2024 PERIODIC REVIEW REPORT

South Hill Dump
South Hill Dump Road
Cortlandville, New York

NYSDEC Site #: 712009
CHA Project Number: 034236.000

December 2024

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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
PFAS	Per-and polyfluoroalkyl substances
PRR	Periodic Review Report
RI	Remedial Investigation
ROD	Record of Decision
RPD	Relative Percent Difference
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
µg/L	Micrograms per Liter, or parts per billion
mg/kg	Milligrams per Kilogram, or parts per million

1.0 SITE OVERVIEW

The South Hill Dump (Site) is a 10.9-acre parcel located off South Hill 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. Note the Environmental Easement for the Site indicates the landfill is off Sommerville Road (also known as South Hill Road). 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.

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 period from January 1st, 2023 to December 31st, 2024.

1.1 Site Background

The Site was reportedly used as a local waste disposal location by residents as early as 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 laboratory analytical results identifying 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 (TCE)
  - 1,2-dichloroethene (DCE)
- 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, updated in 2021; (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

Following the submission of the 2020 annual PRR, the NYSDEC approved the frequency of submission of the PRR to change from annual to biennial 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 the 2023 and 2024 calendar years. 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 on a 24-month cycle began in September 2020 and continued with this September 2024 sampling event. Additionally, at the request of NYSDEC, emerging contaminants sampling was added to the monitoring conducted during the 2023 and 2024 reporting period.

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 Engineering 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, the 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 are improved with 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 stick-up or flush-mount 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 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 and analyzed in September 2024.

In addition to the biennial sampling described in this section and at the request of the NYSDEC following the submission of the 2022 PRR, 5 of the 11 groundwater monitoring wells (MW-1B, MW-3BR2, MW-3SR2, MW-4S, and MW-4B) were sampled for the emerging contaminants per- and polyfluoroalkyl substances (PFAS) via EPA Method 1633 and 1,4-dioxane via EPA Method 8270E-SIM. The emerging contaminants sampling event was performed by CHA on June 12, 2024 using a peristaltic pump with disposable silicone tubing and high density polyethylene tubing. CHA performed the emerging contaminants sampling using PFAS-compliant methods

before installing the passive diffusion samplers, which are not PFAS-compliant, used for the biennial sampling program.

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 on June 11/12 and September 18, 2024 are summarized in the following sections.

2.2.3.1 Surface Water Sampling

A surface water sample was collected from the stormwater retention basin outfall during the September 2024 monitoring event. The results were compared to the TOGS 1.1.1 Ambient Water Quality Standards, as well. The surface water 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 for the following analyses:

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

2.2.3.2 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 2024 sampling event, there were no active seeps observed, and therefore, no leachate seep sample was collected.

2.2.3.3 Sediment Sampling

A sediment sample was collected from the stormwater detention basin outfall during the September 2024 monitoring event. 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. 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 for the following analyses:

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

2.2.3.4 Groundwater Elevation Monitoring

Groundwater water level measurements were collected on June 11 and September 18, 2024 from each of the 11 groundwater monitoring wells shown on Figure 2.

2.2.3.5 Groundwater Sampling

At the request of NYSDEC, an emerging contaminants sampling event was performed on June 12, 2024 and involved the sampling 5 of the 11 monitoring wells for PFAS and 1,4-dioxane. Groundwater samples were collected using a peristaltic pump with the exception of well MW-4B which was sampled using a PVC disposable bailer due to the depth of water being too great to purge and sample with the peristaltic pump. All the wells were purged to stabilization of water quality parameters including ORP, pH, conductivity, dissolved oxygen, and temperature using low-flow purging and sampling methods. At the time of sampling the turbidity probe on the water quality meter was malfunctioning; therefore, the meter could not provide accurate results. CHA staff noted the water was visibly clear prior to sample collection. These deficiencies are discussed further in Section 3.2.2. Samples were submitted to Alpha Analytical for the following analyses:

- PFAS via USEPA Method 1633
- 1,4-dioxane via USEPA Method 8270E-SIM

Groundwater samples for VOCs and Total Metals were collected in accordance with the SMP using "no purge" passive diffusion samplers from all on-site monitoring wells. MW-1S was dry and unable to be sampled at the time of the September monitoring event. The passive diffusion bag in MW-2S contained insufficient water to sample but the depth to water indicated approximately 2.84 feet of water available in the well. CHA staff attempted to use a disposable bailer to purge and sample, but a kink in the well riser prevented the bailer from reaching the water. These deficiencies are discussed further in Section 3.2.2. Samples were submitted to Alpha for the following analyses:

- VOCs via EPA Method 8260C; and,

- Total metals via EPA Methods 6020B and 7470A.

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. Groundwater results from both the June and September sampling events were compared to the Technical and Operational Guidance Series (TOGS) 1.1.1 New York State (NYS) Class GA Ambient Water Quality Standards.

3.0 MONITORING RESULTS

3.1 Site-Wide Inspection Results

In accordance with the revised SMP, CHA performed Site inspections on October 16, 2023, June 11, 2024, and September 18, 2024. The June 11, 2024, inspection was accompanied by two employees of TRC Companies representing the NYSDEC. 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 2024 following CHA's recommendation to mow the landfill two times per year.
- No animal burrows, or leachate seeps were observed during the site inspections.
- A relatively large tree is growing within the drainage channel between the waste mass and the stormwater retention pond on the southern portion of the landfill. Although it appears to be outside the landfill cover system, the tree should be removed.
    - Town of Cortland was contacted following the site-wide inspection and mobilized their maintenance staff to remove the tree located within the drainage channel on the southern portion of the landfill.
- The drainage channels appeared to be in good condition with no evidence of scour or accumulation of silt.
- The Site access controls including the gate at the entrance to the landfill was observed to be locked and secure.
- Landfill gas vents were in good condition.
- Monitoring wells were in generally good condition with the exception of:
    - A crack was observed in the curb box for MW-1S; however, the casing remains vertical.
    - The groundwater in MW-3BR2 and MW-3SR2 was observed to be orange/rust color indicating high iron content. During the June 11, 2024 inspection, both monitoring wells are experiencing pressure head significant enough to cause upwelling of groundwater above the top of the riser. At the September 18, 2024 inspection, the upwelling was not observed.
- The landfill access roads were generally in good condition; however, relatively large ruts from mowing operations were observed during the June 11, 2024 inspection between the landfill and the stormwater retention basin to the south and outside of the limits of waste.

The results from this inspection indicate that the landfill cap and infrastructure are in generally good condition, the following repairs are recommended as a result of the 2023 and 2024 inspections:

- Cut and remove the tree growing within the drainage channel on the south side of the waste mass.
- Continue to monitor the condition of the casing of groundwater monitoring well MW-1S.
- Continue to monitor the landfill access roads and the ruts observed between the landfill and the stormwater retention basin to the south.

