/24/2018	7/6/2017	10/24/2018	7/5/2017	10/24/2018
	TOGS 1.1.1	Units	Downgradient					
Volatile Organics								
4-Methyl-2-pentanone		mg/l						
Acetone	0.05	mg/l						
cis-1,2-Dichloroethene	0.005	mg/l						
Trichloroethene	0.005	mg/l						0.0024
Total Metals								
Aluminum, Total		mg/l	0.6	0.406	2.6	7.75	1.4	2.28
Antimony, Total	0.003	mg/l						
Arsenic, Total	0.025	mg/l		0.00046 J		0.00789		0.00181
Barium, Total	1	mg/l	0.032	0.03338	0.042	0.1012	0.072	0.102
Beryllium, Total	0.003	mg/l				0.00063		
Cadmium, Total	0.005	mg/l		0.00012 J		0.00048		
Calcium, Total		mg/l	52.6	54.7	73.8	69.8	69.8	76
Chromium, Total	0.05	mg/l	0.0018 J	0.00197	0.0046	0.01116	0.0016 J	0.00509
Cobalt, Total		mg/l		0.00026 J	0.00069 J	0.00621		0.002
Copper, Total	0.2	mg/l		0.0008 J	0.0027 J	0.01214	0.0021 J	0.00335
Iron, Total	0.3	mg/l	**0.68 J**	**0.729**	**2.4 J**	**17.1**	**1.6 J**	**4.59**
Lead, Total	0.025	mg/l		0.00065 J	0.0035 J	0.01104	0.003 J	0.00206
Magnesium, Total	35	mg/l	13.2	13.5	14.2	14	15.2	16.6
Manganese, Total	0.3	mg/l	0.03 J	0.03386	0.015 J	**1.677**	**0.18 J**	**0.3926**
Nickel, Total	0.1	mg/l		0.00073 J	0.0027 J	0.01275	0.0019 J	0.00497
Potassium, Total		mg/l	1	0.958	1.6	3.1	3.5	3.2
Silver, Total	0.05	mg/l						
Sodium, Total	20	mg/l	3.6	3.55	**24.1**	**51.2**	6.2	6.39
Thallium, Total	0.0005	mg/l						
Vanadium, Total		mg/l			0.0029 J	0.00872	0.0018 J	0.00417 J
Zinc, Total	2	mg/l	0.005 J		0.02	0.1104	0.0061 J	0.0142

Notes:
Samples were collected by CHA Consulting, Inc. October 2018
Samples were analyzed by Alpha Analytical
Samples were compared to the New York TOGS 1.1.1 Ambient Water Quality Standards and Guidance Criteria, Class GA
Highlighted and bold parameters exceed TOGS 1.1.1
J - Estimated value

CHA design/construction solutions

Table 2
Groundwater Monitoring Well Results - Detected Compounds Only
South Hill Dump
2018 Periodic Review Report

LOCATION			MW-3SR2		MW-3BR		MW-3BR2	
SAMPLING DATE			7/5/2017	10/24/2018	7/5/2017	10/24/2018	7/5/2017	10/24/2018
	TOGS 1.1.1	Units	Downgradient					
Volatile Organics								
4-Methyl-2-pentanone		mg/l						
Acetone	0.05	mg/l						
cis-1,2-Dichloroethene	0.005	mg/l	**0.02**	**0.024**			0.0031	**0.0092**
Trichloroethene	0.005	mg/l	**0.17**	**0.16**			**0.0065**	**0.083**
Total Metals								
Aluminum, Total		mg/l	9.9	0.871		0.011	0.081 J	0.115
Antimony, Total	0.003	mg/l			**0.011 J**			
Arsenic, Total	0.025	mg/l	0.0058 J	0.00062		0.00176		0.00076
Barium, Total	1	mg/l	0.22	0.1358	0.074	0.0703	0.12	0.2898
Beryllium, Total	0.003	mg/l	0.0005 J					
Cadmium, Total	0.005	mg/l						
Calcium, Total		mg/l	102	98.7	10	9.44	29.6	86.1
Chromium, Total	0.05	mg/l	0.012	0.00182		0.00039 J		0.00124
Cobalt, Total		mg/l	0.0051	0.0008	0.0013 J	0.00162		0.00042 J
Copper, Total	0.2	mg/l	0.0095 J	0.00142	0.002 J	0.00147		0.00145
Iron, Total	0.3	mg/l	**13 J**	**1.65**	**124 J**	**136**	**27.3 J**	**46**
Lead, Total	0.025	mg/l	0.0079 J	0.00079 J				
Magnesium, Total	35	mg/l	21.4	18.4	3.1	2.78	12.5	16.1
Manganese, Total	0.3	mg/l	**0.35 J**	0.1692	**1.5 J**	**1.321**	0.29 J	**0.3597**
Nickel, Total	0.1	mg/l	0.013	0.00179 J	0.015	0.00757	0.0015 J	0.00196 J
Potassium, Total		mg/l	3.9	1.62	2.3	1.86	0.96	1
Silver, Total	0.05	mg/l						
Sodium, Total	20	mg/l	18.2	17.6	14.9	12.8	12	12.3
Thallium, Total	0.0005	mg/l						
Vanadium, Total		mg/l	0.014	0.00182 J				
Zinc, Total	2	mg/l	0.034	0.00451 J	0.0043 J			

Notes:
Samples were collected by CHA Consulting, Inc. October 2018
Samples were analyzed by Alpha Analytical
Samples were compared to the New York TOGS 1.1.1 Ambient Water Quality Standards and Guidance Criteria, Class GA
Highlighted and bold parameters exceed TOGS 1.1.1
J - Estimated value

CHA design/construction solutions

Table 2
Groundwater Monitoring Well Results - Detected Compounds Only
South Hill Dump
2018 Periodic Review Report

LOCATION			MW-4S		CHA-001	MW-4B	
SAMPLING DATE			7/5/2017	10/24/2018	10/24/2018	7/5/2017	10/24/2018
	TOGS 1.1.1	Units	Downgradient				
Volatile Organics							
4-Methyl-2-pentanone		mg/l					
Acetone	0.05	mg/l					
cis-1,2-Dichloroethene	0.005	mg/l					
Trichloroethene	0.005	mg/l				0.00056 J	0.0018
Total Metals							
Aluminum, Total		mg/l	0.36	0.026	0.0293	0.066 J	0.0705
Antimony, Total	0.003	mg/l			0.00148 J		
Arsenic, Total	0.025	mg/l					0.0002 J
Barium, Total	1	mg/l	0.028	0.04582	0.04605	0.041	0.2449
Beryllium, Total	0.003	mg/l				0.00078 J	
Cadmium, Total	0.005	mg/l					0.00006 J
Calcium, Total		mg/l	58.3	83.4	83.5	27.6	55.3
Chromium, Total	0.05	mg/l		0.00066 J	0.00073 J		0.00175
Cobalt, Total		mg/l					0.00082
Copper, Total	0.2	mg/l	0.0021 J				0.00476
Iron, Total	0.3	mg/l	**0.44 J**	0.11	0.0715	**11.7 J**	**144**
Lead, Total	0.025	mg/l					
Magnesium, Total	35	mg/l	8.7	12.7	12.7	6.9	10.4
Manganese, Total	0.3	mg/l	**0.017 J**	0.00229	0.00283	0.11 J	**0.4255**
Nickel, Total	0.1	mg/l				0.0014 J	0.00648
Potassium, Total		mg/l	0.61	0.534	0.548	0.52	0.916
Silver, Total	0.05	mg/l			0.00017 J		
Sodium, Total	20	mg/l	2	2.37	2.43	3.2	4.38
Thallium, Total	0.0005	mg/l			0.00018 J		0.00019 J
Vanadium, Total		mg/l					
Zinc, Total	2	mg/l	0.0019 J		0.00345 J	0.0017 J	0.01484

