March 18, 2021

Ms. Brianna Scharf
New York State Department of Environmental Conservation
Division of Environmental Remediation, Bureau E, Section A
625 Broadway
Albany, New York 12233
Brianna.scharf@dec.ny.gov

RE: Response to Comments on the 2020 Periodic Review Report
South Hill Dump, Town of Cortlandville, New York
CHA Project No.: 34236
NYSDEC Site No.: 712009

Dear Ms. Scharf,

On behalf of the Town of Cortlandville, please find an enclosed copy of the revised 2020 Periodic Review Report for the South Hill Dump located in the Town of Cortlandville, New York. The document has been revised to reflect the comments provided in the New York State Department of Environmental Conservation's (NYSDEC's) comment letter dated March 10, 2021. The NYSDEC comments and CHA responses/report amendments are summarized below.

Comment 1: Table 2 – Groundwater Monitoring Well Results – "Detected Compounds Only" is presented in mg/l. TOGS is presented in ug/l. Please convert the table to ug/l.

Response 1: *The table has been revised to display compounds in ug/l.*

Comment 2: The PRR does not include any trend graphs for metals or volatile organic compounds (VOCs). Please include a set of trend graphs for VOCs and metals.

Response 2: *CHA has included time series graphs for the compounds that were detected above TOGS 1.1.1 in Appendix C.*

Comment 3: The PRR does not include a figure of groundwater analytical results that exceed Class GA ambient water quality standards (AWQS). Please provide a figure including chemical boxes with the groundwater analytical data that exceeds Class GA AWQS.

Response 3: *Figure 5 has been included and displays the compounds that were detected which exceed the Class GA AWQS.*

Comment 4: The PRR does not include any groundwater plume maps for Site related compounds of concern (COCs). Please provide a groundwater plume map with Total chlorinated VOCs.

Response 5: *The purpose of a groundwater plume map is to understand how the groundwater contaminants are migrating through the environment. Typically, in order to create a groundwater plume map, a source area is identified, and concentrations downstream are used to delineate the*

plume. The monitoring well network at the site consists of 11 wells, only two of which have detections of the contaminants of concern. The two wells are in relatively close proximity to one another and are not considered the source. Therefore, CHA has not prepared groundwater plume maps.

In addition to the items above, and the recommendations previously included in the PRR, CHA also requests the reduction in the requirement to submit a PRR from annual to bi-annual. While the site inspections will be performed annually, the report will be prepared the same year as the groundwater monitoring event and will summarize both annual inspections. If you have any questions, please do not hesitate to contact me at (315) 257-7154.

Sincerely,

Samantha J. Miller

Samantha J. Miller, P.E.
Assistant Project Engineer III

SJM/cab
cc:
Sarah Saucier, Section Chief Sarah.Saucier@dec.ny.gov
Johnathan Robinson, NYSDOH Project Manager Johnathan.Robinson@health.ny.gov
Nate Kranes, TRC NKranes@trccompanies.com

V:\Projects\ANY\K4\34236\Reports\2020 PRR\FINAL\Revision 1\2020 PRR Response to Comments.docx

2020 PERIODIC REVIEW REPORT

SOUTH HILL DUMP
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK

NYSDEC Site Number: 712009

CHA Project Number: 034236.000

Prepared for:

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

Prepared by:

One Park Place
300 South State Street, Suite 600
Syracuse, New York 13202
Phone: (315) 471-3920
Fax: (315) 471-3569

December 2020

Revised: March 2021

V:\Projects\ANY\K4\34236\Reports\2020 PRR\FINAL\Revision 1\2020PRR.report.hw.712009_r1.doc

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

LIST OF ACRONYMS & ABBREVIATIONS

CHA	CHA Consulting, Inc.
CVOC	Chlorinated Volatile Organic Compound
DCE	cis-1,2-Dichloroethylene
EC	Engineering Controls
FER	Final Engineering Report
IC	Institutional Controls
MACTEC	MACTEC Engineering and Consulting, P.C.
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic 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 required as an element of the SMP developed for the Site and documents the groundwater monitoring event and site-wide inspections during the reporting year from January 1, 2020 to December 31, 2020.

The Site is a 10.4-acre parcel located off 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 Site location map is included as Figure 1. An aerial image showing the boundaries and layout 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 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 CONTAMINANTS OF CONCERN

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

- Volatile organic compounds (VOCs)
  - Trichloroethene
  - 1,2-dichloroethene
- Semivolatile organic compounds (SVOCs)
  - Polycyclic Aromatic 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

An annual PRR is required by NYSDEC to document status of the controls established by the SMP. This PRR was prepared by CHA Consulting, Inc. (CHA) on behalf of the Town of Cortlandville to document the status of the controls, established by the SMP, during 2020. The SMP requirements include:

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

In the 2018 PRR, CHA requested groundwater, surface water, and sediment monitoring frequency to be reduced from once every 15 months, as written in the SMP, to once every 24 months. This was approved by the NYSDEC with concurrent approval of the 2018 PRR. Per this reduced monitoring frequency, groundwater, surface water, and sediment sampling were completed in September 2020.

2.0 INSTITUTIONAL/ENGINEERING CONTROLS

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.

The IC and EC Certification Forms are included in Appendix A.

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 Site-Wide Inspection

2.2.1.1 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 referred to for requirements for restoration of the cover system.

The landfill cover system was inspected for the evidence of erosion, cracks, and settlement of the cover soils. The drainage systems were inspected for evidence of leachate seeps. Vegetation was inspected for height, evidence of disturbance, and evidence of woody growth. The cover system inspection included examining the landfill for the presence of any live or dead vectors, animal droppings, and burrows.

2.2.1.2 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. Site access controls were inspected for evidence of trespassing such as breaks in the fence, broken locks, or vehicle tracks.

2.2.1.3 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 (down-drains or interceptor trenches) on the landfill cover convey most surface water to a riprap-lined drainage swale along the near centerline of the landfill and ultimately to the stormwater detention basin on the southern side of the landfill. Surface water not managed by the stone drainage pathways is conveyed to riprap swales along the perimeter of the landfill that also discharge to the stormwater detention basin to the south. The stormwater detention basin outlet creates an intermittent flow of water that discharges to an unnamed stream which then discharges to Hoxie Gorge Creek located approximately 550 feet to the southeast of the landfill. The drainage system was inspected to identify any erosion, siltation, settlement, or restriction to the flow of water in the drainage channels and piping on top of and around the perimeter of the landfill.

2.2.1.4 Landfill Gas Vents

Seven passive landfill gas vents were installed to collect potential landfill gas for direct venting to the atmosphere. The gas venting system was inspected by checking the vents for damage or blockages and checking the cap adjacent to the vents for settlement and stressed vegetation. These gas vents reduce the potential for accumulation and migration of landfill gas in the subsurface. Items

such as stressed vegetation and bubbling of surface water could indicate a malfunction of the gas venting system that cannot readily be detected upon visual inspection of the venting system itself.

2.2.1.5 Groundwater Monitoring Wells

Eleven groundwater monitoring wells were installed at the Site. The wells are constructed of polyvinyl chloride and are protected by lockable steel casings. All monitoring well casings, covers, locks, and associated structures were visually inspected to verify they are properly secured and not damaged.

2.2.2 Components of the Monitoring Program

The NYSDEC approved a reduction in the groundwater, surface water, and sediment sampling frequency from once per 15 months to once per 24 months. Per this reduced monitoring frequency, groundwater, surface water, and sediment samples were collected or analyzed in September 2020.

Components of the monitoring plan include:

Semiannually

- Water level measurements from the 11 groundwater monitoring wells on Site. Monitoring wells are set in clusters with screens in the shallow overburden and bedrock.

Biennially

- Groundwater sampling;
- Surface water sampling;
- Seep sampling (if observed); and
- Sediment sampling.

Following sample collection, the samples were delivered by CHA to Alpha Analytical Inc.'s (Alpha) Service Center in Syracuse, New York, for subsequent transport by Alpha to its laboratory in Westborough, Massachusetts, in accordance with proper chain-of-custody protocol. Alpha is currently certified by the New York State Department of Health's (NYSDOH) Environmental Laboratory Approval Program (ELAP). The samples were analyzed for one or more of the parameters below, as detailed in Section 2.2.3:

- VOCs via United States Environmental Protection Agency (USEPA) Method 8260C;
- Metals via USEPA method 6020B and 7470A; and/or
- PCBs via USEPA method 8082.

2.2.3 Monitoring Completed During Reporting Period

Monitoring activities were performed September 23rd, 2020 and are summarized in the following sections.

2.2.3.1 Groundwater Elevation Monitoring

Groundwater water level measurements were collected in June and September 2020 from each of the 11 groundwater monitoring wells shown on Figure 2.

2.2.3.2 Groundwater Sampling

Groundwater samples were collected in accordance with the SMP using "no purge" passive collection bags from all on-site monitoring wells. 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. The groundwater samples were placed directly into laboratory-supplied containers, which were labeled with the project name, sample identification, date, time, sampler's initials, and applicable laboratory analyses. Samples were submitted to Alpha Analytical for the following analyses:

- VOCs via EPA Method 8260C; and,
- Total Metals via EPA Methods 6020B and 7470A.

2.2.3.3 Surface Water Sampling

A surface water sample was not collected from the stormwater detention basin outfall during the September 2020 monitoring event due lack of standing water from the recent drought conditions. If conditions allow, a surface water sample will be collected during the next monitoring event in 2022.

2.2.3.4 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 2020 fieldwork, there were no active seeps observed, and therefore, no leachate seep sample was collected.

2.2.3.5 Sediment Sampling

A sediment sample was collected from the stormwater detention basin outfall during the September 2020 monitoring event. The sediment sample was placed directly into laboratory-supplied containers, which were labeled with the project name, sample identification, date, time, sampler's initials, and applicable laboratory analyses. Samples were submitted to Alpha Analytical for the following analyses:

- VOCs via EPA Method 8260C;
- Total Metals via EPA Methods 6020B and 7470A; and,
- Total PCBs via EPA Method 8082A.

3.0 MONITORING RESULTS

3.1 SITE-WIDE INSPECITON RESULTS

In accordance with the SMP, CHA performed Site inspections on June 18th and September 23rd, 2020. The landfill inspection forms associated with each inspection are included in Appendix B. The results of the inspections indicate the following:

- Landfill cover was in good condition; there was no evidence of scour or erosion. The Town of Cortlandville maintained the vegetative cover at an appropriate height by mowing the landfill in June and September 2020 following CHA's recommendation to mow the landfill two times per year;
- No woody vegetation, animal burrows, or leachate seeps were observed during the site inspections; and,
- The drainage channels appeared to be in good condition with no evidence of scour or accumulation of silt.
- The Site access controls were observed to be in satisfactory condition and no evidence of trespassing was observed;
- Landfill gas vents were in good condition;
- Monitoring wells were in good condition;

The results from this inspection indicate that the landfill cap and infrastructure is in generally good condition, and no repairs are recommended as a result of the 2020 inspections.

3.2 SITE MONITORING RESULTS

3.2.1 Groundwater Elevation Monitoring and Flow Direction

Groundwater levels measured in June and September 2020 in most wells were generally lower compared to the previous year's monitoring events 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 3 and 4, respectively. Groundwater at the Site generally flows to the southeast across the Site for both the shallow overburden aquifer and the bedrock aquifer.

3.2.2 Groundwater Sampling

During the September 2020 monitoring event, HydraSleeves™ were empty when removed from wells MW-1S, MW-2S, and MW-4S. CHA used a Solinst water level meter to determine the volume of water in each well and found that wells MW-1S and MW-2S had only approximately four

to six inches of water in the well riser for each. A 1.5-inch diameter bailer lowered down the well risers did not obtain any water, and therefore, CHA was unable to collect a groundwater sample from wells MW-1S and MW-2S. However, MW-4S contained sufficient water to collect a sample; therefore, CHA sampled well MW-4S with a disposable bailer rather than the HydraSleeve™. The HydraSleeve™ may have been faulty or the water level may have decreased since the last sampling event in 2018 caused the HydraSleeve™ to be placed above the water table in well MW-4S. Table 1 indicates the groundwater elevation in well MW-4S has decreased by nearly six feet since 2018.

The laboratory analytical results from the groundwater sampling event are shown in table in Table 2 and are summarized below. Data that exceeds TOGS 1.1.1 are also shown on Figure 5.

VOCs:

- VOC detections are consistent with previous monitoring events.
- Overburden well results:
    - No VOCs were detected in the upgradient monitoring well MW-1S.
    - No VOCs were detected in the downgradient overburden wells MW-2S, MW-2D or MW-4S.
    - TCE was detected at a concentration of 0.019 mg/L in MW-3SR, which exceeds the applicable groundwater standard.
    - Benzene and trans-1,2-dichloroethene were detected in well MW-3SR2 at an estimated concentration below the applicable groundwater standards. Chlorinated VOCs (CVOC) trichloroethene (TCE), cis-1,2-Dichloroethene (DCE) and vinyl chloride were detected at concentrations of 0.014 mg/L, 0.028 mg/L, and 0.003 mg/L, respectively, which exceeds their applicable groundwater standards.
- Bedrock well results:
    - No VOCs were detected in the upgradient monitoring well MW-1B.
    - No VOCs were detected in downgradient bedrock wells MW-3BR or MW-4B during the September 2020 monitoring event.
    - Benzene was detected in well MW-2B at an estimated concentration below the groundwater standard.
    - TCE and DCE were detected at concentrations of 0.067 mg/L and 0.0097 mg/L, respectively, in MW-3BR2 which exceeds their appliable groundwater standards. Vinyl chloride was also detected, but at an estimated concentration that was below the groundwater standard.
- Monitoring wells MW-3SR2 and MW-3BR2 are the only wells that have had detectable concentrations that exceed applicable groundwater standards for the primary contaminants of concern, more specifically the chlorinated solvents trichloroethene and cis-1,2-

Dichloroethene. Appendix C contains two time series graphs for these parameters. As shown on the graphs, there appears to be a decrease in the detections of trichloroethene while there is an increase in cis-1,2-dichloroethene. This is consistent with the process of natural degradation of chlorinated solvents.