3.2 Site Monitoring Results

3.2.1 Surface Water Sampling

One surface water sample from the outflow of the stormwater retention basin was collected during the September 2024 sampling event. The laboratory analytical results from the surface water sample are provided in Table 1. Multiple metals were detected, and iron and sodium were detected at concentrations in exceedance of the applicable ambient water quality standards.

The complete laboratory analytical package is included in Appendix C.

3.2.2 Seep Sampling

As previously discussed, no seeps were identified at the time of the September 2024 sampling event. Therefore, no seep sample was able to be collected for analysis.

3.2.3 Sediment Sampling

The laboratory analytical results from the sediment sample are provided in Table 2. 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 metals manganese and nickel were detected at concentrations exceeding the applicable standards in the sediment sample with a concentration of 78,600 mg/kg and 55.3 mg/kg respectively. The manganese exceedance was consistent with previous sampling events. Nickel was exceeded for the first time since 2016. The complete laboratory analytical package is included in Appendix C.

3.2.4 Groundwater Elevation Monitoring and Flow Direction

Groundwater levels measured in September 2024 in most wells were generally consistent to elevations during the September 2022 monitoring event and are presented in Table 3. 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.

3.2.5 Groundwater Sampling

During the June 2024 emerging contaminants sampling event, the turbidity probe on the water quality meter (YSI) was malfunctioning resulting in fluctuating turbidity readings which did not correspond to what CHA staff observed during the sampling process. All other water quality parameters measured by YSI were relatively consistent. Therefore, CHA sampled without waiting for turbidity to stabilize. It should be noted that the water was visibly clear to CHA staff prior to the sample collection.

During the September 2024 monitoring event, the passive diffusion sampler located in monitoring well MW-1S did not have sufficient water to sample. CHA used a Solinst water level meter to determine the volume of water in the well and found that MW-1S had approximately 2.03 feet of water at the time of the September 2024 sampling event. Using a disposable bailer, CHA

attempted to purge and sample MW-1S but the monitoring well purged dry and did not recover sufficiently to sample. Therefore, CHA was not able to collect a groundwater sample. Table 3 indicates the groundwater elevation in well MW-1S has decreased by over four feet since 2018. The dedicated passive diffusion sampler in MW-2S also did not accumulate sufficient water to sample and less than 3 feet of water was available in the well. CHA staff attempted to utilize a disposable bailer to sample MW-2S, but the bailer was unable to move past a kink in the riser. Therefore, CHA was not able to collect a groundwater sample from MW-2S.

For quality assurance purposes, one blind duplicate (CHA-001) was collected at MW-4B and matrix spike/matrix spike duplicate (MS/MSD-001) samples were collected at MS-2B. One trip blank was prepared by the laboratory and accompanied the sample containers throughout the sampling and transport processes. CHA reviewed the relative percent difference (RPD) between the detections of the blind duplicate (CHA-001) and MW-4B and found the RPDs were below 10% which indicates the results are consistent.

The laboratory analytical results from the groundwater sampling event are presented in table in Table 4 and summarized below.

VOCs:

- VOC detections are consistent with previous monitoring events with the exception of MW-3BR2 and MW-3SR2 which previously had detections exceeding the TOGS 1.1.1 Ambient Water Quality Standards for TCE and now had detections below the standard (MW-3BR2) or were not detected (MW-3SR2).
- Overburden well results:
    - The upgradient overburden monitoring well MW-1S was dry and unable to be sampled.
    - The downgradient overburden monitoring well MW-2S was unable to be sampled due to its damaged dedicated passive diffusion sampler and a kink in the well riser.
    - No VOCs were detected in the downgradient overburden wells MW-2D or MW-4S.
    - None of the VOCs detected in MW-3SR (TCE) and MW-3SR2 (Vinyl Chloride) were detected exceeding the TOGS 1.1.1 Ambient Water Quality Standards.
- Bedrock well results:
    - No VOCs were detected in the upgradient monitoring well MW-1B.
    - No VOCs were detected in downgradient bedrock wells MW-2B or MW-3BR during the September 2024 monitoring event.
    - TCE and DCE was detected in downgradient bedrock well MW-4B below the groundwater standard.
    - TCE was detected at concentrations of 5.1 µg/L, in MW-3BR2 which is in exceedance of the groundwater standard. DCE was detected at 1.6 µg/L which is below the groundwater standard. Vinyl chloride was also detected, but at an estimated concentration not in exceedance of the groundwater standard.

Metals:

- The metals results were generally consistent with historical groundwater results.
- Overburden well results:
    - Upgradient monitoring well MW-1S was not sampled. In October 2018, only iron was detected in exceedance of the groundwater standard.
    - Downgradient monitoring well MW-2S was not sampled. In September 2022 manganese, iron, and sodium were detected in exceedance of their applicable groundwater standards.
    - Iron was detected in exceedance of the groundwater standard in all sampled downgradient overburden monitoring wells (MW-4S, MW-2D, MW-3SR, MW-3SR2).
    - Manganese was detected in exceedance of the groundwater standard in downgradient overburdened wells MW-4S and MW-2D.
    - Nickel was detected in exceedance of the groundwater standard in well MW-4S.
    - Sodium was detected in exceedance of the groundwater standard in well MW-3SR2.
    - 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 all were below the applicable groundwater standards.
    - Several metals were detected in all the downgradient bedrock wells as well. Iron was detected in exceedance of the applicable groundwater standard in wells MW-2B, MW-4B, MW-3BR and MW-3BR2. The complete laboratory analytical package is included in Appendix C.

3.2.6 Emerging Contaminants Sampling

The laboratory analytical results from the June 2024 PFAS and 1,4-dioxane sampling are provided in Table 5. 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 2023 and 2024 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, or leachate seeps during the site inspections. The landfill appeared to be in relatively good condition.
- Groundwater level measurements were consistent with the 2022 site inspection. Groundwater flow direction in both overburden and bedrock wells remains consistent towards the southeast.
- No groundwater sample was collected from wells MW-1S due to insufficient water in the monitoring well or from MW-2S due to a damaged dedicated passive diffusion sampler and a kink in the well.
- Groundwater results indicated slightly elevated concentrations of some VOCs and metals, which is consistent with previous monitoring events.
    - TCE was detected in exceedance of the groundwater standard in MW-3BR2.
    - Iron was detected in exceedance of the groundwater standard in most monitoring wells sampled (MW-4S, MW-2D, MW-3SR, MW-3SR2, MW-2B, MW-4B, MW-3BR and MW-3BR2).
    - Manganese was detected in exceedance of the groundwater standard in downgradient overburdened wells MW-4S and MW-2D.
    - Nickel was detected in exceedance of the groundwater standard in well MW-4S.
    - Sodium was detected in exceedance of the groundwater standard in well MW-3SR2.
- One sediment sample was collected from the catch basin outfall. Analytical results indicated low levels of metals detected in the sediment sample. However, manganese and nickel were detected at a concentration exceeding the applicable standards.
- The surface water sample was collected at the outfall of the stormwater retention basin. Analytical results indicate iron and sodium were detected in exceedance of the applicable standard in the stormwater.