Notes:
Samples were collected by CHA Consulting, Inc. October 2018
Samples were analyzed by Alpha Analytical
Samples were compared to the New York TOGS 1.1.1 Ambient Water Quality Standards and Guidance Criteria, Class GA
Highlighted and bold parameters exceed TOGS 1.1.1
J - Estimated value

CHA design/construction solutions

Table 3
Surface Water Results - Detected Compounds Only
South Hill Dump
2018 Periodic Review Report

	LOCATION		SW-001	
	SAMPLING DATE		7/6/2017	10/24/2018
	TOGS 1.1.1	Units		
Aluminum, Total	0.1	mg/L	0.5	0.0352
Antimony, Total		mg/L		0.00046 J
Arsenic, Total	0.15	mg/L		0.00074
Barium, Total		mg/L	0.048	0.05633
Beryllium, Total		mg/L		
Cadmium, Total		mg/L		
Calcium, Total		mg/L	61.8	93.2
Chromium, Total		mg/L		0.00041 J
Cobalt, Total		mg/L		
Copper, Total	0.018	mg/L	0.0022 J	0.00211
Iron, Total	0.3	mg/L	**0.61**	0.207
Lead, Total		mg/L		
Magnesium, Total		mg/L	8.3	13.4
Manganese, Total		mg/L	0.3	0.08915
Mercury, Total		mg/L		0.0002
Nickel, Total	0.108	mg/L	0.0018 J	0.00071 J
Potassium, Total		mg/L	4.2	1.95
Selenium, Total		mg/L		
Silver, Total		mg/L	25.5	
Sodium, Total		mg/L		3.44
Thallium, Total		mg/L		
Vanadium, Total	0.014	mg/L	0.0019 J	
Zinc, Total	0.014	mg/L	0.0058 J	

Notes:
Samples were collected by CHA Consulting, Inc. October 2018
Samples were analyzed by Alpha Analytical
Samples were compared to the New York TOGS 1.1.1 Ambient Water Qualities and Guidance Criteria for Class C waters
Highlighted and bold parameters exceed TOGS 1.1.1
J - Estimated value

CHA design/construction solutions

APPENDIX A

Landfill Inspection Forms

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 001	
Page 1 of 3	
Date: 06/07/2018	Time: 1:30 PM

Inspector:	Project No. 34236
Samantha Miller	Weather: Sunny/Clear
People Accompanying Inspector:	
Abigail Langenderfer	Temp.: Hi 56°F Low 26°F

SIGNAGE AND GATE INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Is a sign posted at entrance to the landfill stating that the area is a closed landfill?	☐	☒	☐	
Is a gate present at the entrance to the landfill?	☒	☐	☐	
Is the gate locked and secured?	☒	☐	☐	

SOIL COVER SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of erosion of cover soils from surface of landfill (top/sideslopes)?	☐	☒	☐	
Evidence of cracks or depressions in cover soils?	☐	☒	☐	
Evidence of exposed or damaged geomembrane/clay barrier?	☐	☒	☐	

GAS VENTING SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Gas vent structures intact?	☒	☐	☐	
Screens on gas vents intact and unobstructed?	☒	☐	☐	
Settlement of cover system soils in area of gas vents?	☐	☒	☐	
Vapors or odors emanating from gas vents?	☐	☒	☐	
Evidence of stressed vegetation in areas around gas vents or other areas of the landfill?	☐	☒	☐	
Evidence of bubbling surface water on or in the area surrounding the landfill?	☐	☒	☐	

VEGETATIVE COVER SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Is vegetation well established over the entire landfill?	☒	☐	☐	
Evidence of stressed vegetation?	☐	☒	☐	
Evidence of bare or thin vegetative cover?	☐	☒	☐	
Does the landfill need to be mowed?	☒	☐	☐	Vegetation was overgrown during the site inspection

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 001	
Page 2 of 3	
Date: 06/07/2018	Time: 1:30 PM

DRAINAGE SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of erosion in drainage structures?	☐	☒	☐	
Presence of siltation in drainage structures?	☐	☒	☐	
Evidence of settlement in drainage structures?	☐	☒	☐	
Evidence of restrictions of water flow in drainage ditches and structures?	☐	☒	☐	

LEACHATE INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of leachate seeps or staining around the perimeter of the landfill?	☐	☒	☐	
Evidence of leachate seeps or staining off the perimeter of the landfill?	☐	☒	☐	
Evidence of leachate seeps or staining in the drainage ditches or structures of the landfill?	☐	☒	☐	
Evidence of leachate seeps or staining on the surface of the landfill?	☐	☒	☐	

MONITORING WELL INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Are the monitoring wells in generally good condition?	☒	☐	☐	
Are well caps installed on the wells?	☒	☐	☐	
Are locks present and secured?	☒	☐	☐	

VECTOR INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Were any vectors observed?	☐	☒	☐	
Evidence of vector activity (tracks, droppings, dens, etc.)	☐	☒	☐	
Evidence of damage due to vector activity?	☐	☒	☐	

SITE ACCESS ROAD INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Are site access roads passable?	☒	☐	☐	
Presence of ruts or erosion?	☐	☒	☐	
Are site access roads in generally good condition?	☒	☐	☐	

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 001	
Page 3 of 3	
Date: 06/07/2018	Time: 1:30 PM

ADDITIONAL NOTES & OBSERVATIONS

Northeast corner of the landfill

West side of the landfill

Stormwater detention basin

South end of the landfill

June 18th and 19th mowing

June 18th and 19th mowing

June 18th and 19th mowing

June 18th and 19th mowing

June 18th and 19th mowing

June 18th and 19th mowing

Signature:

Samantha J. Miller

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 002	
Page 1 of 3	
Date: 10/24/2018	Time: 11:30 AM