Metals:

- The metals results were generally consistent with historical groundwater results.
- Overburden well results:
    - Only iron was detected above the groundwater standard in upgradient well MW-1S (October 2018).
    - Iron was detected above the groundwater standard in all downgradient overburden monitoring wells except for well MW-4S.
    - Several other metals were detected in the downgradient overburden monitoring wells; however, no other metals were detected above the applicable groundwater standards and guidance values.
- Bedrock well results:
    - Several metals were detected in the upgradient well MW-1B; however, only iron exceeded the groundwater during the 2020 sampling event. The detected concentration of 0.321 milligrams per liter (mg/L) was only slightly in excess of the groundwater standard of 0.3 mg/L.
    - Several metals were detected in all of the downgradient bedrock wells as well. However, only iron was detected in excess of the applicable groundwater standards and guidance values in wells MW-2B, MW-3BR2 and MW-4S.
    - Both iron and manganese were detected at concentrations in excess of the applicable groundwater stands in well MW-3BR.
- In addition to the time series graphs previously mentioned, Appendix C also includes graphs for total iron levels in both the overburden and the bedrock wells. As can be seen on these graphs, levels of iron appear to have increased in the year following completion of the remedy and have since decreased.

The complete laboratory analytical package is included in Appendix D.

3.2.3 Sediment Sampling

The laboratory analytical results from the sediment sample are provided in Table 3. The sediment sample was compared to NYSDEC Sediment Guidance Values from the Division of Fish, Wildlife and Marine Resources Technical Guidance for Screening Contaminated Sediments, updated January 25, 1999. Analytical results indicate VOCs and most metals were detected in the sediment sample at concentrations not exceeding their applicable standards. PCBs were not detected in the sample. The

metal manganese was detected at a concentration exceeding the applicable standard in the sediment sample with a concentration of 25,000 mg/kg. An exceedance of manganese was noted in the last sediment sample collected in March 2016. The complete laboratory analytical package is included in Appendix C.

4.0 SUMMARY, CONCLUSIONS & RECOMMENDATIONS

4.1 SUMMARY

The Site was observed to be in overall good condition at the time of the 2020 activities. In summary, specific observations include:

- Previously, it was recommended the Town of Cortlandville mow the landfill twice annually. Landfill mowing occurred before each site inspection.
- 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 lower compared to the 2019 site inspections; however, groundwater flow direction in both, overburden and bedrock wells, remains consistent towards the southeast.
- No groundwater sample was collected from wells MW-1S or MW-2S due to insufficient water in the monitoring well.
- Groundwater results indicated slightly elevated concentrations of some VOCs and metals, which is consistent with previous monitoring events.
    - At least one of three CVOCs (TCE, DCE and vinyl chloride) were detected above applicable standards in three groundwater samples.
    - Iron was detected above standard in most monitoring wells sampled.
    - Manganese was detected in monitoring wells MW-3SR2 and MW-3BR.
- One sediment sample was collected from the catch basin outfall. Analytical results indicated low levels of metals detected in the sediment sample. Only manganese was detected at a concentration exceeding the applicable standard.
- The stormwater detention basin was dry at the time of the monitoring event, and therefore, no surface water samples was collected.
- No leachate seeps were identified; therefore, a leachate sample was not collected.

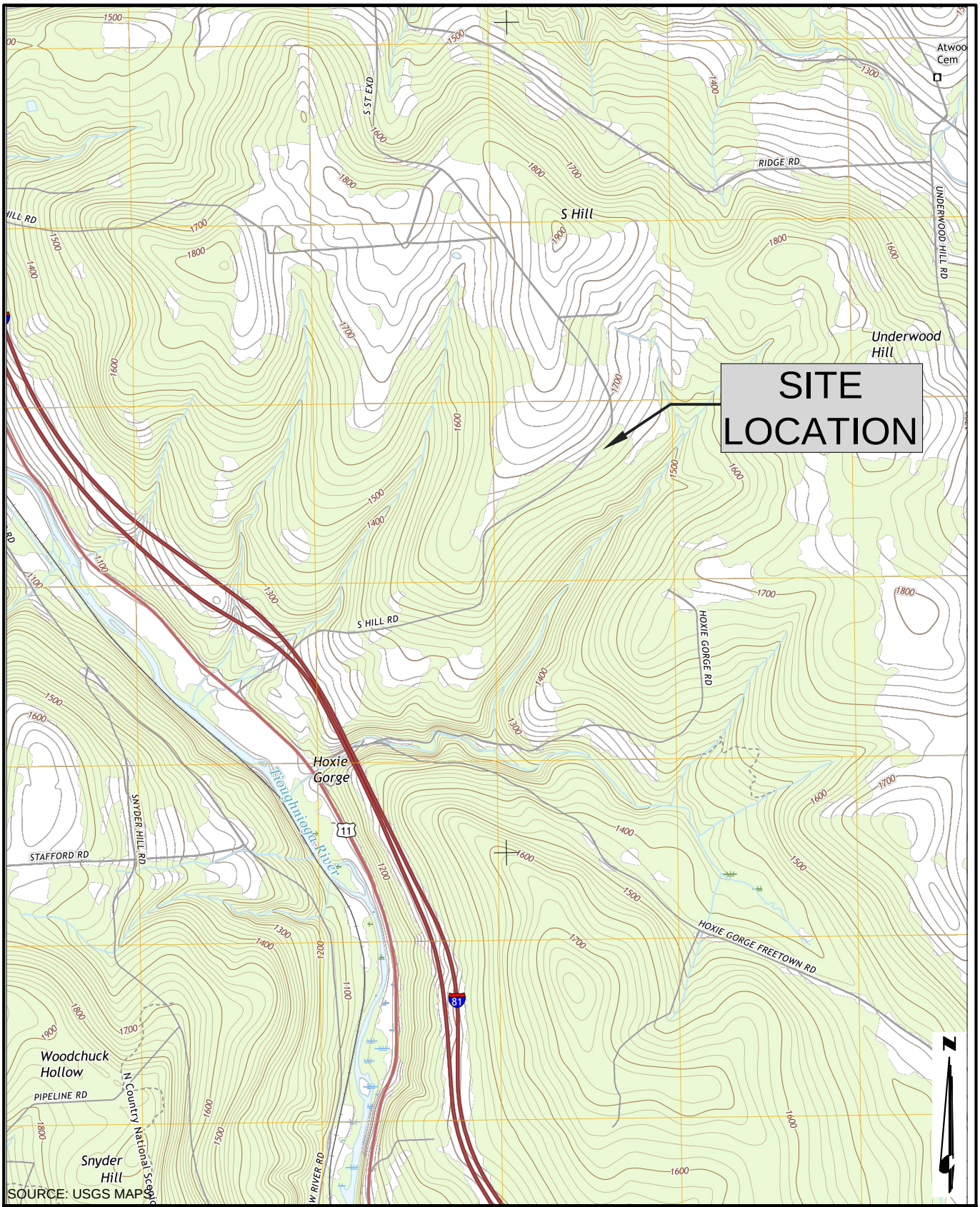
4.2 CONCLUSIONS

As previously indicated, the IC and EC Certification Forms are included in Appendix A. 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.

4.3 RECOMMENDATIONS

It is recommended that all 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. Therefore, it is recommended that the Site monitoring program continue. No changes to the operation and maintenance plans are recommended at this time. However, given the change to bi-annual groundwater monitoring CHA recommends a reduction to annual landfill inspections. If approved by the NYSDEC, the next landfill inspection is anticipated to be in Fall 2021 and the next groundwater, surface water, and sediment sampling is anticipated to be in September 2022. Additionally, CHA recommends a reduction in the submission of the PRR to NYSDEC from annual to bi-annual, to be submitted in the year that the groundwater monitoring event is conducted.

FIGURES



SOURCE: USGS MAP

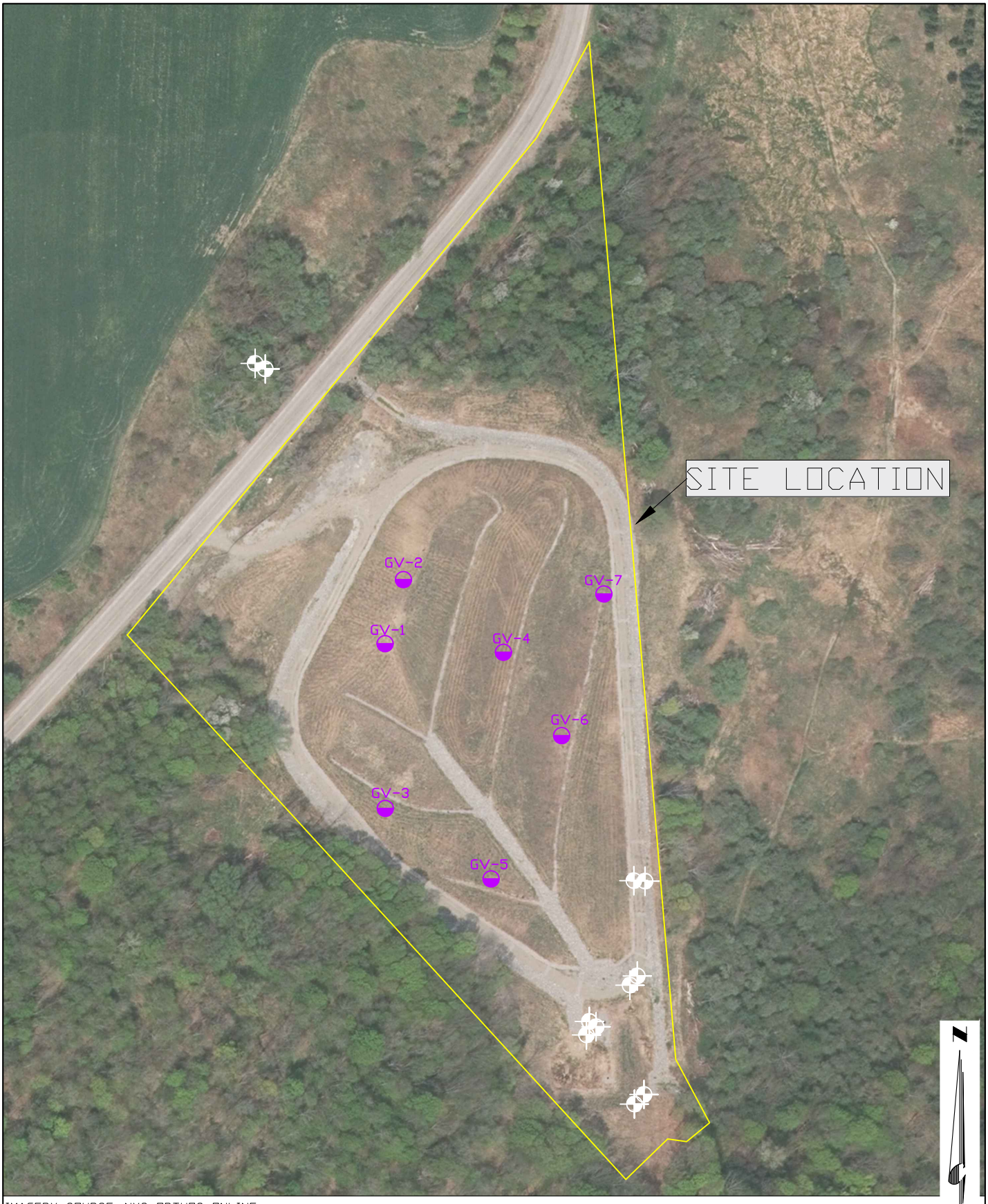
CHA
300 South State Street - Suite 600
Syracuse, NY 13202
315.471.3920 • www.chacompanies.com

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

PROJECT NO. 34236

DATE: 12/2020

FIGURE 1



IMAGERY SOURCE: NYS ORTHOS ONLINE

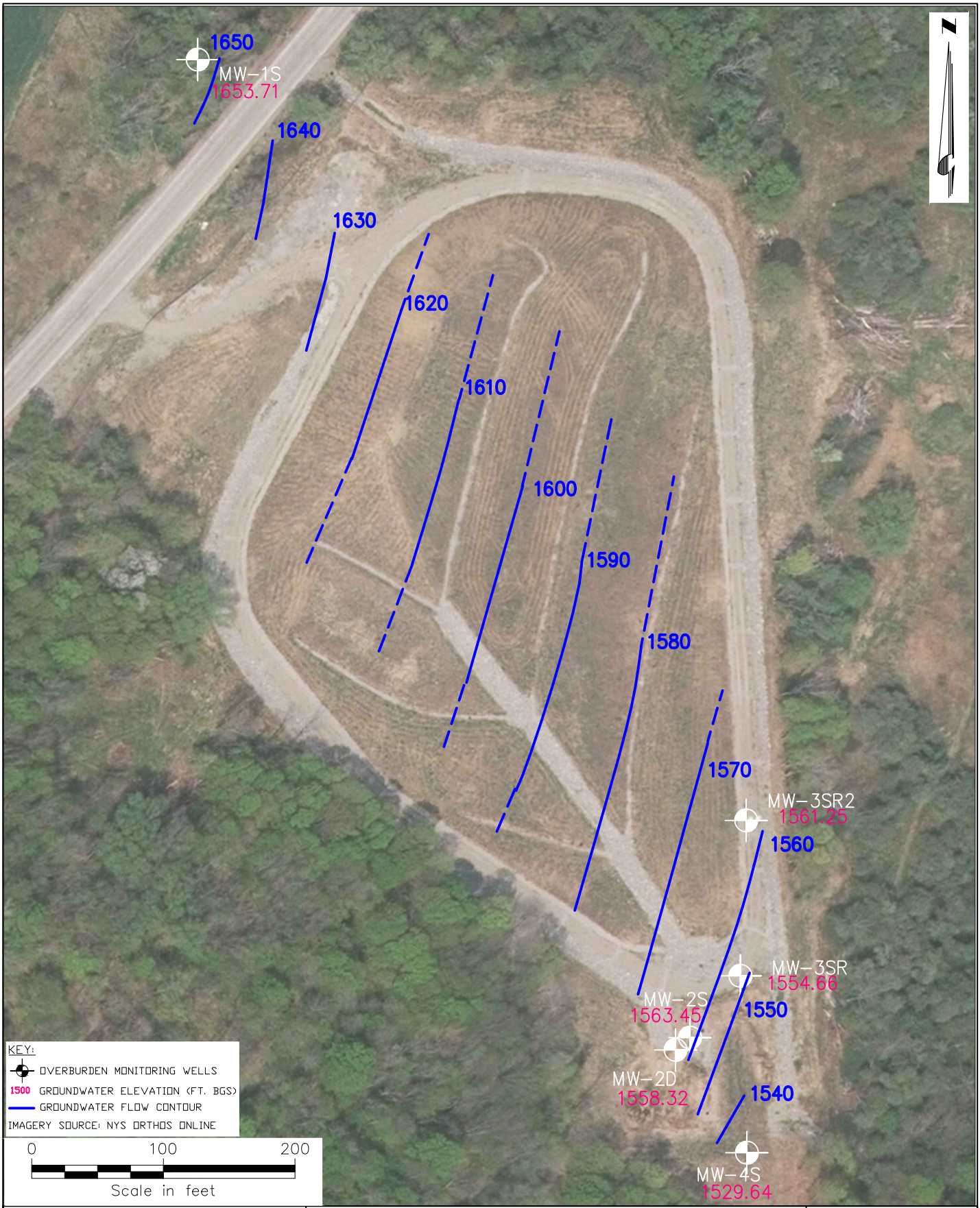
CHA
300 South State Street - Suite 600
Syracuse, NY 13202
315.471.3920 • www.chacompanies.com