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. The next landfill inspection is anticipated to be in Summer/Fall 2025 and the next groundwater, surface water, and sediment sampling is anticipated to be in September 2026.

TABLES

Table 1.
Surface Water Sample Results -
Detected Compounds Only
South Hill Dump
2024 Periodic Review Report

LOCATION				SW-001		SW-001	
SAMPLING DATE				9/14/2022		9/18/2024	
	NY-AWQS	Units	Results	Qual	Results	Qual
Volatile Organics by GC/MS						
Acetone	50	ug/l	1.5	J	-	
Total Metals						
Aluminum, Total		ug/l	177		430	
Arsenic, Total	25	ug/l	-		1.18	
Barium, Total	1000	ug/l	64		69.56	
Calcium, Total		ug/l	95700		78100	
Cobalt, Total		ug/l	-		1.01	
Copper, Total	200	ug/l	-		1.51	
Iron, Total	300	ug/l	383		852	
Lead, Total	25	ug/l	-		0.9	J
Magnesium, Total	35000	ug/l	-		11700	
Manganese, Total	300	ug/l	448		1751	
Mercury, Total	0.7	ug/l	-		0.14	J
Nickel, Total	100	ug/l	-		2.08	
Potassium, Total		ug/l	4250		3450	
Sodium, Total	20000	ug/l	3210		30800	
Zinc, Total	2000	ug/l	-		5.47	J

Notes:

Samples were collected by CHA Consulting, Inc.

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

Blue Highlighted and bold parameters exceed TOGS 1.1.1

"-" indicate the parameter was not detected above the laboratory Method Detection Limit.

J - Estimated value between the Method Detection Limit and Reporting Limit

Table 2.
Sediment Sample Results - Detected Compounds Only
South Hill Dump
2024 Periodic Review Report

	LOCATION		SED-1		SED-001		SED-001		SED-001	
	SAMPLING DATE		3/2/2016		9/23/2020		9/14/2022		9/18/2024	
	NYSDEC Sediment Guidance Value	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry										
Solids, Total		%	62.6		18		20.4		22.4	
Polychlorinated Biphenyls by GC										
PCBs, Total	0.0008	mg/kg	-		-		-		-	
Total Metals										
Aluminum, Total		mg/kg	22,600		12,700		12,300		14,300	
Antimony, Total		mg/kg	2.4	J	-		-		-	
Arsenic, Total	33	mg/kg	9.7		7.19		5.56		13.6	J
Barium, Total		mg/kg	166		310		224		1510	J
Beryllium, Total		mg/kg	0.91		0.732	J	0.626	J	0.732	J
Cadmium, Total	9	mg/kg	0.33	J	1.16	J	1.07	J	-	
Calcium, Total		mg/kg	4,480		15,900		13,200		17,000	
Chromium, Total	110	mg/kg	26.5		40.6		32.5		26.1	
Cobalt, Total		mg/kg	16.2		24.4		17.1		40.1	
Copper, Total	110	mg/kg	18.2		24		22.2		23.7	
Iron, Total	40,000	mg/kg	33,500		24,200		21,800		29,900	
Lead, Total	110	mg/kg	17.8		18.1	J	17.9		18.5	J
Magnesium, Total		mg/kg	5,240		6,680		6,400		6,340	
Manganese, Total	1,100	mg/kg	1,890		25,000		9,690		78,600	
Nickel, Total	50	mg/kg	34.3		43.2		32.5		55.3	
Potassium, Total		mg/kg	2,190		925	J	806	J	12.9	J
Selenium, Total		mg/kg	-		10.8		-		-	
Silver, Total	2.2	mg/kg	-		1.38	J	1.62	J	-	
Sodium, Total		mg/kg	112	J	302	J	202	J	315	J
Thallium, Total		mg/kg	-		23		-		-	
Vanadium, Total		mg/kg	37.5		6.2		44.6		49.2	
Zinc, Total	270	mg/kg	89.2		93		87.7		104	
Volatile Organics by GC/MS										
Toluene		mg/kg	-		0.068		0.01		-	
Ethylbenzene		mg/kg	-		0.003	J	-		-	
Trichloroethene		mg/kg	-		-		-		4.4	
cis-1,2-Dichloroethene		mg/kg	-		-		-		0.88	J
Acetone		mg/kg	-		0.76		0.5		-	
2-Butanone		mg/kg	-		0.21		0.11		-	

* 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.
"-" cells indicate the parameter was not detected above the laboratory Method Detection Limit
2024 sample collected September 18th, 2024 and analyzed by Alpha Analytical.
J - Estimated value below the reporting limit but above the method detection limit.

Table 3.
Groundwater Elevation Data
South Hill Dump
Town of Cortlandville, New York
2024 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	Groundwater Elevation (ft) October 2021	Groundwater Elevation (ft) July 2022	Groundwater Elevation (ft) September 2022	Groundwater Elevation (ft) October 2023	Groundwater Elevation (ft) September 2024
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	1660.57	1655.34	1653.45	1657.06	1655.16
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	1649.05	1647.30	1647.81	1648.34	1646.88
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	1556.07	1565.81	1561.53	1562.03	1561.74	1561.04
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	1567.48	1560.42	1560.83	1563.43	1562.72
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	1568.76	1566.33	1563.97	1565.97	1565.39
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	1551.01	1553.74	1552.13	1551.08	1553.07	1552.57
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	1560.59	1558.28	1557.65	1558.69	1558.23
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	1565.24	1563.87	1563.42	1563.93	1564.06
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	1565.64	1563.80	1563.38	1563.73	1564.08
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	1511.19	1513.43	1510.26	1510.08	1510.18	1510.19
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	1536.75	1530.66	1530.49	1531.36	1530.37

Notes:

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

Table 4.
Groundwater Monitoring Results - Detected Compounds only
South Hill Dump
2024
Periodic Review Report