Inspector:	Project No. 34236
Samantha Miller	Weather: Overcast/Fog
People Accompanying Inspector:	
Anthony Russo	Temp.: Hi 39°F Low 33°F

SIGNAGE AND GATE INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Is a sign posted at entrance to the landfill stating that the area is a closed landfill?	☐	☒	☐	
Is a gate present at the entrance to the landfill?	☒	☐	☐	
Is the gate locked and secured?	☒	☐	☐	

SOIL COVER SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of erosion of cover soils from surface of landfill (top/sideslopes)?	☐	☒	☐	
Evidence of cracks or depressions in cover soils?	☐	☒	☐	
Evidence of exposed or damaged geomembrane/clay barrier?	☐	☒	☐	

GAS VENTING SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Gas vent structures intact?	☒	☐	☐	
Screens on gas vents intact and unobstructed?	☒	☐	☐	
Settlement of cover system soils in area of gas vents?	☐	☒	☐	
Vapors or odors emanating from gas vents?	☐	☒	☐	
Evidence of stressed vegetation in areas around gas vents or other areas of the landfill?	☐	☒	☐	
Evidence of bubbling surface water on or in the area surrounding the landfill?	☐	☒	☐	

VEGETATIVE COVER SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Is vegetation well established over the entire landfill?	☒	☐	☐	
Evidence of stressed vegetation?	☐	☒	☐	
Evidence of bare or thin vegetative cover?	☐	☒	☐	
Does the landfill need to be mowed?	☒	☐	☐	Vegetation has become overgrown

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 002	
Page 2 of 3	
Date: 10/24/2018	Time: 11:30 AM

DRAINAGE SYSTEM INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of erosion in drainage structures?	☐	☒	☐	
Presence of siltation in drainage structures?	☐	☒	☐	
Evidence of settlement in drainage structures?	☐	☒	☐	
Evidence of restrictions of water flow in drainage ditches and structures?	☐	☒	☐	

LEACHATE INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of leachate seeps or staining around the perimeter of the landfill?	☐	☒	☐	
Evidence of leachate seeps or staining off the perimeter of the landfill?	☐	☒	☐	
Evidence of leachate seeps or staining in the drainage ditches or structures of the landfill?	☐	☒	☐	
Evidence of leachate seeps or staining on the surface of the landfill?	☐	☒	☐	

MONITORING WELL INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Are the monitoring wells in generally good condition?	☒	☐	☐	
Are well caps installed on the wells?	☒	☐	☐	
Are locks present and secured?	☒	☐	☐	

VECTOR INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Were any vectors observed?	☐	☒	☐	
Evidence of vector activity (tracks, droppings, dens, etc.)	☐	☒	☐	
Evidence of damage due to vector activity?	☐	☒	☐	

SITE ACCESS ROAD INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Are site access roads passable?	☒	☐	☐	
Presence of ruts or erosion?	☐	☒	☐	
Are site access roads in generally good condition?	☒	☐	☐	

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 002	
Page 3 of 3	
Date: 10/24/2018	Time: 11:30 AM

ADDITIONAL NOTES & OBSERVATIONS

North side of the landfill

West side of the landfill

Access road along the south side of the landfill

Flush mounted monitoring well

Signature:

Samantha J. Miller

APPENDIX B

Institutional and Engineering Controls Certification Forms

Mailed 12/7/18 RR

Enclosure 1
Institutional and Engineering Controls - Property Owner Survey

Site Details **Box 1**

Site No. 712009

Site Name South Hill Dump

Site Address: South Hill Road Zip Code: 13073
City/Town: Cortlandville
County: Cortland
Site Acreage: 10.9

Reporting Period: December 05, 2017 to December 05, 2018

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2, 3 or 4, include documentation with this form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

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

Town of Cortlandville
By: John Folan Town Atty
Signature of Property Owner

12/6/18
Date

SITE NO. **Box 3**

Description of Institutional Controls

A series of ICs are required to implement, maintain and monitor the ECs. The Environmental Easement (EE) requires compliance with the ICs. The EE for this site was recorded on 10/11/13 in Cortland County as instrument #2013-05304.

The EE ensures that:
* All ECs must be operated and maintained as specified in the SMP
* All ECs on the Site must be inspected and certified at a frequency and in a manner defined in the SMP
* Environmental monitoring must be performed as defined in the SMP
* Data and information pertinent to SM for the Controlled Property must be reported at the frequency and in a manner defined in the SMP
* On-site environmental monitoring devices, including but not limited to groundwater monitoring wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the SMP.

In addition, the Environmental Easement places the following restrictions on the property:
* Required compliance with the approved SMP. Restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) and/or the NYSDEC
* the owner of the Property shall provide information to the NYSDEC to assist in carrying out its obligation to provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the NYSDEC or Relevant Agency, which will certify that the IC/ECs put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired
* The owner of the Property shall continue in full force and effect any IC/ECs required for the Remedy and shall not, through any act or omission, interfere with the NYSDEC's maintenance and monitoring of such controls, unless the owner first obtains permission to discontinue such controls from the NYSDEC or Relevant Agency, in compliance with the approved SMP subject to modifications as approved by the NYSDEC or Relevant Agency
* Limit the use and development of the property to the current use as a closed and capped/covered landfill only

Description of Engineering Controls **Box 4**

Because remaining contamination is present at the Site, ECs and ICs have been implemented to protect public health and the environment for the applicable future use. The controlled Property has the following ECs:
* A cover system placed over the landfilled waste
* Site access controls
* Surface water drainage conveyance
* Landfill gas vents

Parcel	Engineering Control
• landfill gas vents	

Box 5

Periodic Review Report (PRR) Survey Statements

For each Institutional or Engineering control listed in Boxes 3 and/or 4, by checking "YES" below I believe all of the following statements to be true:

(a) the Institutional Control(s) and/or Engineering Control(s) employed at this site remain 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; and

(d) if a Site Management Plan (SMP) exists, nothing has occurred that would constitute a violation or failure to comply with the SMP for this Control.

	YES	NO
	☑	☐

Town of Scottsville

BY: Town Attx

Signature of Property Owner

12/6/18

Date

IC CERTIFICATIONS
SITE NO.

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Richard Tupper, Town Supervisor at 3577 Terrace Road, Cortlandville, NY 13045,
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 Date

IC/EC CERTIFICATIONS

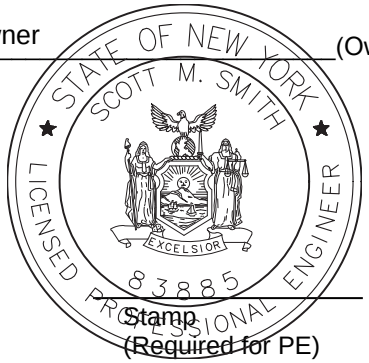
Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Scott. M. Smith (print name) 300 South State Street, Ste 600, Syracuse, NY 13202 (print business address),

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



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

Stamp (Required for PE)

02/12/19
Date

APPENDIX C

Laboratory Analytical Report

ANALYTICAL REPORT

Lab Number:	L1843466
Client:	CHA Companies One Park Place 300 South State St., Suite 600 Syracuse, NY 13202
ATTN:	Samantha Miller
Phone:	(315) 471-3920
Project Name:	SOUTH HILL DUMP
Project Number:	34236
Report Date:	11/02/18

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).