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

PROJECT NO. 34236

DATE: 12/2020

FIGURE 2



CHA
300 South State Street - Suite 600
Syracuse, NY 13202
315.471.3920 • www.chacompanies.com

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

PROJECT NO. 34236

DATE: 12/2020

FIGURE 3

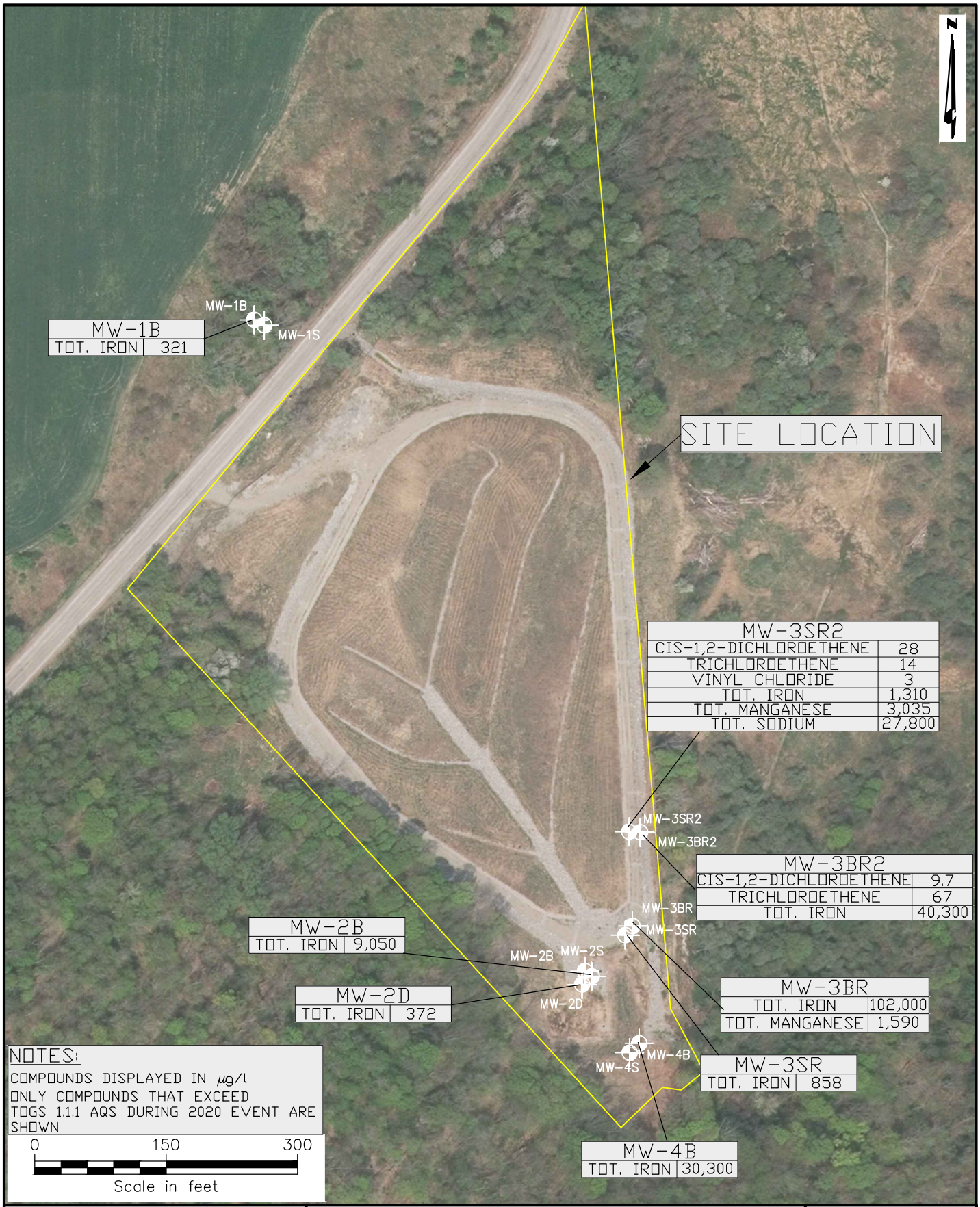
CHA
300 South State Street - Suite 600
Syracuse, NY 13202
315.471.3920 • www.chacompanies.com

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

PROJECT NO. 34236

DATE: 12/2020

FIGURE 4



CHA
300 South State Street - Suite 600
Syracuse, NY 13202
315.471.3920 • www.chacompanies.com

SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
2020 ANALYTICAL DATA

PROJECT NO. 34263

DATE: 03/2021

FIGURE 5

TABLES

Table 1.
Groundwater Elevation Data
South Hill Dump
Town of Cortlandville, New York
2020 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	Groundwater Elevation (ft) July 2019	Groundwater Elevation (ft) October 2019	Groundwater Elevation (ft) June 2020	Groundwater Elevation (ft) September 2020
MW-1S	1670.85	1670.95	1668.10	TOR	17.90	2-inch Overburden	5'-15'	1659.34	1659.06	1657.03	1655.55	1656.19	1653.71
MW-1B	1671.65	1671.35	1668.50	TOR	37.90	2-inch Bedrock	25'-35'	1648.40	1648.96	1648.60	1647.52	1647.04	1644.41
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	1562.98	1560.65	1562.01	1554.62
MW-2D	1576.30	1575.00	1572.00	TOR	27.00	2-inch Overburden	14'-24'	1566.64	1566.44	1565.12	1562.44	1563.81	1558.32
MW-2S	1575.40	1575.45	1572.60	TOR	12.90	2-inch Overburden	5'-10'	1567.83	1567.72	1567.23	1566.06	1565.88	1563.45
MW-3BR	1562.61	No Riser	1559.83	TOC	43.90	3-inch Open Hole Bedrock	Open from 31'-41'	1553.69	1553.57	1552.95	1551.19	1553.77	1548.23
MW-3SR	1563.68	1563.04	1561.35	TOR	25.30	2-inch Overburden	19'-24'	1558.71	1558.52	1558.08	1556.58	1558.49	1554.66
MW-3BR2	1565.25	No Riser	1565.61	TOR	24.49	4-inch Open Hole Bedrock	Open from 14'-26'	1564.71	1565.25	Not Gauged	1562.55	1563.76	1561.06
MW-3SR2	Flush	1565.76	1566.02	TOR	11.04	2-inch Overburden	6'-11'	1564.47	1565.36	1564.12	1562.44	1563.58	1561.25
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	1516.09	1512.00	1513.61	1507.64
MW-4S	1545.45	1545.40	1542.60	TOR	18.80	2-inch Overburden	6'-16'	1535.65	1535.54	1532.84	1533.66	1530.79	1529.64

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
2020 Periodic Review Report

LOCATION			MW-1S		MW-1B			MW-2B		
SAMPLING DATE			7/5/2017	10/24/2018	7/5/2017	10/24/2018	9/23/2020	7/5/2017	10/24/2018	9/23/2020
	NY-AWQS	Units	Results	Results		Results	Results		Results	Results
Volatile Organics by GC/MS										
Acetone	50	ug/l							2 J	
Benzene	1	ug/l								0.35 J
cis-1,2-Dichloroethene	5	ug/l								
trans-1,2-Dichloroethene	5	ug/l								
Trichloroethene	5	ug/l								
Vinyl chloride	2	ug/l								
Total Metals										
Aluminum, Total		ug/l	4400	594	300	406	104		37.5	9.47 J
Antimony, Total	3	ug/l		0.49 J		0.55 J		13 J		0.43 J
Arsenic, Total	25	ug/l		0.42 J		0.37 J	0.17 J			
Barium, Total	1000	ug/l	50	40.37	17	23.31	26.86	120	149.1	109.4
Cadmium, Total	5	ug/l							0.08 J	
Calcium, Total		ug/l	16100	33600	17600	21400	37900	32300	38300	33900
Chromium, Total	50	ug/l	4.4	1.42		0.84 J	0.64 J		3.01	0.44 J
Cobalt, Total		ug/l	1.5 J	0.62		0.35 J	0.23 J		1.37	
Copper, Total	200	ug/l	3.1 J	1.1		0.94 J		20 J	11.01	1.1
Iron, Total	300	ug/l	3900 J	1060	320 J	606	321	159000 J	370000	9050
Lead, Total	25	ug/l	4.1 J	1.04		0.53 J		3.4 J	0.4 J	
Magnesium, Total	35000	ug/l	4400	7720	4000	4850	8300	7000	8560	7680
Manganese, Total	300	ug/l	70 J	64.76	13	39.83	28.85	1000 J	1590	181.4
Nickel, Total	100	ug/l	3.8 J	1.39 J		0.88 J		6.5 J	8.27	0.9 J
Potassium, Total		ug/l	1700	943	710	708	935	840	1320	967
Sodium, Total	20000	ug/l	6100	15800	6800	7420	16100	4200	5650	5520
Thallium, Total	0.5	ug/l	4.2 J							0.47 J
Zinc, Total	2000	ug/l	11	10.06		10.91		1.5 J	12.98	3.57 J

Notes:
Samples were collected by CHA Consulting, Inc. September 2020
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
Blank cells indicate the parameter was not detected
above the laboratory Method Detection Limit.
J - Estimated value

Table 2.
Groundwater Monitoring Well results - Detected Compounds only
South Hill Dump
2020 Periodic Review Report

LOCATION			MW-2S		MW-2D			MW-4B		
SAMPLING DATE			7/5/2017	10/24/2018	7/5/2017	10/24/2018	9/23/2020	7/5/2017	10/24/2018	9/23/2020
	NY-AWQS	Units		Results		Results	Results		Results	Results
Volatile Organics by GC/MS										
Acetone	50	ug/l						0.56 J		
Benzene	1	ug/l								
cis-1,2-Dichloroethene	5	ug/l								
trans-1,2-Dichloroethene	5	ug/l								
Trichloroethene	5	ug/l							1.8	
Vinyl chloride	2	ug/l								
Total Metals										
Aluminum, Total		ug/l	2600	7750	0.6	406	78.1	66 J	70.5	25
Antimony, Total	3	ug/l								
Arsenic, Total	25	ug/l		7.89		0.46 J	0.48 J		0.2 J	
Barium, Total	1000	ug/l	42	101.2	0.032	33.38	31.67	41	244.9	57.58
Cadmium, Total	5	ug/l		0.48		0.12 J	0.24		0.06 J	
Calcium, Total		ug/l	73800	69800	52.6	54700	61800	27600	55300	28300
Chromium, Total	50	ug/l	4.6	11.16	0.0018 J	1.97	0.99 J		1.75	0.65 J
Cobalt, Total		ug/l	0.69 J	6.21		0.26 J	0.24 J		0.82	
Copper, Total	200	ug/l	2.7 J	12.14		0.8 J			4.76	0.62 J
Iron, Total	300	ug/l	2400 J	17100	0.68 J	729	372	11700 J	144000	30300
Lead, Total	25	ug/l	3.5 J	11.04		0.65 J				
Magnesium, Total	35000	ug/l	14200	14000	13.2	13500	14900	6900	10400	6890
Manganese, Total	300	ug/l	15 J	1677	0.03 J	33.86	192.8	110 J	425.5	245.2
Nickel, Total	100	ug/l	2.7 J	12.75		0.73 J	0.66 J	1.4 J	6.48	0.94 J
Potassium, Total		ug/l	1600	3100	1	958	998	520	916	347
Sodium, Total	20000	ug/l	24100	51200	3.6	3550	3950	3200	4380	3300
Thallium, Total	0.5	ug/l					0.25 J		0.19 J	0.16 J
Zinc, Total	2000	ug/l	20	110.4	0.005 J		27.07	1.7 J	14.84	12.01

Notes:
Samples were collected by CHA Consulting, Inc. September 2020
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
Blank cells indicate the parameter was not detected
above the laboratory Method Detection Limit.
J - Estimated value

Table 2.
Groundwater Monitoring Well results - Detected Compounds only
South Hill Dump
2020 Periodic Review Report

LOCATION			MW-4S			MW-3SR			MW-3BR		
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	7/5/2017	10/24/2018	9/23/2020	7/5/2017	10/24/2018	9/23/2020
	NY-AWQS	Units		Results	Results	Results	Results	Results	Results	Results	Results
Volatile Organics by GC/MS											
Acetone	50	ug/l									
Benzene	1	ug/l									
cis-1,2-Dichloroethene	5	ug/l									
trans-1,2-Dichloroethene	5	ug/l									
Trichloroethene	5	ug/l					2.4	1.9			
Vinyl chloride	2	ug/l									
Total Metals											
Aluminum, Total		ug/l	360	26	11.4	1400	2280	419		11	20.9
Antimony, Total	3	ug/l							11 J		
Arsenic, Total	25	ug/l					1.81	0.52		1.76	1.11
Barium, Total	1000	ug/l	28	45.82	44.41	72	102	86.28	74	70.3	67.04
Cadmium, Total	5	ug/l									0.08 J
Calcium, Total		ug/l	58300	83400	104000	69800	76000	87000	10000	9440	6420
Chromium, Total	50	ug/l		0.66 J	2.04	1.6 J	5.09	1.64		0.39 J	0.57 J
Cobalt, Total		ug/l					2	0.55	1.3 J	1.62	2.15
Copper, Total	200	ug/l	2.7 J			2.1 J	3.35	1.09	2 J	1.47	3.01
Iron, Total	300	ug/l	440 J	110	35.1 J	1600 J	4590	858	124000 J	136000	102000
Lead, Total	25	ug/l				3 J	2.06	0.66 J			
Magnesium, Total	35000	ug/l	8700	12700	16800	15200	16600	18800	3100	2780	1180
Manganese, Total	300	ug/l	17 J	2.29	5.99	180 J	392.6	164.7	1500 J	1321	1590
Nickel, Total	100	ug/l				1.9 J	4.97	1.19 J	15	7.57	15.15
Potassium, Total		ug/l	610	534	840	3500	3200	2380	2300	1860	1060
Sodium, Total	20000	ug/l	2000	2370	2750	6200	6390	6520	14900	12800	10700
Thallium, Total	0.5	ug/l									
Zinc, Total	2000	ug/l	1.9 J		21.41	6.1 J	14.2	10.52	4.3 J		4.82 J