LOCATION			MW-1S		MW-1B				
SAMPLING DATE			7/5/2017	10/24/2018	7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24
	NY-AWQS	Units	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	-	-	-	-	-	-	-
Vinyl chloride	2	ug/l	-	-	-	-	-	-	-
Total Metals									
Aluminum, Total		ug/l	4400	594	300	406	104	33700	132
Antimony, Total	3	ug/l	-	0.49 J	-	0.55 J	-	-	-
Arsenic, Total	25	ug/l		0.42 J		0.37 J	0.17 J	6	0.28 J
Barium, Total	1000	ug/l	50	40.37	17	23.31	26.86	431	24.81
Beryllium, Total	3	ug/l	-	-	-	-	-	1 J	-
Cadmium, Total	5	ug/l	-	-	-	-	-	1 J	-
Calcium, Total		ug/l	16100	33600	17600	21400	37900	43700	25500
Chromium, Total	50	ug/l	4.4	1.42	-	0.84 J	0.64 J	46	0.36 J
Cobalt, Total		ug/l	1.5 J	0.62	-	0.35 J	0.23 J	29	-
Copper, Total	200	ug/l	3.1 J	1.1	-	0.94 J	-	52	0.45 J
Iron, Total	300	ug/l	3900 J	1060	320 J	606	321	55000	193
Lead, Total	25	ug/l	4.1 J	1.04	-	0.53 J	-	41	-
Magnesium, Total	35000	ug/l	4400	7720	4000	4850	8300	20000	6610
Manganese, Total	300	ug/l	70 J	64.76	13	39.83	28.85	4870	36.33
Mercury, Total	0.7	ug/l	-	-	-	-	-	-	-
Nickel, Total	100	ug/l	3.8 J	1.39 J		0.88 J	-	74	0.6 J
Potassium, Total		ug/l	1700	943	710	708	935	4140	757
Selenium, Total	10	ug/l		5	-	-	-	-	-
Sodium, Total	20000	ug/l	6100	15800	6800	7420	16100	18000	6810
Thallium, Total	0.5	ug/l	4.2 J	-	-	-	-	4 J	-
Vanadium, Total		ug/l	-	-	-	-	-	38	-
Zinc, Total	2000	ug/l	11	10.06	-	10.91	-	145	3.58 J

Notes:

Samples were collected by CHA Consulting, Inc. September 18, 2024

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

Blue Highlighted and bold parameters exceed TOGS 1.1.1

"-" indicate the parameter was not detected above the laboratory Method Detection Limit.

J - Estimated value between the Method Detection Limit and Reporting Limit

Table 4.
Groundwater Monitoring Results - Detected Compounds only
South Hill Dump
2024
Periodic Review Report

LOCATION			MW-2B					MW-2S		
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24	7/5/2017	10/24/2018	9/14/2022
	NY-AWQS	Units	Results	Results	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	-	37.5	9.47 J	-	5.02 J	2600	7750	4120
Antimony, Total	3	ug/l	13 J	-	0.43 J	-	0.99 J	-	-	-
Arsenic, Total	25	ug/l	-	-	-	-	0.18 J	-	7.89	3 J
Barium, Total	1000	ug/l	120	149.1	109.4	151	151.7	42	101.2	64
Beryllium, Total	3	ug/l	-	-	-	-	-	-	0.63	-
Cadmium, Total	5	ug/l	-	0.08 J	-	-	-	-	0.48	-
Calcium, Total		ug/l	32300	38300	33900	39300	35800	73800	69800	54600
Chromium, Total	50	ug/l	-	3.01	0.44 J	-	0.39 J	4.6	11.16	6 J
Cobalt, Total		ug/l	-	1.37	-	-	-	0.69 J	6.21	5 J
Copper, Total	200	ug/l	20 J	11.01	1.1		0.62 J	2.7 J	12.14	9 J
Iron, Total	300	ug/l	159000 J	370000	9050	16300	6720	2400 J	17100	8180
Lead, Total	25	ug/l	3.4 J	0.4 J	-	-	-	3.5 J	11.04	8 J
Magnesium, Total	35000	ug/l	7000	8560	7680	8390	8510	14200	14000	10300
Manganese, Total	300	ug/l	1000 J	1590	181.4	214	191.7	15 J	1677	838
Mercury, Total	0.7	ug/l	-	-	-	-	-	-	-	-
Nickel, Total	100	ug/l	6.5 J	8.27	0.9 J	-	-	2.7 J	12.75	8 J
Potassium, Total		ug/l	840	1320	967	933 J	964	1600	3100	3030
Selenium, Total	10	ug/l	-	-	-	-	-	-	-	-
Sodium, Total	20000	ug/l	4200	5650	5520	5330	5920	24100	51200	28500
Thallium, Total	0.5	ug/l	-	-	0.47 J	-	-	-	-	-
Vanadium, Total		ug/l	0.0022 J	-	-	-	-	0.0029 J	8.72	6 J
Zinc, Total	2000	ug/l	1.5 J	12.98	3.57 J	-	-	20	110.4	78

Notes:

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Table 4.
Groundwater Monitoring Results - Detected Compounds only
South Hill Dump
2024
Periodic Review Report

LOCATION			MW-2D					MW-4B				
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24	7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24
	NY-AWQS	Units	Results	Results	Results	Results	Results	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	-	-	-	-	-	-	-	-	-	1.5 J
trans-1,2-Dichloroethene	5	ug/l	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	ug/l	-	-	-	-	-	-	1.8	-	1.8	3.9
Vinyl chloride	2	ug/l	-	-	-	-	-	-	-	-	-	-
Total Metals												
Aluminum, Total		ug/l	0.6	406	78.1	-	19.1	66 J	70.5	25	-	92.4
Antimony, Total	3	ug/l	-	-	-	-	-	-	-	-	-	-
Arsenic, Total	25	ug/l	-	0.46 J	0.48 J	3 J	1.75		0.2 J	-	-	0.57
Barium, Total	1000	ug/l	0.032	33.38	31.67	30	-	41	244.9	57.58	56	148.9
Beryllium, Total	3	ug/l	-	-	-	-	-	0.00078 J	-	0.5	-	-
Cadmium, Total	5	ug/l	-	0.12 J	0.24	-	0.1 J		0.06 J	-	-	-
Calcium, Total		ug/l	52.6	54700	61800	55100	55700	27600	55300	28300	22700	65000
Chromium, Total	50	ug/l	0.0018 J	1.97	0.99 J	-	0.49 J	-	1.75	0.65 J	-	5.04
Cobalt, Total		ug/l	-	0.26 J	0.24 J	-	0.47	-	0.82	-	-	0.67
Copper, Total	200	ug/l	-	0.8 J	-	2 J	1.03	-	4.76	0.62 J	-	8.86
Iron, Total	300	ug/l	0.68 J	729	372	1820	891	11700 J	144000	30300	25900	19400
Lead, Total	25	ug/l	-	0.65 J	-	-	-	-	-	-	-	-
Magnesium, Total	35000	ug/l	13.2	13500	14900	16500	15500	6900	10400	6890	6280	15500
Manganese, Total	300	ug/l	0.03 J	33.86	192.8	518	570	110 J	425.5	245.2	352	92.59
Mercury, Total	0.7	ug/l	-	-	-	-	-	-	-	-	-	-
Nickel, Total	100	ug/l	-	0.73 J	0.66 J	-	0.75 J	1.4 J	6.48	0.94 J	-	5.09
Potassium, Total		ug/l	1	958	998	1380 J	936	520	916	347	648 J	630
Selenium, Total	10	ug/l	-	-	-	-	-	-	-	-	-	-
Sodium, Total	20000	ug/l	3.6	3550	3950	4220	4070	3200	4380	3300	3270	5520
Thallium, Total	0.5	ug/l	-	-	0.25 J	-	-	-	0.19 J	0.16 J	-	-
Vanadium, Total		ug/l	-	-	-	-	-	-	-	-	-	-
Zinc, Total	2000	ug/l	0.005 J	-	27.07	7 J	16.07	1.7 J	14.84	12.01	-	-