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

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1843466-01	MW-1S	WATER	CORTLANDVILLE, NY	10/24/18 09:45	10/24/18
L1843466-02	MW-1B	WATER	CORTLANDVILLE, NY	10/24/18 10:00	10/24/18
L1843466-03	MW-2B	WATER	CORTLANDVILLE, NY	10/24/18 10:20	10/24/18
L1843466-04	MW-2D	WATER	CORTLANDVILLE, NY	10/24/18 10:55	10/24/18
L1843466-05	MW-2S	WATER	CORTLANDVILLE, NY	10/24/18 10:45	10/24/18
L1843466-06	MW-3SR	WATER	CORTLANDVILLE, NY	10/24/18 11:30	10/24/18
L1843466-07	MW-3SR2	WATER	CORTLANDVILLE, NY	10/24/18 12:35	10/24/18
L1843466-08	MW-3BR	WATER	CORTLANDVILLE, NY	10/24/18 11:50	10/24/18
L1843466-09	MW-3BR2	WATER	CORTLANDVILLE, NY	10/24/18 12:25	10/24/18
L1843466-10	MW-4S	WATER	CORTLANDVILLE, NY	10/24/18 11:25	10/24/18
L1843466-11	MW-4B	WATER	CORTLANDVILLE, NY	10/24/18 11:10	10/24/18
L1843466-12	SW-001	WATER	CORTLANDVILLE, NY	10/24/18 11:35	10/24/18
L1843466-13	SED-001	SOIL	CORTLANDVILLE, NY	10/24/18 11:40	10/24/18
L1843466-14	CHA-001	WATER	CORTLANDVILLE, NY	10/24/18 10:27	10/24/18
L1843466-17	TRIP BLANK	WATER	CORTLANDVILLE, NY	10/24/18 00:00	10/24/18

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

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

L1843466-13: This sample could not be analyzed due to insufficient volume.

L1843466-17: A sample identified as "TRIP BLANK" was received but not listed on the Chain of Custody and was not analyzed.

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

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 11/02/18

ORGANICS

VOLATILES

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-01
Client ID: MW-1S
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 09:45
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 11:47
Analyst: MKS

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

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-01
Client ID: MW-1S
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 09:45
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	111		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-02
Client ID: MW-1B
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:00
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 12:15
Analyst: MKS

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-02 Date Collected: 10/24/18 10:00

Client ID: MW-1B Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-03
Client ID: MW-2B
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:20
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 12:43
Analyst: MKS

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-03 Date Collected: 10/24/18 10:20

Client ID: MW-2B Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.0	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	2.5	J	ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	112		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-04
Client ID: MW-2D
Sample Location: CORTLANDVILLE, NY

Date Collected: 10/24/18 10:55
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 13:11
Analyst: MKS

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-04 Date Collected: 10/24/18 10:55

Client ID: MW-2D Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-05
Client ID: MW-2S
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:45
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 13:39
Analyst: MKS

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-05 Date Collected: 10/24/18 10:45

Client ID: MW-2S Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	110		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-06
Client ID: MW-3SR
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:30
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 14:07
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	2.4		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-06 Date Collected: 10/24/18 11:30

Client ID: MW-3SR Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	113		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-07 D
Client ID: MW-3SR2
Sample Location: CORTLANDVILLE, NY

Date Collected: 10/24/18 12:35
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 14:35
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	ND		ug/l	1.0	0.32	2
Toluene	ND		ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
Trichloroethene	160		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-07 D
Client ID: MW-3SR2
Sample Location: CORTLANDVILLE, NY

Date Collected: 10/24/18 12:35
Date Received: 10/24/18
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	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	ND		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	24		ug/l	5.0	1.4	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl Acetate	ND		ug/l	4.0	0.47	2
Cyclohexane	ND		ug/l	20	0.54	2
1,4-Dioxane	ND		ug/l	500	120	2
Freon-113	ND		ug/l	5.0	1.4	2
Methyl cyclohexane	ND		ug/l	20	0.79	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	112		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-08
Client ID: MW-3BR
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:50
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 15:03
Analyst: MKS

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

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-08
Client ID: MW-3BR
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:50
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	111		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-09
Client ID: MW-3BR2
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 12:25
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 15:31
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	83		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-09
Client ID: MW-3BR2
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 12:25
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	9.2		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	111		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-10
Client ID: MW-4S
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:25
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 16:00
Analyst: MKS

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-10 Date Collected: 10/24/18 11:25

Client ID: MW-4S Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	112		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-11
Client ID: MW-4B
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:10
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/01/18 16:28
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.8		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-11
Client ID: MW-4B
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:10
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	110		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-12
Client ID: SW-001
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:35
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/02/18 09:27
Analyst: PD

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-12 Date Collected: 10/24/18 11:35

Client ID: SW-001 Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	112		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-14
Client ID: CHA-001
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:27
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/02/18 09:55
Analyst: PD

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

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-14 Date Collected: 10/24/18 10:27