Notes:
Samples were collected by CHA Consulting, Inc. September 2020
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
Blank cells indicate the parameter was not detected above the laboratory Method Detection Limit.
J - Estimated value

Table 2.
Groundwater Monitoring Well results - Detected Compounds only
South Hill Dump
2020 Periodic Review Report

LOCATION			MW-3BR2			MW-3SR2		
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	7/5/2017	10/24/2018	9/23/2020
	NY-AWQS	Units	Results	Results	Results	Results	Results	Results
Volatile Organics by GC/MS								
Acetone	50	ug/l			5 U			
Benzene	1	ug/l						0.17 J
cis-1,2-Dichloroethene	5	ug/l	3.1	9.2	9.7	20	24	28
trans-1,2-Dichloroethene	5	ug/l						1.4 J
Trichloroethene	5	ug/l	6.5	83	67	170	160	14
Vinyl chloride	2	ug/l			0.21 J			3
Total Metals								
Aluminum, Total		ug/l	81 J	115	14.8	9900	871	174
Antimony, Total	3	ug/l						
Arsenic, Total	25	ug/l		0.76	0.26 J	5.8 J	0.62	1.42
Barium, Total	1000	ug/l	120	289.8	278	220	135.8	180.2
Cadmium, Total	5	ug/l						
Calcium, Total		ug/l	29600	86100	62300	102000	98700	118000
Chromium, Total	50	ug/l		1.24	0.41 J	12	1.82	0.61 J
Cobalt, Total		ug/l		0.42 J	0.19 J	5.1	0.8	2.64
Copper, Total	200	ug/l		1.45	0.72 J	9.5 J	1.42	1.33
Iron, Total	300	ug/l	27300 J	46000	40300	13000 J	1650	1310
Lead, Total	25	ug/l				7.9 J	0.79 J	0.47 J
Magnesium, Total	35000	ug/l	12500	16100	15900	21400	18400	18500
Manganese, Total	300	ug/l	290 J	359.7	220.3	350 J	169.2	3035
Nickel, Total	100	ug/l	1.5 J	1.96 J	0.81 J	13	1.79 J	2.67
Potassium, Total		ug/l	960	1000	926	3900	1620	3810
Sodium, Total	20000	ug/l	12000	12300	14000	18200	17600	27800
Thallium, Total	0.5	ug/l						
Zinc, Total	2000	ug/l				34	4.51 J	31.54

Notes:
Samples were collected by CHA Consulting, Inc. September 2020
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
Blank cells indicate the parameter was not detected above the laboratory Method Detection Limit.
J - Estimated value

Table 3.
Sediment Sample Results
South Hill Dump
2020 Periodic Review Report

	LOCATION		SED-1		SED-001	
	SAMPLING DATE		3/2/2016		9/23/2020	
	NYSDEC Sediment Guidance Value	Units	Results	Qual	Results	Qual
General Chemistry						
Solids, Total		%	62.6		18	
Polychlorinated Biphenyls by GC						
PCBs, Total	0.0008	mg/kg			0.177	U
Total Metals						
Aluminum, Total		mg/kg	22,600		12,700	
Antimony, Total		mg/kg	2.4	J	21.5	U
Arsenic, Total	33	mg/kg	9.7		7.19	
Barium, Total		mg/kg	166		310	
Beryllium, Total		mg/kg	0.91		0.732	J
Cadmium, Total	9	mg/kg	0.33	J	1.16	J
Calcium, Total		mg/kg	4,480		15,900	
Chromium, Total	110	mg/kg	26.5		40.6	
Cobalt, Total		mg/kg	16.2		24.4	
Copper, Total	110	mg/kg	18.2		24	
Iron, Total	40,000	mg/kg	33,500		24,200	
Lead, Total	110	mg/kg	17.8		18.1	J
Magnesium, Total		mg/kg	5,240		6,680	
Manganese, Total	1,100	mg/kg	**1,890**		**25,000**	
Nickel, Total	50	mg/kg	34.3		43.2	
Potassium, Total		mg/kg	2,190		925	J
Selenium, Total		mg/kg			10.8	
Silver, Total	2.2	mg/kg			1.38	J
Sodium, Total		mg/kg	112	J	302	J
Thallium, Total		mg/kg			23	
Vanadium, Total		mg/kg	37.5		6.2	
Zinc, Total	270	mg/kg	89.2		93	
Volatile Organics by GC/MS						
Toluene		mg/kg			0.068	
Ethylbenzene		mg/kg			0.003	J
Acetone		mg/kg			0.76	
2-Butanone		mg/kg			0.21	

* Comparison is not performed on parameters with non-numeric criteria.

NYDEC Sediment Guidance Values - Division of Fish, Wildlife and Marine Resources Technical Guidance for Screening Contaminated Sediment, updated January 25, 1999. PCB and VOC Sediment Guidance Values are based off the Human Health Bioaccumulation Level of Protection.

Exceedances of NYSDEC Sediment Guidance Values are highlighted in blue.
Blank cells indicate the parameter was not detected above the laboratory Method Detection Lim

APPENDIX A

Institutional and Engineering Controls Certification Forms

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 712009

Site Name: South Hill Dump

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

Reporting Period: January 1, 2020 to December 31, 2020

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

Box 2

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

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

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

_____ _____
Signature of Owner, Remedial Party or Designated Representative Date

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

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted

YES	NO
☑	☐

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

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

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

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

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

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

YES	NO
☑	☐

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

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

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO.

Box 6

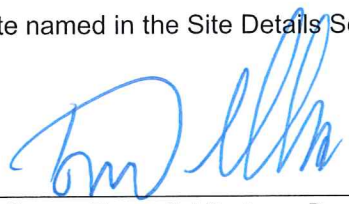
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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 Tom Williams, 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

12/8/20
Date

IC/EC CERTIFICATIONS

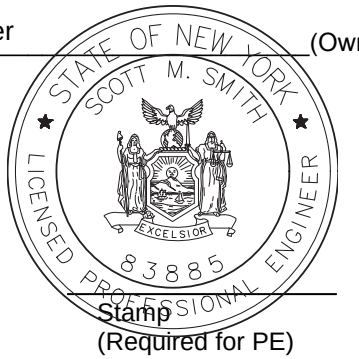
Box 7

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)

03/18/21
Date

APPENDIX B

Landfill Inspection Forms

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 005	
Page 1 of 3	
Date: 6/18/2020	Time: 08:30

Inspector:	Project No. 34236
Karyn Ehmann	Weather: Sunny, hot
People Accompanying Inspector:	
Anthony Russo	Temp.: Hi 80 °F Low 68 °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?	☐	☒	☐	No sign present
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 erosion or thin vegetative cover?	☐	☒	☐	
Does the landfill need to be mowed?	☐	☒	☐	The Town mowed the day before the inspection

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 005	
Page 2 of 3	
Date: 6/18/2020	Time: 08:30

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of exposed geotextile?	☐	☒	☐	
Presence of woody growth?	☐	☒	☐	
Evidence of ponded water?	☐	☒	☐	
Evidence of debris?	☐	☒	☐	
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?	☒	☐	☐	Deer, but no damage visible.
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. 005	
Page 3 of 3	
Date: 6/18/2020	Time: 08:30

ADDITIONAL NOTES & OBSERVATIONS

Landfill appeared to be in good condition. No evidence of compromise to the capping system or drainage infrastructure.

Front gate is locked but doesn't have a sign.

West side of the landfill, looking south.

South side of the landfill, looking north.

Well cluster MW-2B, MW-2S, and MW-2D

Signature:

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 006	
Page 1 of 3	
Date: 9/23/2020	Time: 08:00

Inspector:	Project No. 34236
Karyn Ehmann	Weather: Cool, Sunny
People Accompanying Inspector:	
Anthony Russo	Temp.: Hi 72 °F Low 55 °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?	☐	☒	☐	No sign present
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 erosion or thin vegetative cover?	☐	☒	☐	
Does the landfill need to be mowed?	☐	☒	☐	

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 006	
Page 2 of 3	
Date: 9/23/2020	Time: 08:00

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of exposed geotextile?	☐	☒	☐	
Presence of woody growth?	☐	☒	☐	
Evidence of ponded water?	☐	☒	☐	
Evidence of debris?	☐	☒	☐	
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. 006	
Page 3 of 3	
Date: 9/23/2020	Time: 08:00

ADDITIONAL NOTES & OBSERVATIONS

Landfill appeared to be in good condition. No evidence of compromise to the capping system or drainage infrastructure. Groundwater elevations in monitoring wells appear to be lower than previous inspections due to dry weather. Two hydrasleeves empty and monitoring wells dry (MW-2S and MW-1S). One hydrasleeve empty but monitoring well not dry – used bailer to collected sample (MW-4S).

Front gate has a lock but no signage. Landfill appears to be recently mowed.

West side of the landfill, looking south.

South side of the landfill, looking north.

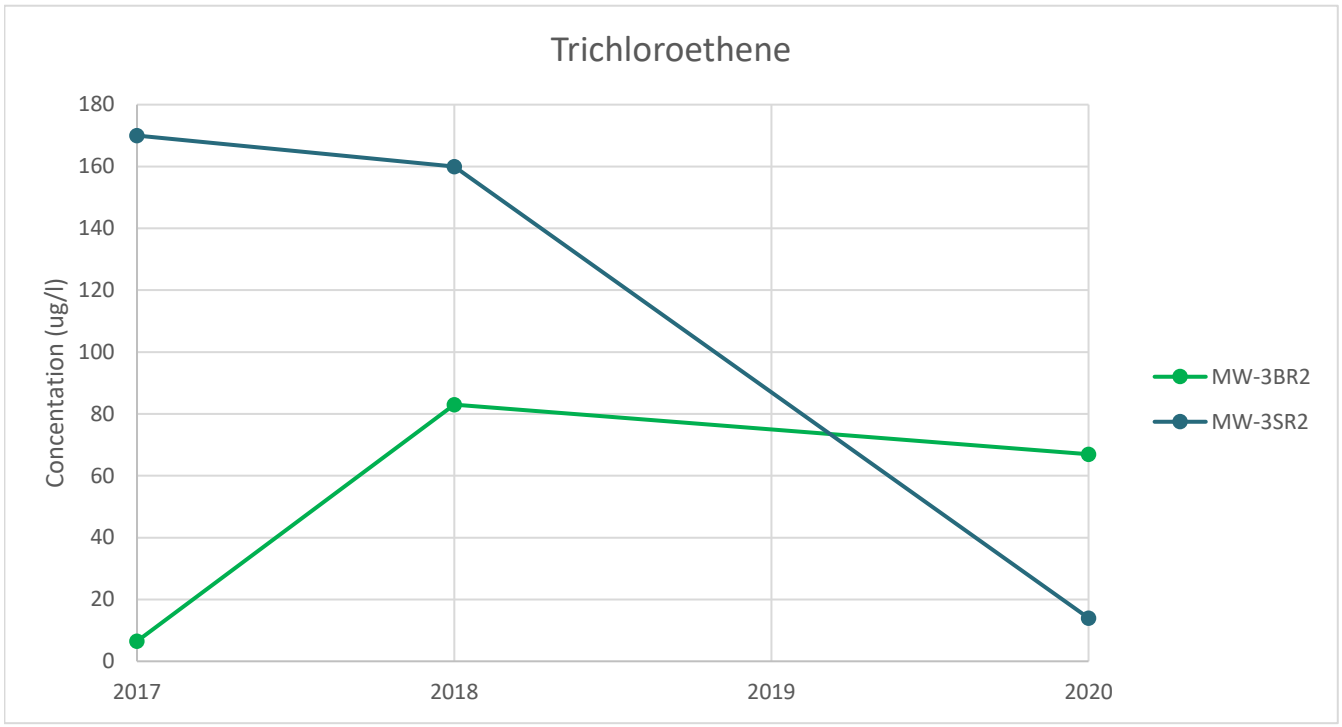
Well cluster MW-2B, MW-2S, and MW-2D

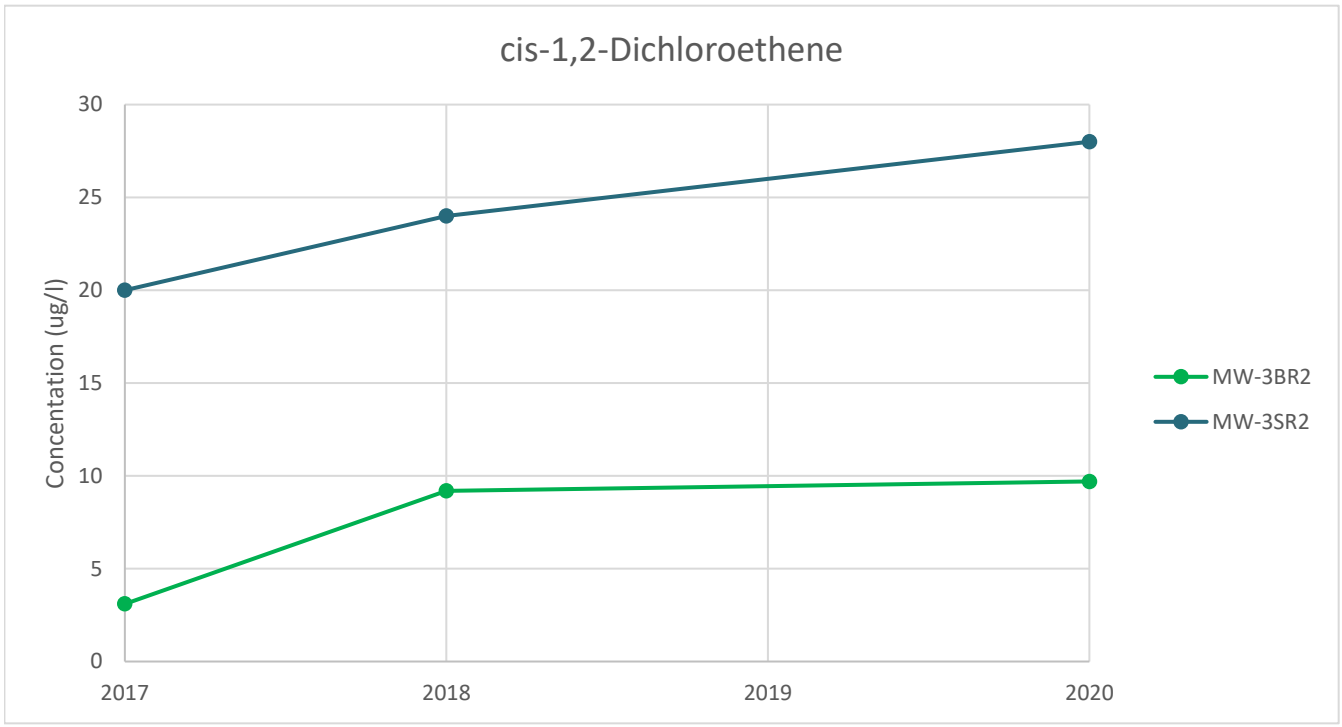
Signature:

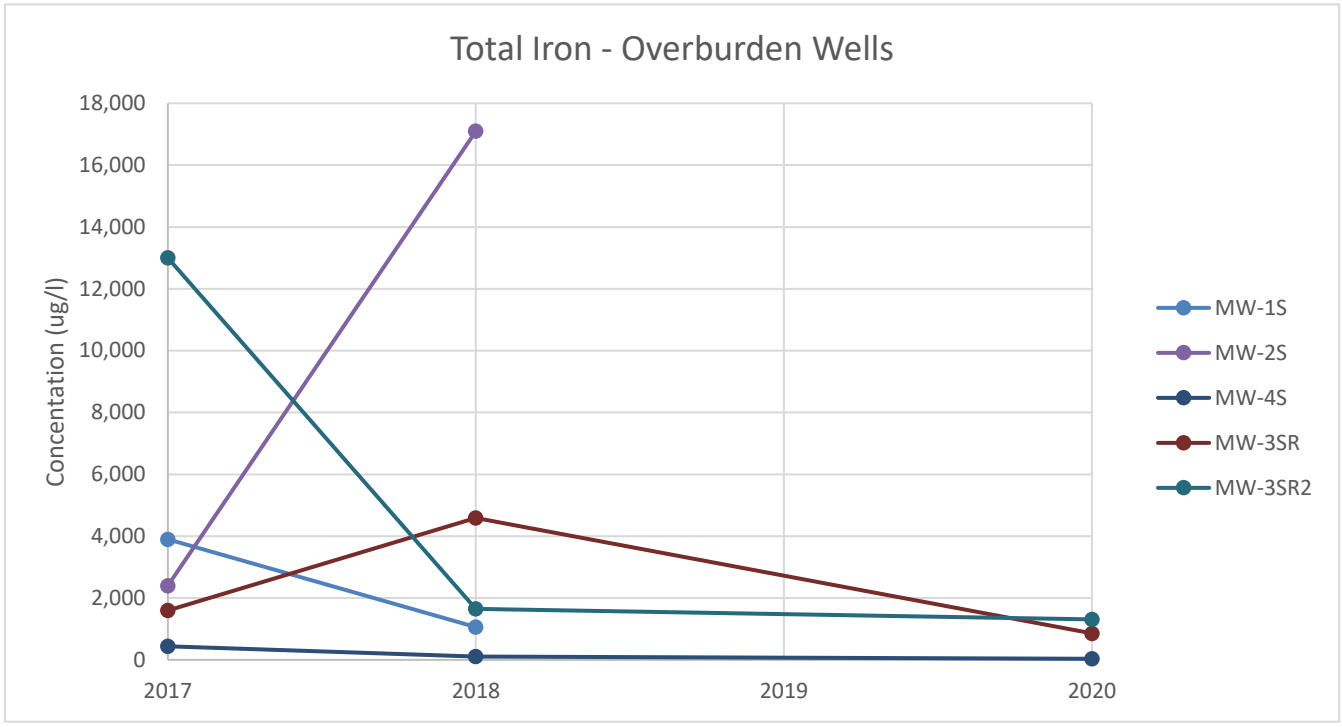
Karyn Ehmann

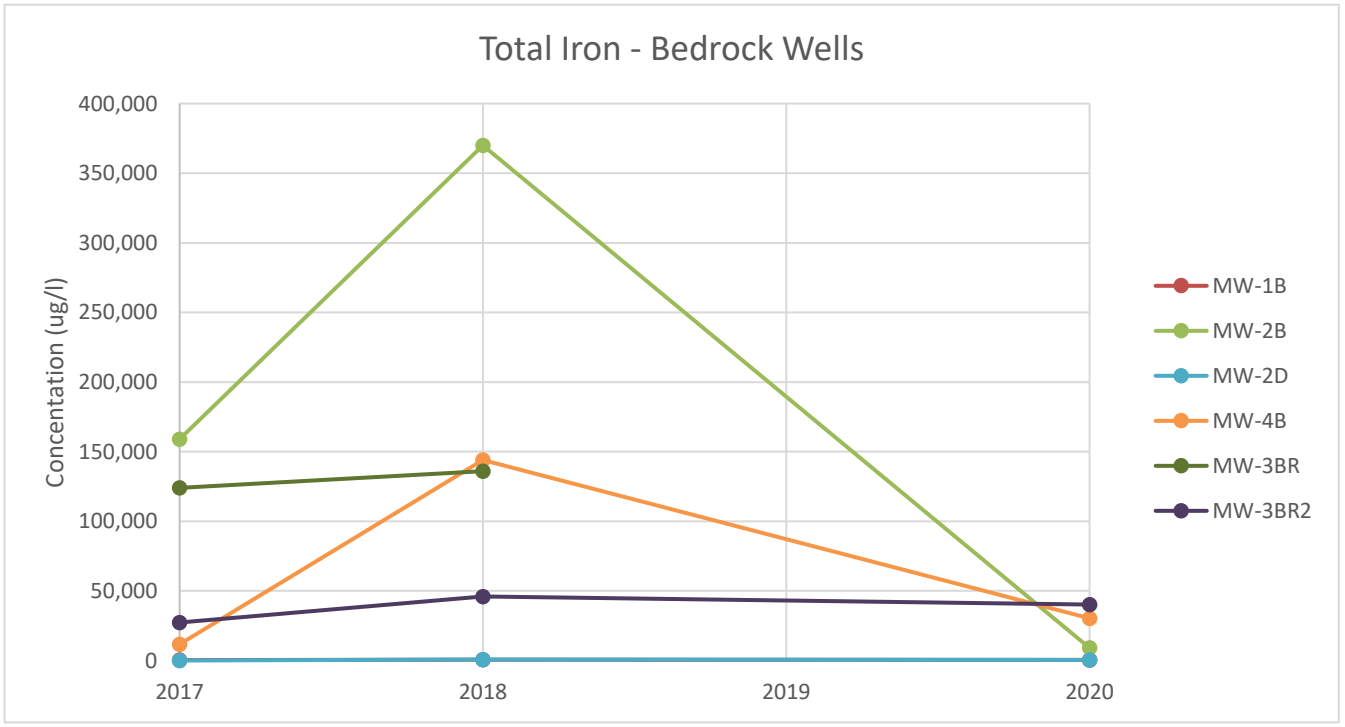
APPENDIX C

Groundwater Time Series Graphs


Trichloroethene
Concentation (ug/l)
180
160
140
120
100
80
60
40
20
0
2017
2018
2019
2020
MW-3BR2
MW-3SR2


cis-1,2-Dichloroethene
Concentation (ug/l)
30
25
20
15
10
5
0
2017
2018
2019
2020
MW-3BR2
MW-3SR2


Total Iron - Overburden Wells
Concentation (ug/l)
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2017
2018
2019
2020
MW-1S
MW-2S
MW-4S
MW-3SR
MW-3SR2


Total Iron - Bedrock Wells
Concentation (ug/l)
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2017
2018
2019
2020
MW-1B
MW-2B
MW-2D
MW-4B
MW-3BR
MW-3BR2

APPENDIX D

Laboratory Analytical Report

ANALYTICAL REPORT

Lab Number:	L2040189
Client:	CHA Companies One Park Place 300 South State St., Suite 600 Syracuse, NY 13202
ATTN:	Karyn Ehmann
Phone:	(315) 471-3920
Project Name:	SOUTH HILL DUMP
Project Number:	34236
Report Date:	09/30/20

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

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

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2040189-01	MW-2B	WATER	CORTLANDVILLE, NY	09/23/20 09:45	09/23/20
L2040189-02	MW-2D	WATER	CORTLANDVILLE, NY	09/23/20 10:20	09/23/20
L2040189-03	MW-4B	WATER	CORTLANDVILLE, NY	09/23/20 10:40	09/23/20
L2040189-04	MW-4S	WATER	CORTLANDVILLE, NY	09/23/20 11:00	09/23/20
L2040189-05	CHA-001	WATER	CORTLANDVILLE, NY	09/23/20 10:00	09/23/20
L2040189-06	MW-3SR	WATER	CORTLANDVILLE, NY	09/23/20 12:00	09/23/20
L2040189-07	MW-3BR	WATER	CORTLANDVILLE, NY	09/23/20 11:45	09/23/20
L2040189-08	MW-3BR2	WATER	CORTLANDVILLE, NY	09/23/20 12:20	09/23/20
L2040189-09	MW-1B	WATER	CORTLANDVILLE, NY	09/23/20 13:00	09/23/20
L2040189-10	SED-001	SOIL	CORTLANDVILLE, NY	09/23/20 11:40	09/23/20
L2040189-11	TRIP BLANK	TRIP BLANK (AQUEOUS)	CORTLANDVILLE, NY	09/23/20 00:00	09/23/20
L2040189-12	MW-3SR2	WATER	CORTLANDVILLE, NY	09/23/20 12:30	09/23/20

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2040189
Project Number:	34236	**Report Date:**	09/30/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189
Project Number: 34236 **Report Date:** 09/30/20

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2040189-08: The sample identified as "MW-3R2" on the chain of custody was identified as "MW-3BR2" on the container label. At the client's request, the sample is reported as "MW-3BR2".

L2040189-12: A sample identified as "MW-3SR2" was received, but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

Volatile Organics

L2040189-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L2040189-06: The pH of the sample was greater than two; however, the sample was analyzed within the method required holding time.

L2040189-10: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Total Metals

L2040189-10: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1415491-3/-4 MS/MSD recoveries for iron (0%/0%), performed on L2040189-01, do not apply because the sample concentration is greater than four times the spike amount added.

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: Jennifer L Clements

Title: Technical Director/Representative Date: 09/30/20

ORGANICS

VOLATILES

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-01
Client ID: MW-2B
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 09:45
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/30/20 09:43
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	0.35	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-01 Date Collected: 09/23/20 09:45

Client ID: MW-2B Date Received: 09/23/20

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	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	102		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-02 D
Client ID: MW-2D
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 10:20
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 13:20
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	12	3.5	5
1,1-Dichloroethane	ND		ug/l	12	3.5	5
Chloroform	ND		ug/l	12	3.5	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5
Tetrachloroethene	ND		ug/l	2.5	0.90	5
Chlorobenzene	ND		ug/l	12	3.5	5
Trichlorofluoromethane	ND		ug/l	12	3.5	5
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
Bromoform	ND		ug/l	10	3.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
Benzene	ND		ug/l	2.5	0.80	5
Toluene	ND		ug/l	12	3.5	5
Ethylbenzene	ND		ug/l	12	3.5	5
Chloromethane	ND		ug/l	12	3.5	5
Bromomethane	ND		ug/l	12	3.5	5
Vinyl chloride	ND		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	ND		ug/l	2.5	0.84	5
trans-1,2-Dichloroethene	ND		ug/l	12	3.5	5
Trichloroethene	ND		ug/l	2.5	0.88	5
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-02 D
Client ID: MW-2D
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 10:20
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	ND		ug/l	12	3.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	ND		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
Methyl Acetate	ND		ug/l	10	1.2	5
Cyclohexane	ND		ug/l	50	1.4	5
1,4-Dioxane	ND		ug/l	1200	300	5
Freon-113	ND		ug/l	12	3.5	5
Methyl cyclohexane	ND		ug/l	50	2.0	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	96		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-03
Client ID: MW-4B
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 10:40
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 13:44
Analyst: TMS

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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-03 Date Collected: 09/23/20 10:40

Client ID: MW-4B Date Received: 09/23/20

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	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	94		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-04
Client ID: MW-4S
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 11:00
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 14:07
Analyst: TMS

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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-04 Date Collected: 09/23/20 11:00

Client ID: MW-4S Date Received: 09/23/20

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	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-05
Client ID: CHA-001
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 10:00
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 14:30
Analyst: TMS

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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-05 Date Collected: 09/23/20 10:00

Client ID: CHA-001 Date Received: 09/23/20

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	103		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-06
Client ID: MW-3SR
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 12:00
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 23:05
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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	1.9		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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-06 Date Collected: 09/23/20 12:00

Client ID: MW-3SR Date Received: 09/23/20

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	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-07
Client ID: MW-3BR
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 11:45
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 23:30
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-07 Date Collected: 09/23/20 11:45

Client ID: MW-3BR Date Received: 09/23/20

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	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-08
Client ID: MW-3BR2
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 12:20
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/29/20 23:56
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
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	0.21	J	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	67		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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-08 Date Collected: 09/23/20 12:20

Client ID: MW-3BR2 Date Received: 09/23/20

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	9.7		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	110		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-09
Client ID: MW-1B
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 13:00
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/30/20 00:21
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-09 Date Collected: 09/23/20 13:00