Notes:

Samples were collected by CHA Consulting, Inc. September 18, 2024

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

Blue Highlighted and bold parameters exceed TOGS 1.1.1

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Table 4.
Groundwater Monitoring Results - Detected Compounds only
South Hill Dump
2024
Periodic Review Report

LOCATION			MW-4S						MW-3SR				
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	9/23/2020	9/14/2022	9/18/24	7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24
	NY-AWQS	Units	Results	Results	Results	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	1.7	1.4
Vinyl chloride	2	ug/l	-	-	-	-	-	-	-	-	-	-	-
Total Metals													
Aluminum, Total		ug/l	360	26	11.4	5.62	-	8030	1400	2280	419	104	229
Antimony, Total	3	ug/l	-	-	-	-	-		-	-	-	-	-
Arsenic, Total	25	ug/l	-	-	-	-	-	1.85	-	1.81	0.52	-	0.51
Barium, Total	1000	ug/l	28	45.82	44.41	47.25	50	140.8	72	102	86.28	83	115.3
Beryllium, Total	3	ug/l	-	-	-	-	-	0.33 J	-	-	-	-	-
Cadmium, Total	5	ug/l	-	-	-	-	-	0.1 J	-	-	-	-	-
Calcium, Total		ug/l	58300	83400	104000	29100	86000	109000	69800	76000	87000	67900	80500
Chromium, Total	50	ug/l	-	0.66 J	2.04	0.38	2 J	17.95	1.6 J	5.09	1.64	-	0.85 J
Cobalt, Total		ug/l	-	-	-	-	-	6.42	-	2	0.55	-	0.23 J
Copper, Total	200	ug/l	2.7	-	-	0.38	3 J	13.17	2.1 J	3.35	1.09	2 J	0.61 J
Iron, Total	300	ug/l	440	110	35.1 J	25400	48 J	14800	1600 J	4590	858	235	460
Lead, Total	25	ug/l	-	-	-	-	-	13.64	3 J	2.06	0.66 J	-	
Magnesium, Total	35000	ug/l	8700	12700	16800	7010	18200	22200	15200	16600	18800	19200	19900
Manganese, Total	300	ug/l	17	2.29	5.99	225.9	-	311.4	180 J	392.6	164.7	36	51.52
Mercury, Total	0.7	ug/l	-	-	-	-	-	-	-	-	-	-	-
Nickel, Total	100	ug/l	-	-	-	0.66	6 J	140	1.9 J	4.97	1.19 J		0.61 J
Potassium, Total		ug/l	610	534	840	354	1040 J	1900	3500	3200	2380	2590	1710
Selenium, Total	10	ug/l	-	-	-	-	-	1.97 J	-	-	-	-	-
Sodium, Total	20000	ug/l	2000	2370	2750	3480	2710	3140	6200	6390	6520	6620	6600
Thallium, Total	0.5	ug/l	-	-	-	-	-	-	-	-	-	-	-
Vanadium, Total		ug/l	-	-	-	5		12.18	0.0018 J	4.17 J	-	-	-
Zinc, Total	2000	ug/l	1.9	-	21.41	5.25	8 J	44.97	6.1 J	14.2	10.52	-	-

Notes:

Samples were collected by CHA Consulting, Inc. September 18, 2024

Samples were analyzed by Alpha Analytical

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Table 4.
Groundwater Monitoring Results - Detected Compounds only
South Hill Dump
2024
Periodic Review Report

LOCATION			MW-3BR					MW-3BR2				
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24	7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24
	NY-AWQS	Units	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
Volatile Organics by GC/MS												
Acetone	50	ug/l	-	-	-	-	-	-	-	5 U	-	-
Benzene	1	ug/l	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	5	ug/l	-	-	-	-	-	3.1	9.2	9.7	7.8	5.1
trans-1,2-Dichloroethene	5	ug/l	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	ug/l	-	-	-	-	-	6.5	83	67	50	1.6
Vinyl chloride	2	ug/l	-	-	-	-	-	-	-	0.21 J	0.15 J	0.58 J
Total Metals												
Aluminum, Total		ug/l	-	11	20.9	-	5.08 J	81 J	115	14.8	59 J	8.06 J
Antimony, Total	3	ug/l	11 J	-	-	-	-	-	-	-	-	-
Arsenic, Total	25	ug/l	-	1.76	1.11	-	0.53	-	0.76	0.26 J		0.21 J
Barium, Total	1000	ug/l	74	70.3	67.04	42	23.06	120	289.8	278	253	39.62
Beryllium, Total	3	ug/l	-	-	0.5	-	-	-	-	-	-	-
Cadmium, Total	5	ug/l	-	-	0.08 J	-	-	-	-	-	-	-
Calcium, Total		ug/l	10000	9440	6420	4190	3490	29600	86100	62300	88200	21000
Chromium, Total	50	ug/l	-	0.39 J	0.57 J	-	0.3 J	-	1.24	0.41	-	0.22 J
Cobalt, Total		ug/l	1.3 J	1.62	2.15	-	0.18 J	-	0.42 J	0.19	-	-
Copper, Total	200	ug/l	2 J	1.47	3.01	-	0.44 J	-	1.45	0.72	-	0.75 J
Iron, Total	300	ug/l	124000 J	136000	102000	50800	11700	27300 J	46000	40300	25500	8110
Lead, Total	25	ug/l	-	-	-	-	-	-	-	-	-	-
Magnesium, Total	35000	ug/l	3100	2780	1180	1140	890	12500	16100	15900	18900	16100
Manganese, Total	300	ug/l	1500 J	1321	1590	789	204.2	290 J	359.7	220.3	292	131
Mercury, Total	0.7	ug/l	-	-	-	-	-	-	-	-	-	0.11 J
Nickel, Total	100	ug/l	15	7.57	15.15	5 J	1.1	1.5 J	1.96 J	0.81	-	0.68 J
Potassium, Total		ug/l	2300	1860	1060	1260 J	892	960	1000	926 J	1070 J	882
Selenium, Total	10	ug/l	-	-	-	-	-	-	-	-	-	-
Sodium, Total	20000	ug/l	14900	12800	10700	9650	9120	12000	12300	14000	14900	14300
Thallium, Total	0.5	ug/l	-	-	-	-	-	-	-	-	-	-
Vanadium, Total		ug/l	-	-	-	-	-	-	-	-	-	-
Zinc, Total	2000	ug/l	4.3 J	-	4.82 J	-	-	-	-	-	2 J	-