Client ID: CHA-001 Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	112		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/01/18 08:30
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1174944-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/01/18 08:30
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1174944-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/01/18 08:30
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1174944-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	108		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/02/18 08:59
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12,14 Batch: WG1175305-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/02/18 08:59
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12,14 Batch: WG1175305-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/02/18 08:59
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12,14 Batch: WG1175305-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	111		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1174944-3 WG1174944-4								
Methylene chloride	90		92		70-130	2		20
1,1-Dichloroethane	98		100		70-130	2		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	92		94		70-130	2		20
Dibromochloromethane	94		98		63-130	4		20
1,1,2-Trichloroethane	94		97		70-130	3		20
Tetrachloroethene	99		100		70-130	1		20
Chlorobenzene	95		96		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		110		67-130	10		20
Bromodichloromethane	95		98		67-130	3		20
trans-1,3-Dichloropropene	97		100		70-130	3		20
cis-1,3-Dichloropropene	92		94		70-130	2		20
Bromoform	91		97		54-136	6		20
1,1,2,2-Tetrachloroethane	90		100		67-130	11		20
Benzene	83		84		70-130	1		20
Toluene	94		96		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	86		86		64-130	0		20
Bromomethane	61		58		39-139	5		20
Vinyl chloride	110		110		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1174944-3 WG1174944-4								
Chloroethane	120		130		55-138	8		20
1,1-Dichloroethene	97		100		61-145	3		20
trans-1,2-Dichloroethene	97		100		70-130	3		20
Trichloroethene	92		94		70-130	2		20
1,2-Dichlorobenzene	95		100		70-130	5		20
1,3-Dichlorobenzene	98		100		70-130	2		20
1,4-Dichlorobenzene	98		100		70-130	2		20
Methyl tert butyl ether	94		100		63-130	6		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	95		96		70-130	1		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	79		82		36-147	4		20
Acetone	94		100		58-148	6		20
Carbon disulfide	94		95		51-130	1		20
2-Butanone	100		100		63-138	0		20
4-Methyl-2-pentanone	85		94		59-130	10		20
2-Hexanone	88		99		57-130	12		20
Bromochloromethane	95		96		70-130	1		20
1,2-Dibromoethane	93		99		70-130	6		20
1,2-Dibromo-3-chloropropane	77		90		41-144	16		20
Isopropylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	91		99		70-130	8		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1174944-3 WG1174944-4								
1,2,4-Trichlorobenzene	94		100		70-130	6		20
Methyl Acetate	99		110		70-130	11		20
Cyclohexane	100		100		70-130	0		20
1,4-Dioxane	136		124		56-162	9		20
Freon-113	100		110		70-130	10		20
Methyl cyclohexane	98		100		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		113		70-130
Toluene-d8	105		104		70-130
4-Bromofluorobenzene	101		104		70-130
Dibromofluoromethane	108		108		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12,14 Batch: WG1175305-3 WG1175305-4								
Methylene chloride	88		88		70-130	0		20
1,1-Dichloroethane	94		95		70-130	1		20
Chloroform	98		97		70-130	1		20
Carbon tetrachloride	100		98		63-132	2		20
1,2-Dichloropropane	92		88		70-130	4		20
Dibromochloromethane	95		99		63-130	4		20
1,1,2-Trichloroethane	92		94		70-130	2		20
Tetrachloroethene	94		92		70-130	2		20
Chlorobenzene	89		90		75-130	1		20
Trichlorofluoromethane	100		98		62-150	2		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		98		67-130	2		20
Bromodichloromethane	95		94		67-130	1		20
trans-1,3-Dichloropropene	97		98		70-130	1		20
cis-1,3-Dichloropropene	93		91		70-130	2		20
Bromoform	96		100		54-136	4		20
1,1,2,2-Tetrachloroethane	89		94		67-130	5		20
Benzene	83		81		70-130	2		20
Toluene	90		89		70-130	1		20
Ethylbenzene	94		93		70-130	1		20
Chloromethane	80		78		64-130	3		20
Bromomethane	62		64		39-139	3		20
Vinyl chloride	100		100		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12,14 Batch: WG1175305-3 WG1175305-4								
Chloroethane	120		120		55-138	0		20
1,1-Dichloroethene	93		96		61-145	3		20
trans-1,2-Dichloroethene	92		92		70-130	0		20
Trichloroethene	88		89		70-130	1		20
1,2-Dichlorobenzene	90		95		70-130	5		20
1,3-Dichlorobenzene	93		97		70-130	4		20
1,4-Dichlorobenzene	92		95		70-130	3		20
Methyl tert butyl ether	97		100		63-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	92		91		70-130	1		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	75		72		36-147	4		20
Acetone	100		110		58-148	10		20
Carbon disulfide	92		90		51-130	2		20
2-Butanone	100		110		63-138	10		20
4-Methyl-2-pentanone	89		91		59-130	2		20
2-Hexanone	96		98		57-130	2		20
Bromochloromethane	93		94		70-130	1		20
1,2-Dibromoethane	93		95		70-130	2		20
1,2-Dibromo-3-chloropropane	84		86		41-144	2		20
Isopropylbenzene	94		96		70-130	2		20
1,2,3-Trichlorobenzene	92		94		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12,14 Batch: WG1175305-3 WG1175305-4								
1,2,4-Trichlorobenzene	91		96		70-130	5		20
Methyl Acetate	110		110		70-130	0		20
Cyclohexane	99		95		70-130	4		20
1,4-Dioxane	116		118		56-162	2		20
Freon-113	100		98		70-130	2		20
Methyl cyclohexane	94		92		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	116		119		70-130
Toluene-d8	103		101		70-130
4-Bromofluorobenzene	98		102		70-130
Dibromofluoromethane	109		110		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

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): 12,14 QC Batch ID: WG1175305-6 WG1175305-7 QC Sample: L1843466-14 Client ID: CHA-001												
Methylene chloride	ND	10	10	100		8.7	87		70-130	14		20
1,1-Dichloroethane	ND	10	11	110		9.2	92		70-130	18		20
Chloroform	ND	10	11	110		9.4	94		70-130	16		20
Carbon tetrachloride	ND	10	12	120		10	100		63-132	18		20
1,2-Dichloropropane	ND	10	10	100		8.8	88		70-130	13		20
Dibromochloromethane	ND	10	10	100		9.1	91		63-130	9		20
1,1,2-Trichloroethane	ND	10	10	100		8.8	88		70-130	13		20
Tetrachloroethene	ND	10	11	110		9.4	94		70-130	16		20
Chlorobenzene	ND	10	10	100		8.9	89		75-130	12		20
Trichlorofluoromethane	ND	10	13	130		11	110		62-150	17		20
1,2-Dichloroethane	ND	10	11	110		9.6	96		70-130	14		20
1,1,1-Trichloroethane	ND	10	12	120		10	100		67-130	18		20
Bromodichloromethane	ND	10	10	100		9.2	92		67-130	8		20
trans-1,3-Dichloropropene	ND	10	10	100		9.1	91		70-130	9		20
cis-1,3-Dichloropropene	ND	10	10	100		8.6	86		70-130	15		20
Bromoform	ND	10	10	100		9.0	90		54-136	11		20
1,1,2,2-Tetrachloroethane	ND	10	9.5	95		8.6	86		67-130	10		20
Benzene	ND	10	9.5	95		8.0	80		70-130	17		20
Toluene	ND	10	11	110		8.8	88		70-130	**22**	Q	20
Ethylbenzene	ND	10	11	110		9.3	93		70-130	17		20
Chloromethane	ND	10	10	100		8.5	85		64-130	16		20
Bromomethane	ND	10	6.9	69		5.7	57		39-139	19		20
Vinyl chloride	ND	10	13	130		11	110		55-140	17		20