Client ID: MW-1B Date Received: 09/23/20

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	110		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-10 Date Collected: 09/23/20 11:40
Client ID: SED-001 Date Received: 09/23/20
Sample Location: CORTLANDVILLE, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/29/20 12:51
Analyst: KJD
Percent Solids: 18%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	27	12.	1
1,1-Dichloroethane	ND		ug/kg	5.4	0.79	1
Chloroform	ND		ug/kg	8.2	0.76	1
Carbon tetrachloride	ND		ug/kg	5.4	1.2	1
1,2-Dichloropropane	ND		ug/kg	5.4	0.68	1
Dibromochloromethane	ND		ug/kg	5.4	0.76	1
1,1,2-Trichloroethane	ND		ug/kg	5.4	1.4	1
Tetrachloroethene	ND		ug/kg	2.7	1.1	1
Chlorobenzene	ND		ug/kg	2.7	0.69	1
Trichlorofluoromethane	ND		ug/kg	22	3.8	1
1,2-Dichloroethane	ND		ug/kg	5.4	1.4	1
1,1,1-Trichloroethane	ND		ug/kg	2.7	0.91	1
Bromodichloromethane	ND		ug/kg	2.7	0.59	1
trans-1,3-Dichloropropene	ND		ug/kg	5.4	1.5	1
cis-1,3-Dichloropropene	ND		ug/kg	2.7	0.86	1
Bromoform	ND		ug/kg	22	1.3	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.7	0.90	1
Benzene	ND		ug/kg	2.7	0.90	1
Toluene	68		ug/kg	5.4	3.0	1
Ethylbenzene	3.0	J	ug/kg	5.4	0.77	1
Chloromethane	ND		ug/kg	22	5.1	1
Bromomethane	ND		ug/kg	11	3.2	1
Vinyl chloride	ND		ug/kg	5.4	1.8	1
Chloroethane	ND		ug/kg	11	2.5	1
1,1-Dichloroethene	ND		ug/kg	5.4	1.3	1
trans-1,2-Dichloroethene	ND		ug/kg	8.2	0.75	1
Trichloroethene	ND		ug/kg	2.7	0.75	1
1,2-Dichlorobenzene	ND		ug/kg	11	0.78	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-10 Date Collected: 09/23/20 11:40

Client ID: SED-001 Date Received: 09/23/20

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/kg	11	0.81	1
1,4-Dichlorobenzene	ND		ug/kg	11	0.93	1
Methyl tert butyl ether	ND		ug/kg	11	1.1	1
p/m-Xylene	ND		ug/kg	11	3.0	1
o-Xylene	ND		ug/kg	5.4	1.6	1
cis-1,2-Dichloroethene	ND		ug/kg	5.4	0.95	1
Styrene	ND		ug/kg	5.4	1.1	1
Dichlorodifluoromethane	ND		ug/kg	54	5.0	1
Acetone	760		ug/kg	54	26.	1
Carbon disulfide	ND		ug/kg	54	25.	1
2-Butanone	210		ug/kg	54	12.	1
4-Methyl-2-pentanone	ND		ug/kg	54	7.0	1
2-Hexanone	ND		ug/kg	54	6.4	1
Bromochloromethane	ND		ug/kg	11	1.1	1
1,2-Dibromoethane	ND		ug/kg	5.4	1.5	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	16	5.4	1
Isopropylbenzene	ND		ug/kg	5.4	0.59	1
1,2,3-Trichlorobenzene	ND		ug/kg	11	1.8	1
1,2,4-Trichlorobenzene	ND		ug/kg	11	1.5	1
Methyl Acetate	ND		ug/kg	22	5.2	1
Cyclohexane	ND		ug/kg	54	3.0	1
1,4-Dioxane	ND		ug/kg	440	190	1
Freon-113	ND		ug/kg	22	3.8	1
Methyl cyclohexane	ND		ug/kg	22	3.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	99		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-11
Client ID: TRIP BLANK
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 00:00
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Trip Blank (Aqueous)
Analytical Method: 1,8260C
Analytical Date: 09/30/20 01:12
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-11 Date Collected: 09/23/20 00:00

Client ID: TRIP BLANK Date Received: 09/23/20

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	2.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	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	109		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	97		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-12
Client ID: MW-3SR2
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 12:30
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/30/20 00:47
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	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	0.17	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	3.0		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	1.4	J	ug/l	2.5	0.70	1
Trichloroethene	14		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:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-12 Date Collected: 09/23/20 12:30

Client ID: MW-3SR2 Date Received: 09/23/20

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	28		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	111		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 09:51
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1416038-5					
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 **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 09:51
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1416038-5					
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	1.8	J	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: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 09:51
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-05 Batch: WG1416038-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	93		70-130

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 07:26
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1416099-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 07:26
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1416099-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 07:26
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1416099-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	97		70-130

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 19:41
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-09,11-12 Batch: WG1416366-5					
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 **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 19:41
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-09,11-12 Batch: WG1416366-5					
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: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/29/20 19:41
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-09,11-12 Batch: WG1416366-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	96		70-130

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/30/20 09:12
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1416424-5					
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 **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/30/20 09:12
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1416424-5					
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: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/30/20 09:12
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1416424-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1416038-3 WG1416038-4								
Methylene chloride	83		80		70-130	4		20
1,1-Dichloroethane	84		81		70-130	4		20
Chloroform	86		85		70-130	1		20
Carbon tetrachloride	81		80		63-132	1		20
1,2-Dichloropropane	86		85		70-130	1		20
Dibromochloromethane	97		95		63-130	2		20
1,1,2-Trichloroethane	94		89		70-130	5		20
Tetrachloroethene	84		80		70-130	5		20
Chlorobenzene	96		93		75-130	3		20
Trichlorofluoromethane	84		81		62-150	4		20
1,2-Dichloroethane	88		85		70-130	3		20
1,1,1-Trichloroethane	82		80		67-130	2		20
Bromodichloromethane	90		87		67-130	3		20
trans-1,3-Dichloropropene	95		91		70-130	4		20
cis-1,3-Dichloropropene	87		83		70-130	5		20
Bromoform	97		94		54-136	3		20
1,1,2,2-Tetrachloroethane	97		95		67-130	2		20
Benzene	85		83		70-130	2		20
Toluene	95		90		70-130	5		20
Ethylbenzene	92		87		70-130	6		20
Chloromethane	65		**62**	Q	64-130	5		20
Bromomethane	48		47		39-139	2		20
Vinyl chloride	77		74		55-140	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1416038-3 WG1416038-4								
Chloroethane	85		82		55-138	4		20
1,1-Dichloroethene	76		72		61-145	5		20
trans-1,2-Dichloroethene	83		80		70-130	4		20
Trichloroethene	88		83		70-130	6		20
1,2-Dichlorobenzene	110		100		70-130	10		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	110		100		70-130	10		20
Methyl tert butyl ether	82		81		63-130	1		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	88		87		70-130	1		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	76		72		36-147	5		20
Acetone	98		78		58-148	**23**	Q	20
Carbon disulfide	80		75		51-130	6		20
2-Butanone	83		79		63-138	5		20
4-Methyl-2-pentanone	94		88		59-130	7		20
2-Hexanone	90		87		57-130	3		20
Bromochloromethane	100		95		70-130	5		20
1,2-Dibromoethane	97		92		70-130	5		20
1,2-Dibromo-3-chloropropane	90		92		41-144	2		20
Isopropylbenzene	98		93		70-130	5		20
1,2,3-Trichlorobenzene	95		95		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-05 Batch: WG1416038-3 WG1416038-4								
1,2,4-Trichlorobenzene	98		95		70-130	3		20
Methyl Acetate	80		78		70-130	3		20
Cyclohexane	74		71		70-130	4		20
1,4-Dioxane	112		102		56-162	9		20
Freon-113	75		71		70-130	5		20
Methyl cyclohexane	**67**	Q	**65**	Q	70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	93		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1416099-3 WG1416099-4								
Methylene chloride	93		90		70-130	3		30
1,1-Dichloroethane	98		92		70-130	6		30
Chloroform	98		92		70-130	6		30
Carbon tetrachloride	111		103		70-130	7		30
1,2-Dichloropropane	99		96		70-130	3		30
Dibromochloromethane	90		88		70-130	2		30
1,1,2-Trichloroethane	83		82		70-130	1		30
Tetrachloroethene	99		89		70-130	11		30
Chlorobenzene	90		85		70-130	6		30
Trichlorofluoromethane	127		115		70-139	10		30
1,2-Dichloroethane	96		95		70-130	1		30
1,1,1-Trichloroethane	103		94		70-130	9		30
Bromodichloromethane	98		93		70-130	5		30
trans-1,3-Dichloropropene	79		77		70-130	3		30
cis-1,3-Dichloropropene	97		93		70-130	4		30
Bromoform	80		79		70-130	1		30
1,1,2,2-Tetrachloroethane	82		82		70-130	0		30
Benzene	105		98		70-130	7		30
Toluene	90		84		70-130	7		30
Ethylbenzene	90		83		70-130	8		30
Chloromethane	96		86		52-130	11		30
Bromomethane	127		110		57-147	14		30
Vinyl chloride	127		111		67-130	13		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1416099-3 WG1416099-4								
Chloroethane	138		124		50-151	11		30
1,1-Dichloroethene	112		100		65-135	11		30
trans-1,2-Dichloroethene	112		103		70-130	8		30
Trichloroethene	105		96		70-130	9		30
1,2-Dichlorobenzene	85		83		70-130	2		30
1,3-Dichlorobenzene	86		84		70-130	2		30
1,4-Dichlorobenzene	85		82		70-130	4		30
Methyl tert butyl ether	96		94		66-130	2		30
p/m-Xylene	91		85		70-130	7		30
o-Xylene	88		82		70-130	7		30
cis-1,2-Dichloroethene	97		92		70-130	5		30
Styrene	87		82		70-130	6		30
Dichlorodifluoromethane	93		82		30-146	13		30
Acetone	97		96		54-140	1		30
Carbon disulfide	94		84		59-130	11		30
2-Butanone	92		91		70-130	1		30
4-Methyl-2-pentanone	81		79		70-130	3		30
2-Hexanone	73		72		70-130	1		30
Bromochloromethane	104		100		70-130	4		30
1,2-Dibromoethane	84		84		70-130	0		30
1,2-Dibromo-3-chloropropane	79		75		68-130	5		30
Isopropylbenzene	84		80		70-130	5		30
1,2,3-Trichlorobenzene	90		87		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1416099-3 WG1416099-4								
1,2,4-Trichlorobenzene	90		84		70-130	7		30
Methyl Acetate	92		92		51-146	0		30
Cyclohexane	112		102		59-142	9		30
1,4-Dioxane	130		**139**	Q	65-136	7		30
Freon-113	107		97		50-139	10		30
Methyl cyclohexane	108		96		70-130	12		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		91		70-130
Toluene-d8	88		88		70-130
4-Bromofluorobenzene	90		89		70-130
Dibromofluoromethane	98		97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-09,11-12 Batch: WG1416366-3 WG1416366-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	96		96		63-130	0		20
1,1,2-Trichloroethane	99		99		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	120		120		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		110		67-130	10		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
Bromoform	90		89		54-136	1		20
1,1,2,2-Tetrachloroethane	93		94		67-130	1		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	88		96		64-130	9		20
Bromomethane	**14**	Q	**23**	Q	39-139	**49**	Q	20
Vinyl chloride	90		96		55-140	6		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-09,11-12 Batch: WG1416366-3 WG1416366-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	98		100		61-145	2		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	110		100		70-130	10		20
1,3-Dichlorobenzene	99		100		70-130	1		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	80		81		36-147	1		20
Acetone	140		120		58-148	15		20
Carbon disulfide	96		99		51-130	3		20
2-Butanone	130		130		63-138	0		20
4-Methyl-2-pentanone	100		100		59-130	0		20
2-Hexanone	120		110		57-130	9		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	98		97		70-130	1		20
1,2-Dibromo-3-chloropropane	89		84		41-144	6		20
Isopropylbenzene	95		99		70-130	4		20
1,2,3-Trichlorobenzene	100		96		70-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-09,11-12 Batch: WG1416366-3 WG1416366-4								
1,2,4-Trichlorobenzene	100		98		70-130	2		20
Methyl Acetate	120		120		70-130	0		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	120		122		56-162	2		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	116		106		70-130
Toluene-d8	95		97		70-130
4-Bromofluorobenzene	97		96		70-130
Dibromofluoromethane	98		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1416424-3 WG1416424-4								
Methylene chloride	100		98		70-130	2		20
1,1-Dichloroethane	100		97		70-130	3		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		98		63-132	2		20
1,2-Dichloropropane	96		92		70-130	4		20
Dibromochloromethane	110		100		63-130	10		20
1,1,2-Trichloroethane	100		97		70-130	3		20
Tetrachloroethene	120		110		70-130	9		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		96		70-130	4		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	96		92		67-130	4		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		99		70-130	1		20
Chloromethane	83		80		64-130	4		20
Bromomethane	66		68		39-139	3		20
Vinyl chloride	100		99		55-140	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1416424-3 WG1416424-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	100		98		61-145	2		20
trans-1,2-Dichloroethene	100		99		70-130	1		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	120		94		70-130	**24**	Q	20
1,4-Dichlorobenzene	110		100		70-130	10		20
Methyl tert butyl ether	98		93		63-130	5		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	99		94		36-147	5		20
Acetone	100		100		58-148	0		20
Carbon disulfide	110		100		51-130	10		20
2-Butanone	100		98		63-138	2		20
4-Methyl-2-pentanone	90		86		59-130	5		20
2-Hexanone	86		82		57-130	5		20
Bromochloromethane	110		100		70-130	10		20
1,2-Dibromoethane	100		99		70-130	1		20
1,2-Dibromo-3-chloropropane	98		93		41-144	5		20
Isopropylbenzene	100		99		70-130	1		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1416424-3 WG1416424-4								
1,2,4-Trichlorobenzene	110		99		70-130	11		20
Methyl Acetate	90		90		70-130	0		20
Cyclohexane	93		89		70-130	4		20
1,4-Dioxane	102		98		56-162	4		20
Freon-113	100		99		70-130	1		20
Methyl cyclohexane	100		93		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		102		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	100		100		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1416424-6 WG1416424-7 QC Sample: L2040189-01 Client ID: MW-2B												
Methylene chloride	ND	10	9.0	90		9.8	98		70-130	9		20
1,1-Dichloroethane	ND	10	9.2	92		10	100		70-130	8		20
Chloroform	ND	10	9.3	93		10	100		70-130	7		20
Carbon tetrachloride	ND	10	9.7	97		10	100		63-132	3		20
1,2-Dichloropropane	ND	10	8.6	86		9.5	95		70-130	10		20
Dibromochloromethane	ND	10	9.7	97		11	110		63-130	13		20
1,1,2-Trichloroethane	ND	10	9.3	93		10	100		70-130	7		20
Tetrachloroethene	ND	10	11	110		12	120		70-130	9		20
Chlorobenzene	ND	10	9.7	97		10	100		75-130	3		20
Trichlorofluoromethane	ND	10	10	100		11	110		62-150	10		20
1,2-Dichloroethane	ND	10	9.6	96		10	100		70-130	4		20
1,1,1-Trichloroethane	ND	10	10	100		11	110		67-130	10		20
Bromodichloromethane	ND	10	9.0	90		10	100		67-130	11		20
trans-1,3-Dichloropropene	ND	10	9.0	90		10	100		70-130	11		20
cis-1,3-Dichloropropene	ND	10	8.6	86		9.6	96		70-130	11		20
Bromoform	ND	10	9.3	93		10	100		54-136	7		20
1,1,2,2-Tetrachloroethane	ND	10	8.5	85		9.4	94		67-130	10		20
Benzene	0.35J	10	9.9	99		11	110		70-130	11		20
Toluene	ND	10	9.8	98		11	110		70-130	12		20
Ethylbenzene	ND	10	9.7	97		11	110		70-130	13		20
Chloromethane	ND	10	7.7	77		8.4	84		64-130	9		20
Bromomethane	ND	10	4.0	40		4.8	48		39-139	18		20
Vinyl chloride	ND	10	9.7	97		10	100		55-140	3		20