Notes:

Samples were collected by CHA Consulting, Inc. September 18, 2024

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

Blue Highlighted and bold parameters exceed TOGS 1.1.1

"-" indicate the parameter was not detected above the laboratory Method Detection Limit.

J - Estimated value between the Method Detection Limit and Reporting Limit

Table 4.
Groundwater Monitoring Results - Detected Compounds only
South Hill Dump
2024
Periodic Review Report

LOCATION			MW-3SR2				
SAMPLING DATE			7/5/2017	10/24/2018	9/23/2020	9/14/2022	9/18/24
	NY-AWQS	Units	Results	Results	Results	Results	Results
Volatile Organics by GC/MS							
Acetone	50	ug/l	-	-	-	-	-
Benzene	1	ug/l	-	-	0.17 J	-	-
cis-1,2-Dichloroethene	5	ug/l	20	24	28	26	-
trans-1,2-Dichloroethene	5	ug/l	-	-	1.4 J	-	-
Trichloroethene	5	ug/l	170	160	14	160	-
Vinyl chloride	2	ug/l	-	-	3	0.79 J	0.21 J
Total Metals							
Aluminum, Total		ug/l	9900	871	174	125	64.4
Antimony, Total	3	ug/l	-	-	-	-	-
Arsenic, Total	25	ug/l	5.8 J	0.62	1.42	-	0.48 J
Barium, Total	1000	ug/l	220	135.8	180.2	129	127.3
Beryllium, Total	3	ug/l	0.0005 J	-	-	-	-
Cadmium, Total	5	ug/l	-	-	-	-	-
Calcium, Total		ug/l	102000	98700	118000	107000	92700
Chromium, Total	50	ug/l	12	1.82	0.61 J	-	0.39 J
Cobalt, Total		ug/l	5.1	0.8	2.64	-	0.17 J
Copper, Total	200	ug/l	9.5 J	1.42	1.33	-	0.68 J
Iron, Total	300	ug/l	13000 J	1650	1310	1340	424
Lead, Total	25	ug/l	7.9 J	0.79 J	0.47 J	-	-
Magnesium, Total	35000	ug/l	21400	18400	18500	19800	18800
Manganese, Total	300	ug/l	350 J	169.2	3035	152	59.85
Mercury, Total	0.7	ug/l	-	-	-	-	-
Nickel, Total	100	ug/l	13	1.79 J	2.67	-	-
Potassium, Total		ug/l	3900	1620	3810	1730 J	1810
Selenium, Total	10	ug/l	-	-	-	-	-
Sodium, Total	20000	ug/l	18200	17600	27800	21900	21600
Thallium, Total	0.5	ug/l	-		-	-	-
Vanadium, Total		ug/l	0.014	1.82 J	-	-	-
Zinc, Total	2000	ug/l	34	4.51 J	31.54	10 J	5.02 J

Notes:

Samples were collected by CHA Consulting, Inc. September 18, 2024

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

Blue Highlighted and bold parameters exceed TOGS 1.1.1

"-" indicate the parameter was not detected above the laboratory Method Detection Limit.

J - Estimated value between the Method Detection Limit and Reporting Limit

Table 5.
PFAS and 1,4-Dioxane Sample Results - Detected Compounds Only
South Hill Dump
2024 Periodic Review Report

LOCATION			MW-1B-20240612		MW-3BR2-20240612		MW-3SR2-20240612		MW-4B-20240612		MW-4S-20240612		CHA-1-20240612	
SAMPLING DATE			6/12/2024		6/12/2024		6/12/2024		6/12/2024		6/12/2024		6/12/2024	
LAB SAMPLE ID			L2433023-01		L2433023-02		L2433023-03		L2433023-04		L2433023-05		L2433023-06	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,4 Dioxane by 8270E-SIM														
1,4-Dioxane	0.35	ug/l	0.144	U	0.068	J	0.0528	J	0.186		0.144	U	0.19	
Perfluorinated Alkyl Acids by EPA 1633														
Perfluorobutanoic Acid (PFBA)		ug/l	0.003	J	0.00768	J	0.00357	J	0.00485	J	0.00242	J	0.00515	J
Perfluoropentanoic Acid (PFPeA)		ug/l	0.00306	U	0.00251	J	0.00167	J	0.00095	J	0.00292	U	0.00103	J
Perfluorobutanesulfonic Acid (PFBS)		ug/l	0.000741	J	0.0032	U	0.00149	U	0.00148	U	0.00146	U	0.00151	U
Perfluorohexanoic Acid (PFHxA)		ug/l	0.00153	U	0.0019	J	0.00157		0.000646	J	0.00146	U	0.000815	J
Perfluoropentanesulfonic Acid (PFPeS)		ug/l	0.00153	U	0.0032	U	0.000357	J	0.00148	U	0.00146	U	0.00151	U
Perfluoroheptanoic Acid (PFHpA)		ug/l	0.00153	U	0.00125	J	0.00112	J	0.000341	J	0.00146	U	0.000332	J
Perfluorohexanesulfonic Acid (PFHxS)		ug/l	0.00153	U	0.0032	U	0.00108	J	0.00148	U	0.00146	U	0.00151	U
Perfluorooctanoic Acid (PFOA)	0.0067	ug/l	0.00084	J	0.00522		0.0071		0.00125	J	0.00146	U	0.00126	J
Perfluorooctanesulfonic Acid (PFOS)	0.0027	ug/l	0.000947	J	0.00286	J	0.00814		0.00148	U	0.00146	U	0.000687	J

Notes:

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

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards & Guidance Values Criteria per Standards &