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

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): 12,14 QC Batch ID: WG1175305-6 WG1175305-7 QC Sample: L1843466-14 Client ID: CHA-001												
Chloroethane	ND	10	15	**150**	Q	12	120		55-138	**22**	Q	20
1,1-Dichloroethene	ND	10	12	120		9.7	97		61-145	**21**	Q	20
trans-1,2-Dichloroethene	ND	10	11	110		9.3	93		70-130	17		20
Trichloroethene	ND	10	12	120		10	100		70-130	18		20
1,2-Dichlorobenzene	ND	10	10	100		8.7	87		70-130	14		20
1,3-Dichlorobenzene	ND	10	10	100		8.9	89		70-130	12		20
1,4-Dichlorobenzene	ND	10	10	100		8.8	88		70-130	13		20
Methyl tert butyl ether	ND	10	10	100		9.2	92		63-130	8		20
p/m-Xylene	ND	20	23	115		19	95		70-130	19		20
o-Xylene	ND	20	22	110		18	90		70-130	20		20
cis-1,2-Dichloroethene	ND	10	11	110		9.3	93		70-130	17		20
Styrene	ND	20	22	110		18	90		70-130	20		20
Dichlorodifluoromethane	ND	10	11	110		9.2	92		36-147	18		20
Acetone	ND	10	8.9	89		8.1	81		58-148	9		20
Carbon disulfide	ND	10	11	110		9.3	93		51-130	17		20
2-Butanone	ND	10	9.2	92		8.9	89		63-138	3		20
4-Methyl-2-pentanone	ND	10	9.1	91		7.8	78		59-130	15		20
2-Hexanone	ND	10	8.8	88		8.4	84		57-130	5		20
Bromochloromethane	ND	10	10	100		8.9	89		70-130	12		20
1,2-Dibromoethane	ND	10	10	100		8.8	88		70-130	13		20
1,2-Dibromo-3-chloropropane	ND	10	8.4	84		8.1	81		41-144	4		20
Isopropylbenzene	ND	10	11	110		9.2	92		70-130	18		20
1,2,3-Trichlorobenzene	ND	10	9.7	97		8.5	85		70-130	13		20

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

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): 12,14 QC Batch ID: WG1175305-6 WG1175305-7 QC Sample: L1843466-14 Client ID: CHA-001												
1,2,4-Trichlorobenzene	ND	10	9.9	99		8.7	87		70-130	13		20
Methyl Acetate	ND	10	10	100		9.8	98		70-130	2		20
Cyclohexane	ND	10	12	120		10	100		70-130	18		20
1,4-Dioxane	ND	500	460	92		470	94		56-162	2		20
Freon-113	ND	10	12	120		10	100		70-130	18		20
Methyl cyclohexane	ND	10	12	120		9.9J	99		70-130	19		20

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1,2-Dichloroethane-d4	116		120		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	109		112		70-130
Toluene-d8	104		102		70-130

PCBS

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-12
Client ID: SW-001
Sample Location: CORTLANDVILLE, NY

Date Collected: 10/24/18 11:35
Date Received: 10/24/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 11/01/18 04:53
Analyst: AWS

Extraction Method: EPA 3510C
Extraction Date: 10/31/18 00:54
Cleanup Method: EPA 3665A
Cleanup Date: 10/31/18
Cleanup Method: EPA 3660B
Cleanup Date: 10/31/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/30/18 09:29
Analyst: AWS

Extraction Method: EPA 3510C
Extraction Date: 10/30/18 02:27
Cleanup Method: EPA 3665A
Cleanup Date: 10/30/18
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 12 Batch: WG1173632-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	76		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 12 Batch: WG1173632-2 WG1173632-3									
Aroclor 1016	74		66		40-140	11		50	A
Aroclor 1260	72		68		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		75		30-150	A
Decachlorobiphenyl	74		68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		77		30-150	B
Decachlorobiphenyl	79		78		30-150	B

METALS

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-01
Client ID: MW-1S
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 10/24/18 09:45
Date Received: 10/24/18
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	0.594		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Antimony, Total	0.00049	J	mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00042	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Barium, Total	0.04037		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Calcium, Total	33.6		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Chromium, Total	0.00142		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00062		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Copper, Total	0.00110		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Iron, Total	1.06		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Lead, Total	0.00104		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Magnesium, Total	7.72		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Manganese, Total	0.06476		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:21	EPA 7470A	1,7470A	MG
Nickel, Total	0.00139	J	mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Potassium, Total	0.943		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Sodium, Total	15.8		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM
Zinc, Total	0.01006		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 17:31	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-02
Client ID: MW-1B
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:00
Date Received: 10/24/18
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	0.406		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Antimony, Total	0.00055	J	mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00037	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Barium, Total	0.02331		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Calcium, Total	21.4		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Chromium, Total	0.00084	J	mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00035	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Copper, Total	0.00094	J	mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Iron, Total	0.606		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Lead, Total	0.00053	J	mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Magnesium, Total	4.85		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Manganese, Total	0.03983		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:23	EPA 7470A	1,7470A	MG
Nickel, Total	0.00088	J	mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Potassium, Total	0.708		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Sodium, Total	7.42		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM
Zinc, Total	0.01091		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 17:54	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-03
Client ID: MW-2B
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 10/24/18 10:20
Date Received: 10/24/18
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	0.0375		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Barium, Total	0.1491		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Calcium, Total	38.3		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Chromium, Total	0.00301		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00137		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Copper, Total	0.01101		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Iron, Total	370.		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Lead, Total	0.00040	J	mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Magnesium, Total	8.56		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Manganese, Total	1.590		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:24	EPA 7470A	1,7470A	MG
Nickel, Total	0.00827		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Potassium, Total	1.32		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Sodium, Total	5.65		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM
Zinc, Total	0.01298		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 17:59	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-04
Client ID: MW-2D
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:55
Date Received: 10/24/18
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	0.406		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00046	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Barium, Total	0.03338		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00012	J	mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Calcium, Total	54.7		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Chromium, Total	0.00197		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00026	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Copper, Total	0.00080	J	mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Iron, Total	0.729		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Lead, Total	0.00065	J	mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Magnesium, Total	13.5		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Manganese, Total	0.03386		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:26	EPA 7470A	1,7470A	MG
Nickel, Total	0.00073	J	mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Potassium, Total	0.958		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Sodium, Total	3.55		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:03	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-05
Client ID: MW-2S
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 10/24/18 10:45
Date Received: 10/24/18
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	7.75		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00789		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Barium, Total	0.1012		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00063		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00048		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Calcium, Total	69.8		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Chromium, Total	0.01116		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00621		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Copper, Total	0.01214		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Iron, Total	17.1		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Lead, Total	0.01104		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Magnesium, Total	14.0		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Manganese, Total	1.677		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:28	EPA 7470A	1,7470A	MG
Nickel, Total	0.01275		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Potassium, Total	3.10		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Sodium, Total	51.2		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00872		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM
Zinc, Total	0.1104		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:08	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-06
Client ID: MW-3SR
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:30
Date Received: 10/24/18
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	2.28		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00181		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Barium, Total	0.1020		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Calcium, Total	76.0		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Chromium, Total	0.00509		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00200		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Copper, Total	0.00335		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Iron, Total	4.59		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Lead, Total	0.00206		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Magnesium, Total	16.6		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Manganese, Total	0.3926		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:33	EPA 7470A	1,7470A	MG
Nickel, Total	0.00497		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Potassium, Total	3.20		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Sodium, Total	6.39		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00417	J	mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM
Zinc, Total	0.01420		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:12	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-07
Client ID: MW-3SR2
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 12:35
Date Received: 10/24/18
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	0.871		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00062		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Barium, Total	0.1358		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Calcium, Total	98.7		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Chromium, Total	0.00182		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00080		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Copper, Total	0.00142		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Iron, Total	1.65		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Lead, Total	0.00079	J	mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Magnesium, Total	18.4		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Manganese, Total	0.1692		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:35	EPA 7470A	1,7470A	MG
Nickel, Total	0.00179	J	mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Potassium, Total	1.62		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Sodium, Total	17.6		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00182	J	mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM
Zinc, Total	0.00451	J	mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:17	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-08
Client ID: MW-3BR
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 10/24/18 11:50
Date Received: 10/24/18
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	0.0110		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00176		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Barium, Total	0.07030		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Calcium, Total	9.44		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Chromium, Total	0.00039	J	mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00162		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Copper, Total	0.00147		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Iron, Total	136.		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Magnesium, Total	2.78		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Manganese, Total	1.321		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:36	EPA 7470A	1,7470A	MG
Nickel, Total	0.00757		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Potassium, Total	1.86		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Sodium, Total	12.8		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:22	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-09
Client ID: MW-3BR2
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 12:25
Date Received: 10/24/18
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	0.115		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00076		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Barium, Total	0.2898		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Calcium, Total	86.1		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Chromium, Total	0.00124		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00042	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Copper, Total	0.00145		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Iron, Total	46.0		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Magnesium, Total	16.1		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Manganese, Total	0.3597		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:38	EPA 7470A	1,7470A	MG
Nickel, Total	0.00196	J	mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Potassium, Total	1.00		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Sodium, Total	12.3		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:26	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-10
Client ID: MW-4S
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 10/24/18 11:25
Date Received: 10/24/18
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	0.0260		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Barium, Total	0.04582		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Calcium, Total	83.4		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Chromium, Total	0.00066	J	mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Iron, Total	0.110		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Magnesium, Total	12.7		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Manganese, Total	0.00229		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:40	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Potassium, Total	0.534		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Sodium, Total	2.37		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:31	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP **Lab Number:** L1843466