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1416424-6 WG1416424-7 QC Sample: L2040189-01 Client ID: MW-2B												
Chloroethane	ND	10	9.2	92		9.9	99		55-138	7		20
1,1-Dichloroethene	ND	10	9.9	99		11	110		61-145	11		20
trans-1,2-Dichloroethene	ND	10	9.8	98		11	110		70-130	12		20
Trichloroethene	ND	10	9.6	96		11	110		70-130	14		20
1,2-Dichlorobenzene	ND	10	9.4	94		10	100		70-130	6		20
1,3-Dichlorobenzene	ND	10	9.0	90		11	110		70-130	20		20
1,4-Dichlorobenzene	ND	10	9.4	94		10	100		70-130	6		20
Methyl tert butyl ether	ND	10	8.9	89		9.8	98		63-130	10		20
p/m-Xylene	ND	20	20	100		22	110		70-130	10		20
o-Xylene	ND	20	19	95		21	105		70-130	10		20
cis-1,2-Dichloroethene	ND	10	9.4	94		10	100		70-130	6		20
Styrene	ND	20	19	95		20	100		70-130	5		20
Dichlorodifluoromethane	ND	10	9.2	92		9.8	98		36-147	6		20
Acetone	ND	10	8.3	83		8.8	88		58-148	6		20
Carbon disulfide	ND	10	10	100		11	110		51-130	10		20
2-Butanone	ND	10	8.1	81		8.1	81		63-138	0		20
4-Methyl-2-pentanone	ND	10	8.1	81		9.0	90		59-130	11		20
2-Hexanone	ND	10	7.4	74		8.5	85		57-130	14		20
Bromochloromethane	ND	10	9.7	97		11	110		70-130	13		20
1,2-Dibromoethane	ND	10	9.5	95		10	100		70-130	5		20
1,2-Dibromo-3-chloropropane	ND	10	8.8	88		9.6	96		41-144	9		20
Isopropylbenzene	ND	10	9.8	98		11	110		70-130	12		20
1,2,3-Trichlorobenzene	ND	10	9.0	90		10	100		70-130	11		20

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1416424-6 WG1416424-7 QC Sample: L2040189-01 Client ID: MW-2B												
1,2,4-Trichlorobenzene	ND	10	9.4	94		10	100		70-130	6		20
Methyl Acetate	ND	10	7.7	77		8.5	85		70-130	10		20
Cyclohexane	ND	10	8.8J	88		9.8J	98		70-130	11		20
1,4-Dioxane	ND	500	390	78		500	100		56-162	**25**	Q	20
Freon-113	ND	10	9.9	99		11	110		70-130	11		20
Methyl cyclohexane	ND	10	9.2J	92		10	100		70-130	8		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		101		70-130
4-Bromofluorobenzene	103		104		70-130
Dibromofluoromethane	98		99		70-130
Toluene-d8	99		99		70-130

PCBS

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-10
Client ID: SED-001
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 11:40
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/30/20 08:33
Analyst: CW
Percent Solids: 18%

Extraction Method: EPA 3546
Extraction Date: 09/29/20 22:14
Cleanup Method: EPA 3665A
Cleanup Date: 09/30/20
Cleanup Method: EPA 3660B
Cleanup Date: 09/30/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	177	15.7	1	A
Aroclor 1221	ND		ug/kg	177	17.8	1	A
Aroclor 1232	ND		ug/kg	177	37.6	1	A
Aroclor 1242	ND		ug/kg	177	23.9	1	A
Aroclor 1248	ND		ug/kg	177	26.6	1	A
Aroclor 1254	ND		ug/kg	177	19.4	1	A
Aroclor 1260	ND		ug/kg	177	32.8	1	A
Aroclor 1262	ND		ug/kg	177	22.5	1	A
Aroclor 1268	ND		ug/kg	177	18.4	1	A
PCBs, Total	ND		ug/kg	177	15.7	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/30/20 08:11
Analyst: CW

Extraction Method: EPA 3546
Extraction Date: 09/29/20 22:14
Cleanup Method: EPA 3665A
Cleanup Date: 09/30/20
Cleanup Method: EPA 3660B
Cleanup Date: 09/30/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 10 Batch: WG1416104-1						
Aroclor 1016	ND		ug/kg	32.8	2.92	A
Aroclor 1221	ND		ug/kg	32.8	3.29	A
Aroclor 1232	ND		ug/kg	32.8	6.96	A
Aroclor 1242	ND		ug/kg	32.8	4.43	A
Aroclor 1248	ND		ug/kg	32.8	4.93	A
Aroclor 1254	ND		ug/kg	32.8	3.59	A
Aroclor 1260	ND		ug/kg	32.8	6.07	A
Aroclor 1262	ND		ug/kg	32.8	4.17	A
Aroclor 1268	ND		ug/kg	32.8	3.40	A
PCBs, Total	ND		ug/kg	32.8	2.92	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	99		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 10 Batch: WG1416104-2 WG1416104-3									
Aroclor 1016	77		68		40-140	12		50	A
Aroclor 1260	73		66		40-140	10		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		63		30-150	A
Decachlorobiphenyl	77		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		80		30-150	B
Decachlorobiphenyl	96		87		30-150	B

METALS

Project Name: SOUTH HILL DUMP
Lab Number: L2040189
Project Number: 34236
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-01
Client ID: MW-2B
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 09:45
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00947	J	mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Antimony, Total	0.00043	J	mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Barium, Total	0.1094		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Calcium, Total	33.9		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Chromium, Total	0.00044	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Copper, Total	0.00110		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Iron, Total	9.05		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Magnesium, Total	7.68		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Manganese, Total	0.1814		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 08:55	EPA 7470A	1,7470A	EW
Nickel, Total	0.00090	J	mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Potassium, Total	0.967		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Sodium, Total	5.52		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Thallium, Total	0.00047	J	mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM
Zinc, Total	0.00357	J	mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 09:11	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-02
Client ID: MW-2D
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 10:20
Date Received: 09/23/20
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	0.0781		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00048	J	mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Barium, Total	0.03167		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00024		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Calcium, Total	61.8		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Chromium, Total	0.00099	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00024	J	mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Iron, Total	0.372		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Magnesium, Total	14.9		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Manganese, Total	0.1928		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:01	EPA 7470A	1,7470A	EW
Nickel, Total	0.00066	J	mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Potassium, Total	0.998		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Sodium, Total	3.95		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Thallium, Total	0.00025	J	mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM
Zinc, Total	0.02707		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 09:16	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-03
Client ID: MW-4B
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 10:40
Date Received: 09/23/20
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	0.0250		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Barium, Total	0.05758		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Calcium, Total	28.3		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Chromium, Total	0.00065	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Copper, Total	0.00062	J	mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Iron, Total	30.3		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Magnesium, Total	6.89		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Manganese, Total	0.2452		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:03	EPA 7470A	1,7470A	EW
Nickel, Total	0.00094	J	mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Potassium, Total	0.347		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Sodium, Total	3.30		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Thallium, Total	0.00016	J	mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM
Zinc, Total	0.01201		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 09:20	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-04
Client ID: MW-4S
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 11:00
Date Received: 09/23/20
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	0.0114		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Barium, Total	0.04441		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Calcium, Total	104.		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Chromium, Total	0.00204		mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Iron, Total	0.0351	J	mg/l	0.700	0.0191	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Magnesium, Total	16.8		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Manganese, Total	0.00599		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:05	EPA 7470A	1,7470A	EW
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Potassium, Total	0.840		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Sodium, Total	2.75		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM
Zinc, Total	0.02141		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 09:55	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-05
Client ID: CHA-001
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 10:00
Date Received: 09/23/20
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	0.00562	J	mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Barium, Total	0.04725		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Calcium, Total	29.1		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Chromium, Total	0.00038	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Copper, Total	0.00038	J	mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Iron, Total	25.4		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Magnesium, Total	7.01		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Manganese, Total	0.2259		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:07	EPA 7470A	1,7470A	EW
Nickel, Total	0.00066	J	mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Potassium, Total	0.354		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Sodium, Total	3.48		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM
Zinc, Total	0.00525	J	mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 10:00	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-06
Client ID: MW-3SR
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 12:00
Date Received: 09/23/20
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	0.419		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00052		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Barium, Total	0.08628		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Calcium, Total	87.0		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Chromium, Total	0.00164		mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00055		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Copper, Total	0.00109		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Iron, Total	0.858		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Lead, Total	0.00066	J	mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Magnesium, Total	18.8		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Manganese, Total	0.1647		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:13	EPA 7470A	1,7470A	EW
Nickel, Total	0.00119	J	mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Potassium, Total	2.38		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Sodium, Total	6.52		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM
Zinc, Total	0.01052		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 10:05	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-07
Client ID: MW-3BR
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 11:45
Date Received: 09/23/20
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	0.0209		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00111		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Barium, Total	0.06704		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Calcium, Total	6.42		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Chromium, Total	0.00057	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00215		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Copper, Total	0.00301		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Iron, Total	102.		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Magnesium, Total	1.18		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Manganese, Total	1.590		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:15	EPA 7470A	1,7470A	EW
Nickel, Total	0.01515		mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Potassium, Total	1.06		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Sodium, Total	10.7		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM
Zinc, Total	0.00482	J	mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 10:10	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-08
Client ID: MW-3BR2
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 12:20
Date Received: 09/23/20
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	0.0148		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00026	J	mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Barium, Total	0.2780		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Calcium, Total	62.3		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Chromium, Total	0.00041	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00019	J	mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Copper, Total	0.00072	J	mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Iron, Total	40.3		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Magnesium, Total	15.9		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Manganese, Total	0.2203		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:17	EPA 7470A	1,7470A	EW
Nickel, Total	0.00081	J	mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Potassium, Total	0.926		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Sodium, Total	14.0		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 10:15	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-09
Client ID: MW-1B
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 13:00
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.104		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00017	J	mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Barium, Total	0.02686		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Calcium, Total	37.9		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Chromium, Total	0.00064	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00023	J	mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Iron, Total	0.321		mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Magnesium, Total	8.30		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Manganese, Total	0.02885		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:19	EPA 7470A	1,7470A	EW
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Potassium, Total	0.935		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Sodium, Total	16.1		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 10:20	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-10
Client ID: SED-001
Sample Location: CORTLANDVILLE, NY
Date Collected: 09/23/20 11:40
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 18%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12700		mg/kg	43.1	11.6	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Antimony, Total	ND		mg/kg	21.5	1.64	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Arsenic, Total	7.19		mg/kg	4.31	0.896	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Barium, Total	310		mg/kg	4.31	0.749	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Beryllium, Total	0.732	J	mg/kg	2.15	0.142	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Cadmium, Total	1.16	J	mg/kg	4.31	0.422	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Calcium, Total	15900		mg/kg	43.1	15.1	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Chromium, Total	40.6		mg/kg	4.31	0.413	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Cobalt, Total	24.4		mg/kg	8.61	0.715	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Copper, Total	24.0		mg/kg	4.31	1.11	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Iron, Total	24200		mg/kg	21.5	3.89	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Lead, Total	18.1	J	mg/kg	21.5	1.15	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Magnesium, Total	6680		mg/kg	43.1	6.63	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Manganese, Total	25000		mg/kg	4.31	0.685	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Mercury, Total	ND		mg/kg	0.350	0.228	1	09/29/20 05:00	09/29/20 08:27	EPA 7471B	1,7471B	EW
Nickel, Total	43.2		mg/kg	10.8	1.04	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Potassium, Total	925	J	mg/kg	1080	62.0	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Selenium, Total	10.8		mg/kg	8.61	1.11	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Silver, Total	1.38	J	mg/kg	4.31	1.22	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Sodium, Total	302	J	mg/kg	861	13.6	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Thallium, Total	23.0		mg/kg	8.61	1.36	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Vanadium, Total	6.20		mg/kg	4.31	0.874	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD
Zinc, Total	93.0		mg/kg	21.5	1.26	2	09/29/20 03:40	09/30/20 14:28	EPA 3050B	1,6010D	GD

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-12
Client ID: MW-3SR2
Sample Location: CORTLANDVILLE, NY
Sample Depth:
Matrix: Water

Date Collected: 09/23/20 12:30
Date Received: 09/23/20
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	0.174		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00142		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Barium, Total	0.1802		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Calcium, Total	118.		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Chromium, Total	0.00061	J	mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00264		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Copper, Total	0.00133		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Iron, Total	1.31		mg/l	0.700	0.0191	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Lead, Total	0.00047	J	mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Magnesium, Total	18.5		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Manganese, Total	3.035		mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 09:21	EPA 7470A	1,7470A	EW
Nickel, Total	0.00267		mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Potassium, Total	3.81		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Sodium, Total	27.8		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM
Zinc, Total	0.03154		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 10:25	EPA 3005A	1,6020B	AM

Project Name: SOUTH HILL DUMP **Lab Number:** L2040189

Project Number: 34236 **Report Date:** 09/30/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09,12 Batch: WG1415491-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Iron, Total	0.0222	J	mg/l	0.0700	0.0191	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Manganese, Total	0.00048	J	mg/l	0.00100	0.00044	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Thallium, Total	0.00032	J	mg/l	0.00100	0.00014	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/29/20 20:27	09/30/20 08:41	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09,12 Batch: WG1415492-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/29/20 22:24	09/30/20 08:51	1,7470A	EW