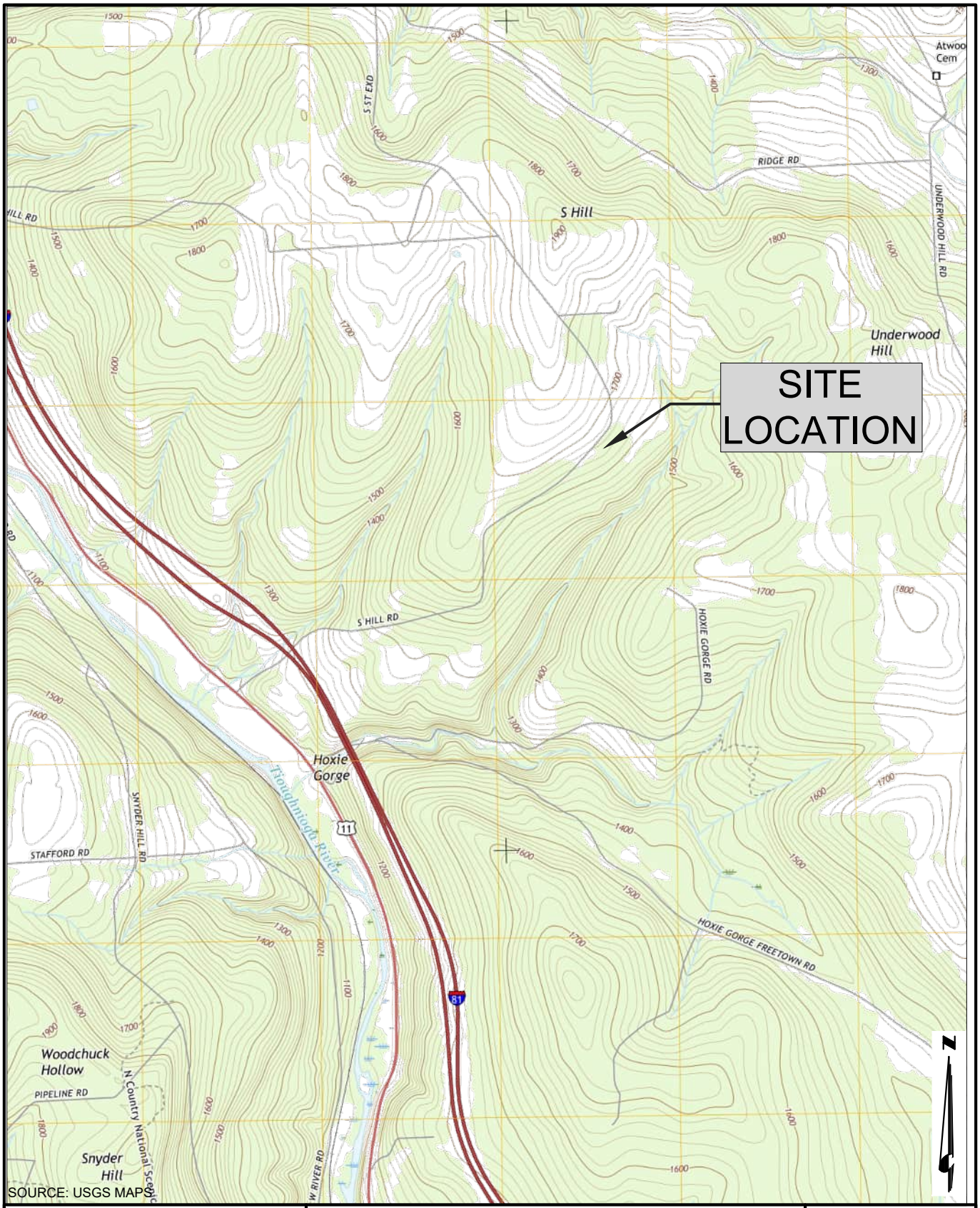
Exceedances of NYAWQS Guidance Values are highlighted in blue.

Samples collected June 12, 2024 and analyzed by Alpha Analytical.

J - Estimated value below the reporting limit but above the method detection limit.

U - Not detected at the reported detection limit for the sample.

FIGURES



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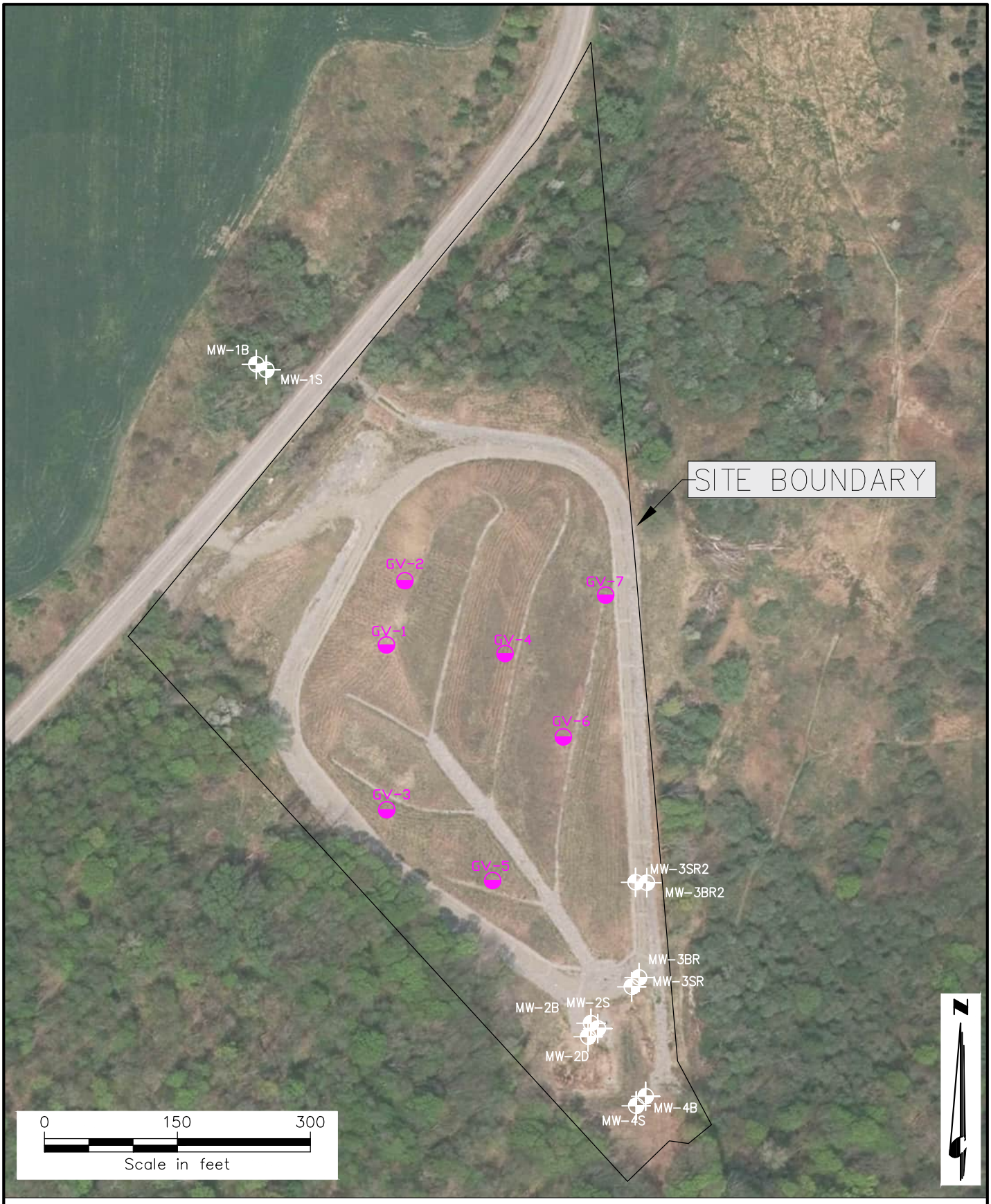
SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
PERIODIC REVIEW REPORT
SITE LOCATION MAP