Project Number: 34236 **Report Date:** 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-11 Date Collected: 10/24/18 11:10

Client ID: MW-4B Date Received: 10/24/18

Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0705		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00020	J	mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Barium, Total	0.2449		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00006	J	mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Calcium, Total	55.3		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Chromium, Total	0.00175		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00082		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Copper, Total	0.00476		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Iron, Total	144.		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Magnesium, Total	10.4		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Manganese, Total	0.4255		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:42	EPA 7470A	1,7470A	MG
Nickel, Total	0.00648		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Potassium, Total	0.916		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Sodium, Total	4.38		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Thallium, Total	0.00019	J	mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM
Zinc, Total	0.01484		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 18:54	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-12
Client ID: SW-001
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 11:35
Date Received: 10/24/18
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	0.0352		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Antimony, Total	0.00046	J	mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00074		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Barium, Total	0.05633		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Calcium, Total	93.2		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Chromium, Total	0.00041	J	mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Copper, Total	0.00211		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Iron, Total	0.207		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Magnesium, Total	13.4		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Manganese, Total	0.08915		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:43	EPA 7470A	1,7470A	MG
Nickel, Total	0.00071	J	mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Potassium, Total	1.95		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Sodium, Total	3.44		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 19:44	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Lab Number: L1843466
Project Number: 34236
Report Date: 11/02/18

SAMPLE RESULTS

Lab ID: L1843466-14
Client ID: CHA-001
Sample Location: CORTLANDVILLE, NY
Date Collected: 10/24/18 10:27
Date Received: 10/24/18
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	0.0293		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Antimony, Total	0.00148	J	mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Barium, Total	0.04605		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Calcium, Total	83.5		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Chromium, Total	0.00073	J	mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Iron, Total	0.0715		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Magnesium, Total	12.7		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Manganese, Total	0.00283		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:16	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Potassium, Total	0.548		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Silver, Total	0.00017	J	mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Sodium, Total	2.43		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Thallium, Total	0.00018	J	mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM
Zinc, Total	0.00345	J	mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 17:08	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

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): 01-12,14 Batch: WG1172810-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/18 15:41	10/29/18 17:12	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-12,14 Batch: WG1174308-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Silver, Total	0.00018	J	mg/l	0.00040	0.00016	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/31/18 11:46	10/31/18 16:59	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L1843466
Report Date: 11/02/18

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 Batch: WG1172810-2								
Mercury, Total	86		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 Batch: WG1174308-2					
Aluminum, Total	90	-	80-120	-	
Antimony, Total	86	-	80-120	-	
Arsenic, Total	105	-	80-120	-	
Barium, Total	93	-	80-120	-	
Beryllium, Total	101	-	80-120	-	
Cadmium, Total	100	-	80-120	-	
Calcium, Total	99	-	80-120	-	
Chromium, Total	91	-	80-120	-	
Cobalt, Total	88	-	80-120	-	
Copper, Total	87	-	80-120	-	
Iron, Total	105	-	80-120	-	
Lead, Total	107	-	80-120	-	
Magnesium, Total	102	-	80-120	-	
Manganese, Total	90	-	80-120	-	
Nickel, Total	90	-	80-120	-	
Potassium, Total	96	-	80-120	-	
Selenium, Total	110	-	80-120	-	
Silver, Total	98	-	80-120	-	
Sodium, Total	96	-	80-120	-	
Thallium, Total	103	-	80-120	-	
Vanadium, Total	89	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L1843466

Report Date: 11/02/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 Batch: WG1174308-2					
Zinc, Total	94	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

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): 01-12,14 QC Batch ID: WG1172810-3 WG1172810-4 QC Sample: L1843466-14 Client ID: CHA-001												
Mercury, Total	ND	0.005	0.00412	82		0.00418	84		75-125	1		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