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

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): 10 Batch: WG1415551-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Antimony, Total	0.256	J	mg/kg	2.00	0.152	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Barium, Total	ND		mg/kg	0.400	0.070	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Beryllium, Total	ND		mg/kg	0.200	0.013	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Calcium, Total	ND		mg/kg	4.00	1.40	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Cobalt, Total	ND		mg/kg	0.800	0.066	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Copper, Total	ND		mg/kg	0.400	0.103	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Iron, Total	1.37	J	mg/kg	2.00	0.361	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Lead, Total	ND		mg/kg	2.00	0.107	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Magnesium, Total	ND		mg/kg	4.00	0.616	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Manganese, Total	0.128	J	mg/kg	0.400	0.064	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Nickel, Total	ND		mg/kg	1.00	0.097	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Potassium, Total	ND		mg/kg	100	5.76	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Silver, Total	ND		mg/kg	0.400	0.113	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Sodium, Total	ND		mg/kg	80.0	1.26	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Thallium, Total	ND		mg/kg	0.800	0.126	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Vanadium, Total	ND		mg/kg	0.400	0.081	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD
Zinc, Total	ND		mg/kg	2.00	0.117	1	09/29/20 03:40	09/30/20 11:21	1,6010D	GD

Prep Information

Digestion Method: EPA 3050B

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 10 Batch: WG1415558-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	09/29/20 05:00	09/29/20 07:34	1,7471B	EW

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09,12 Batch: WG1415491-2								
Aluminum, Total	109		-		80-120	-		
Antimony, Total	89		-		80-120	-		
Arsenic, Total	109		-		80-120	-		
Barium, Total	103		-		80-120	-		
Beryllium, Total	105		-		80-120	-		
Cadmium, Total	108		-		80-120	-		
Calcium, Total	113		-		80-120	-		
Chromium, Total	105		-		80-120	-		
Cobalt, Total	108		-		80-120	-		
Copper, Total	105		-		80-120	-		
Iron, Total	114		-		80-120	-		
Lead, Total	109		-		80-120	-		
Magnesium, Total	106		-		80-120	-		
Manganese, Total	100		-		80-120	-		
Nickel, Total	105		-		80-120	-		
Potassium, Total	110		-		80-120	-		
Selenium, Total	108		-		80-120	-		
Silver, Total	107		-		80-120	-		
Sodium, Total	112		-		80-120	-		
Thallium, Total	108		-		80-120	-		
Vanadium, Total	106		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09,12 Batch: WG1415491-2					
Zinc, Total	110	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-09,12 Batch: WG1415492-2					
Mercury, Total	102	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 Batch: WG1415551-2 SRM Lot Number: D109-540					
Aluminum, Total	73	-	50-150	-	
Antimony, Total	143	-	19-250	-	
Arsenic, Total	104	-	70-130	-	
Barium, Total	100	-	75-125	-	
Beryllium, Total	106	-	75-125	-	
Cadmium, Total	106	-	75-125	-	
Calcium, Total	93	-	73-128	-	
Chromium, Total	99	-	70-130	-	
Cobalt, Total	105	-	75-125	-	
Copper, Total	103	-	75-125	-	
Iron, Total	91	-	35-165	-	
Lead, Total	98	-	72-128	-	
Magnesium, Total	88	-	62-138	-	
Manganese, Total	102	-	74-126	-	
Nickel, Total	105	-	70-130	-	
Potassium, Total	84	-	59-141	-	
Selenium, Total	102	-	68-132	-	
Silver, Total	98	-	68-131	-	
Sodium, Total	102	-	35-165	-	
Thallium, Total	104	-	68-131	-	
Vanadium, Total	99	-	59-141	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 34236

Lab Number: L2040189

Report Date: 09/30/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 Batch: WG1415551-2 SRM Lot Number: D109-540					
Zinc, Total	97	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 10 Batch: WG1415558-2 SRM Lot Number: D109-540					
Mercury, Total	100	-	60-140	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09,12 QC Batch ID: WG1415491-3 WG1415491-4 QC Sample: L2040189-01 Client ID: MW-2B												
Aluminum, Total	0.00947J	2	2.17	108		2.15	108		75-125	1		20
Antimony, Total	0.00043J	0.5	0.4990	100		0.5060	101		75-125	1		20
Arsenic, Total	ND	0.12	0.1072	89		0.1032	86		75-125	4		20
Barium, Total	0.1094	2	2.094	99		2.093	99		75-125	0		20
Beryllium, Total	ND	0.05	0.05365	107		0.05479	110		75-125	2		20
Cadmium, Total	ND	0.051	0.05440	107		0.05646	111		75-125	4		20
Calcium, Total	33.9	10	44.7	108		43.6	97		75-125	2		20
Chromium, Total	0.00044J	0.2	0.2014	101		0.2021	101		75-125	0		20
Cobalt, Total	ND	0.5	0.5102	102		0.5258	105		75-125	3		20
Copper, Total	0.00110	0.25	0.2614	104		0.2597	103		75-125	1		20
Iron, Total	9.05	1	7.10	**0**	Q	6.47	**0**	Q	75-125	9		20
Lead, Total	ND	0.51	0.5327	104		0.5417	106		75-125	2		20
Magnesium, Total	7.68	10	18.3	106		18.1	104		75-125	1		20
Manganese, Total	0.1814	0.5	0.6695	98		0.6639	96		75-125	1		20
Nickel, Total	0.00090J	0.5	0.5048	101		0.5120	102		75-125	1		20
Potassium, Total	0.967	10	11.7	107		11.4	104		75-125	3		20
Selenium, Total	ND	0.12	0.0923	77		0.0896	75		75-125	3		20
Silver, Total	ND	0.05	0.05227	104		0.05221	104		75-125	0		20
Sodium, Total	5.52	10	16.3	108		16.3	108		75-125	0		20
Thallium, Total	0.00047J	0.12	0.1326	110		0.1271	106		75-125	4		20
Vanadium, Total	ND	0.5	0.4971	99		0.4908	98		75-125	1		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09,12 QC Batch ID: WG1415491-3 WG1415491-4 QC Sample: L2040189-01 Client ID: MW-2B									
Zinc, Total	0.00357J	0.5	0.5450	109	0.5406	108	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 01-09,12 QC Batch ID: WG1415492-3 WG1415492-4 QC Sample: L2040189-01 Client ID: MW-2B									
Mercury, Total	ND	0.005	0.00401	80	0.00392	78	75-125	2	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1415551-3 QC Sample: L2040322-01 Client ID: MS Sample										
Aluminum, Total	1620	161	2650	**639**	Q	-	-	75-125	-	20
Antimony, Total	0.203J	40.3	42.3	105		-	-	75-125	-	20
Arsenic, Total	1.02	9.66	11.8	112		-	-	75-125	-	20
Barium, Total	3.12	161	171	104		-	-	75-125	-	20
Beryllium, Total	0.068J	4.03	4.32	107		-	-	75-125	-	20
Cadmium, Total	0.076J	4.11	4.37	106		-	-	75-125	-	20
Calcium, Total	99.5	805	1020	114		-	-	75-125	-	20
Chromium, Total	3.08	16.1	20.4	108		-	-	75-125	-	20
Cobalt, Total	0.997	40.3	40.9	99		-	-	75-125	-	20
Copper, Total	1.46	20.1	22.3	104		-	-	75-125	-	20
Iron, Total	2950	80.5	3300	**434**	Q	-	-	75-125	-	20
Lead, Total	1.41J	41.1	43.8	107		-	-	75-125	-	20
Magnesium, Total	235	805	1130	111		-	-	75-125	-	20
Manganese, Total	52.6	40.3	101	120		-	-	75-125	-	20
Nickel, Total	1.54	40.3	40.1	96		-	-	75-125	-	20
Potassium, Total	88.2J	805	893	111		-	-	75-125	-	20
Selenium, Total	ND	9.66	9.86	102		-	-	75-125	-	20
Silver, Total	ND	24.2	23.8	98		-	-	75-125	-	20
Sodium, Total	5.74J	805	848	105		-	-	75-125	-	20
Thallium, Total	ND	9.66	9.36	97		-	-	75-125	-	20
Vanadium, Total	3.27	40.3	44.9	103		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1415551-3 QC Sample: L2040322-01 Client ID: MS Sample									
Zinc, Total	4.48	40.3	46.5	104	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1415558-3 QC Sample: L2040322-01 Client ID: MS Sample									
Mercury, Total	ND	0.13	0.134	103	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1415551-4 QC Sample: L2040322-01 Client ID: DUP Sample						
Arsenic, Total	1.02	1.56	mg/kg	**42**	Q	20
Barium, Total	3.12	5.07	mg/kg	**48**	Q	20
Beryllium, Total	0.068J	0.138J	mg/kg	NC		20
Cadmium, Total	0.076J	0.117J	mg/kg	NC		20
Chromium, Total	3.08	4.72	mg/kg	**42**	Q	20
Copper, Total	1.46	1.82	mg/kg	**22**	Q	20
Lead, Total	1.41J	2.29	mg/kg	NC		20
Manganese, Total	52.6	72.4	mg/kg	**32**	Q	20
Nickel, Total	1.54	1.56	mg/kg	1		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Zinc, Total	4.48	6.87	mg/kg	**42**	Q	20
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1415558-4 QC Sample: L2040322-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

SAMPLE RESULTS

Lab ID: L2040189-10
Client ID: SED-001
Sample Location: CORTLANDVILLE, NY

Date Collected: 09/23/20 11:40
Date Received: 09/23/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	18.0		%	0.100	NA	1	-	09/29/20 08:17	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1415715-1 QC Sample: L2040930-01 Client ID: DUP Sample						
Solids, Total	83.3	84.3	%	1		20

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

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(*)
L2040189-01A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01A1	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01A2	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01B1	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01B2	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01C1	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01C2	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-01D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-01D1	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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: L2040189
Report Date: 09/30/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2040189-01D2	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-02A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-02B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-02C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-02D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-03A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-03B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-03C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-03D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-04A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-04B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-04C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2040189-04D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-05A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-05A1	Vial HCl preserved	A	NA		3.5	Y	Absent		-
L2040189-05A2	Vial HCl preserved	A	NA		3.5	Y	Absent		-
L2040189-05B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-05B1	Vial HCl preserved	A	NA		3.5	Y	Absent		-
L2040189-05B2	Vial HCl preserved	A	NA		3.5	Y	Absent		-
L2040189-05C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-05C1	Vial HCl preserved	A	NA		3.5	Y	Absent		-
L2040189-05C2	Vial HCl preserved	A	NA		3.5	Y	Absent		-
L2040189-05D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-05D1	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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: L2040189
Report Date: 09/30/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2040189-05D2	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-06A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-06B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-06C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-06D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-07A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-07B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-07C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-07D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-08A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-08B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-08C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2040189-08D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-09A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-09B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-09C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-09D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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)
L2040189-10A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2040189-10B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2040189-10C	Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8082(14)
L2040189-10D	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-10X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-10Y	Vial Water preserved split	A	NA		3.5	Y	Absent	**29-SEP-20 02:00**	NYTCL-8260-R2(14)
L2040189-10Z	Vial Water preserved split	A	NA		3.5	Y	Absent	**29-SEP-20 02:00**	NYTCL-8260-R2(14)
L2040189-11A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-11B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-12A	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-12B	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2040189-12C	Vial HCl preserved	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 34236

Lab Number: L2040189
Report Date: 09/30/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2040189-12D	Plastic 250ml HNO3 preserved	A	<2	<2	3.5	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	**Lab Number:**	L2040189
Project Number:	34236	**Report Date:**	09/30/20

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2040189
Project Number:	34236	**Report Date:**	09/30/20

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

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

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

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

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

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2040189
Project Number:	34236	**Report Date:**	09/30/20

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name: SOUTH HILL DUMP
Project Number: 34236
Lab Number: L2040189
Report Date: 09/30/20

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA ANALYTICAL

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 9/24/20

ALPHA Job #: L2040189

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

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

Project Information

Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 34236
(Use Project name as Project #) ☐
Project Manager: Melissa Deyo
ALPHAQuote #:

Turn-Around Time

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

Client Information

Client: CHA
Address: 300 S State St
Syracuse, NY 13202
Phone: 315 257 7250
Fax:
Email: kehmann@chacompanies.com

Deliverables

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

Regulatory Requirement

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

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

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	ANALYSIS: Total Hg Total Metals	ANALYSIS: NYTCL 8260	Sample Specific Comments	Total Bottles
40189-01	MW-2B	9/23/20	945	W	KE	X	X		4
-01 ~~-05~~	CHA-MSD001	9/23/20	945	W	KE	X	X		
-01 -05	CHA-MS001	9/23/20	945	W	KE	X	X		
-02	MW-2D	9/23/20	1020	W	KE	X	X		
-03	MW-4B	9/23/20	1040	W	KE	X	X		
-04	MW-4S	9/23/20	1100	W	KE	X	X		
-05	CHA-001	9/23/20	1000	W	KE	X	X		
-06	MW-3SR	9/23/20	1200	W	KE	X	X		
-07	MW-3BR	9/23/20	1145	W	KE	X	X		
-08	MW-3R2	9/23/20	1220	W	KE	X	X		

Preservative Code	Container Code
A = None	P = Plastic
B = HCl	A = Amber Glass
C = HNO_3	V = Vial
D = H_2SO_4	G = Glass
E = NaOH	B = Bacteria Cup
F = MeOH	C = Cube
G = $NaHSO_4$	O = Other
H = $Na_2S_2O_3$	E = Encore
K/E = Zn Ac/NaOH	D = BOD Bottle
O = Other	

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

	Total Hg Total Metals	NYTCL 8260
Container Type	P	V
Preservative	C	B

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9.23.20 / 1425	AAL M. Radziewski	9/23/2020 / 1815
Mike Radziewski	9/23/2020 / 1815	[signature]	9/24/20 01:30

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.)

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

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

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab: 9/24/20

ALPHA Job #: L2040189

Client Information

Client: CHA
Address: 300 S State St
Syracuse, NY 13202
Phone: 315 257 7250
Fax:
Email: Kehmann@chacompanies.com

Project Information

Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 34236
(Use Project name as Project #)
Project Manager: Melissa Deyo
ALPHAQuote #:

Turn-Around Time

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

Regulatory Requirement

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

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

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

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 Mthd	NYTCL 8260	SM 2540	EPA 8260C	EPA 8082A	Total 6010D			Sample Specific Comments	Total Bottle
40189-09	MW-1B	9/23/20	1300	W	KE	X	X								4
-10	SED-001	9-23-20	1140	Solid	KE			X	X	X	X				4
-11	Trip Blank	9-23-20	—	W			X								2

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

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

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

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

Relinquished By:	Date/Time	Received By:	Date/Time
	9-23-20 / 14:25	M. Radziewski	9/23/2020 18:15
M. Radziewski	9/23/2020 18:15		9/24/20 01:30

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.)

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