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): 01-12,14 QC Batch ID: WG1174308-3 WG1174308-4 QC Sample: L1843466-14 Client ID: CHA-001									
Aluminum, Total	0.0293	2	1.82	90	1.78	88	75-125	2	20
Antimony, Total	0.00148J	0.5	0.4619	92	0.4784	96	75-125	4	20
Arsenic, Total	ND	0.12	0.1324	110	0.1325	110	75-125	0	20
Barium, Total	0.04605	2	1.938	94	1.971	96	75-125	2	20
Beryllium, Total	ND	0.05	0.05119	102	0.05081	102	75-125	1	20
Cadmium, Total	ND	0.051	0.05408	106	0.05457	107	75-125	1	20
Calcium, Total	83.5	10	93.3	98	94.4	109	75-125	1	20
Chromium, Total	0.00073J	0.2	0.1942	97	0.1905	95	75-125	2	20
Cobalt, Total	ND	0.5	0.4670	93	0.4625	92	75-125	1	20
Copper, Total	ND	0.25	0.2335	93	0.2243	90	75-125	4	20
Iron, Total	0.0715	1	1.12	105	1.05	98	75-125	6	20
Lead, Total	ND	0.51	0.5632	110	0.5684	111	75-125	1	20
Magnesium, Total	12.7	10	23.0	103	23.2	105	75-125	1	20
Manganese, Total	0.00283	0.5	0.4628	92	0.4474	89	75-125	3	20
Nickel, Total	ND	0.5	0.4800	96	0.4682	94	75-125	2	20
Potassium, Total	0.548	10	10.2	96	10.2	96	75-125	0	20
Selenium, Total	ND	0.12	0.135	112	0.141	118	75-125	4	20
Silver, Total	0.00017J	0.05	0.04867	97	0.05043	101	75-125	4	20
Sodium, Total	2.43	10	12.1	97	12.2	98	75-125	1	20
Thallium, Total	0.00018J	0.12	0.1286	107	0.1305	109	75-125	1	20
Vanadium, Total	ND	0.5	0.4635	93	0.4473	89	75-125	4	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

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): 01-12,14 QC Batch ID: WG1174308-3 WG1174308-4 QC Sample: L1843466-14 Client ID: CHA-001									
Zinc, Total	0.00345J	0.5	0.4917	98	0.4875	98	75-125	1	20

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1843466-01A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-01B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-01C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-02A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-02B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-02C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-03A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-03B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-03C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1843466-03D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-04A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-04B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-04C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-04D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-05A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-05B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-05C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-05D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-06A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-06B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-06C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1843466-06D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-07A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-07B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-07C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-07D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-08A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-08B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-08C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-08D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-09A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-09B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-09C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1843466-09D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-10A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-10B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-10C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-10D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-11A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-11B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-11C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-11D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-12A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-12B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-12C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1843466-12D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-12E	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8082-LVI(7)
L1843466-12F	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8082-LVI(7)
L1843466-13A	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		HOLD()
L1843466-13B	Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		HOLD()
L1843466-13C	Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		HOLD()
L1843466-13D	Vial Large Septa unpreserved (4oz)	A	NA		2.2	Y	Absent		HOLD()
L1843466-14A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14A1	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14A2	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14B1	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14B2	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14C1	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14C2	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260-R2(14)
L1843466-14D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L1843466
Report Date: 11/02/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1843466-14D1	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-14D2	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(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-6020T(180),CO-6020T(180)
L1843466-17A	Vial HCl preserved	A	NA		2.2	Y	Absent		ARCHIVE()
L1843466-17B	Vial HCl preserved	A	NA		2.2	Y	Absent		ARCHIVE()
L1843466-17C	Vial HCl preserved	A	NA		2.2	Y	Absent		ARCHIVE()
L1843466-17D	Vial HCl preserved	A	NA		2.2	Y	Absent		ARCHIVE()

*Values in parentheses indicate holding time in days

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L1843466
Project Number:	34236	**Report Date:**	11/02/18

GLOSSARY

Acronyms

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.
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.
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

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.

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L1843466
Project Number:	34236	**Report Date:**	11/02/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

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.

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).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L1843466
Project Number:	34236	**Report Date:**	11/02/18

REFERENCES

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

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), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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 2

Date Rec'd in Lab: 10/24/18

ALPHA Job #: L1843466

Client Information
Client: CHA Consulting
Address: One Park Place 300 S State St Suite 600 Syracuse, NY 13202
Phone: 315 471-3920
Fax: 315 471-3569
Email: smiller@chacompanies.com

Project Information
Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 34236
(Use Project name as Project #)
Project Manager: Sam Miller
ALPHAQuote #: 4949

Turn-Around Time
Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

Deliverables
[ ] ASP-A [X] ASP-B
[ ] EQuIS (1 File) [X] EQuIS (4 File)
[ ] Other

Billing Information
[X] 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:

[ ] These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

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	Total Hg Total Metals	NYTCL-8260	Total Bottle	Sample Specific Comments
43466 - 01	MW-1S	10/24/18	0945	Water	SM/AR	X	X	4	
- 02	MW-1B	10/24/18	1000	Water	SM/AR	X	X		
- 03	MW-2B	10/24/18	1020	Water	SM/AR	X	X		
- 04	MW-2D	10/24/18	1055	Water	SM/AR	X	X		
- 05	MW-2S	10/24/18	1045	Water	SM/AR	X	X		
- 06	MW-3SR	10/24/18	1130	Water	SM/AR	X	X		
- 07	MW-3SR2	10/24/18	1235	Water	SM/AR	X	X		
- 08	MW-3BR	10/24/18	1150	Water	SM/AR	X	X		
- 09	MW-3BR2	10/24/18	1225	Water	SM/AR	X	X		
- 10	MW-4S	10/24/18	1125	Water	SM/AR	X	X		

Container Type: P V
Preservative: C B

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
	10/24/18 15:00	Danielle Mott	10/24/18 22:30
			10/24/18 2330

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

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

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 2 of 2

Date Rec'd in Lab: 10/24/18

ALPHA Job #: L1843466

Client Information

Client: CHA Consulting
Address: One Park Place 300 S State St Suite 600 Syracuse, NY 13202
Phone: 315 471 3920
Fax: 315 471 3569
Email: smiller@chacompanies.com

Project Information

Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 34236
(Use Project name as Project #)
Project Manager: Sam Miller
ALPHAQuote #: 4949

Turn-Around Time

Standard [x] Due Date:
Rush (only if pre approved) [ ] # of Days:

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

Please specify Metals or TAL.

Deliverables

[ ] ASP-A [x] ASP-B
[ ] EQuIS (1 File) [x] 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

[x] Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
[ ] NJ [ ] NY
[ ] Other:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Hg - Total 6010D	NYTCL-8260C	TCL PCBs-8082A	Total Solids-SM 2540	TCL Volatiles-8260C	TCL PCBs-8082A	Total Hg-6010D	Total Bottle
43466-11	MW-4B	10/24/18	1110	water	SM/AR	x	x						4
-12	SW-001	10/24/18	1135	water	SM/AR	x	x	x					6
-13	SED-001	10/24/18	1140	soil	SM/AR				x	x	x	x	4
-14	CHA-001	10/24/18	1027	water	SM/AR	x	x						4
-14Y	CHA-MS001	10/24/18	1123	water	SM/AR	x	x						4
-14	CHA-MSD001	10/24/18	1123	water	SM/AR	x	x						4

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

Sample Specific Comments

Container Type	P	V	A	P	V	G	G
Preservative	C	B	A	A	A	A	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
	10/24/18 15:00	Danielle Matt	10/24/18 22:30
			10/24/18 22:30

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

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