PROJECT NO. 34236

DATE: 10/2024

FIGURE 1



IMAGERY SOURCE: NYS ORTHOS ONLINE

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

PROJECT NO. 34236

DATE: 10/2024

FIGURE 2

One Park Place, 300 South State Street, Suite 600
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SOUTH HILL DUMP
TOWN OF CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009
GROUNDWATER POTENTIOMETRIC MAP
OVERBURDEN WELLS ONLY

PROJECT NO. 34236

DATE: 10/2024

FIGURE 3

File: V:\PROJECTS\ANY\K4\34236\CADD_ACAD\ENVP\PRR FIGURES_10-2022.DWG Saved: 10/15/2024 9:03:15 AM Plotted: 10/15/2024 9:04:46 AM Current User: Ehmann, Karyn LastSavedBy: 5768

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

GROUNDWATER POTENTIOMETRIC MAP
BEDROCK WELLS ONLY

PROJECT NO. 34236

DATE: 10/2024

FIGURE 4

File: V:\PROJECTS\ANY\K4\34236\CADD_ACAD\ENVP\PRR FIGURES_10-2022.DWG Saved: 10/15/2024 9:05:39 AM Plotted: 10/15/2024 9:06:01 AM Current User: Ehmann, Karyn LastSavedBy: 5768

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: Syracuse, NY
County: Onondaga
Site Acreage: 10.9 acres

Reporting Period: January 1st, 2023 to December 31st, 2024

	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 Gregory Leach, 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.

Gregory Leach Supervisor 11/6/24
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

IC/EC CERTIFICATIONS

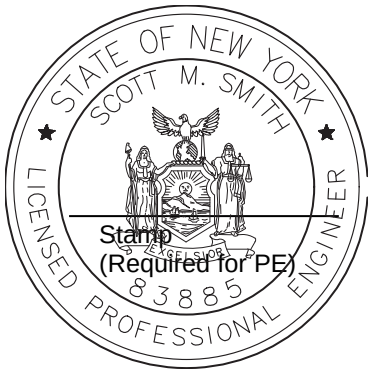
Box 7

Signature

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

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

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



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

Stamp (Required for PE)

12/05/2024
Date

APPENDIX B

Landfill Inspection Forms

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 009	
Page 1 of 3	
Date: 10/16/2023	Time: 12:00

Inspector A.Hodgens	Project No. 34236
	Weather: Rainy
People Accompanying Inspector:	
	Temp.: Hi 58 Low 47

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. 009	
Page 2 of 3	
Date: 10/16/2023	Time: 12:00

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?	☒	☐	☐	The Curb box for MW-1S is cracked.
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. 009	
Page 3 of 3	
Date: 10/16/2023	Time: 12:00

ADDITIONAL NOTES & OBSERVATIONS

MW-1S has a cracked curb box.

Close up of the cracked curb box.

MW-3BR2 covered in leachate seepage.

Vegetation on the landfill is well taken care of.

Signature:

Andrew Hodgson

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 010	
Page 1 of 3	
Date: 6/11/2024	Time: 08:15

Inspector: Karyn Ehmann	Project No. 34236
	Weather: Cool, Misty/Rainy
People Accompanying Inspector: Andrew Hodgens	
	Temp.: Hi 62°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?	☐	☒	☐	Recently mowed by Town of Cortlandville

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 010	
Page 2 of 3	
Date: 6/11/2024	Time: 08:15

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?	☒	☐	☐	MW-3BR2 and MW-3SR2 are experiencing pressure head significant enough to cause upwelling of groundwater above the top of the riser. Groundwater appears rust-colored indicating high iron content. This is consistent with previous inspections, but water level rising in monitoring well riser noted. MW-1S curb box still cracked. Not causing significant issues.
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?	☐	☒	☐	

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 010	
Page 3 of 3	
Date: 06/11/2024	Time: 08:15

SITE ACCESS ROAD INSPECTION

ITEM/CONDITION	YES	NO	NA	COMMENTS
Are site access roads passable?	☒	☐	☐	
Presence of ruts or erosion?	☒	☐	☐	Relatively large ruts from mowing operations noted between the landfill and the stormwater retention basin to the south. See photographs below.
Are site access roads in generally good condition?	☒	☐	☐	

ADDITIONAL NOTES & OBSERVATIONS

Ruts from lawn mowing operations noted between the landfill proper and the stormwater retention area to the south of the landfill.

Close up of the cracked curb box.

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 011	
Page 1 of 3	
Date: 9/18/2024	Time: 09:00

Inspector:	Project No. 34236
Karyn Ehmann	Weather:
People Accompanying Inspector:	
Andrew Hodgens	Temp.: 75 Hi 60 Low

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?	☐	☒	☐	Landfill was mowed between June 2024 and September 2024 inspections.

SOUTH HILL DUMP
SEMI-ANNUAL POST-CLOSURE INSPECTION CHECKLIST

Report No. 011	
Page 2 of 3	
Date: 9/18/2024	Time: 09:00

ITEM/CONDITION	YES	NO	NA	COMMENTS
Evidence of exposed geotextile?	☐	☒	☐	
Presence of woody growth?	☒	☐	☐	One tree in drainage channel, but not on the cap. Tree to be removed.
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?	☒	☐	☐	The Curb box for MW-1S is cracked, but not causing significant heaving of riser/casing. Groundwater near surface of MW-3BR2 and MW-3SR2 is rust colored indicating high iron content.
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. 011	
Page 3 of 3	
Date: 9/18/2024	Time: 09:00

ADDITIONAL NOTES & OBSERVATIONS

Rust coloring similar for MW-3BR2 and MW-3SR2.

Southeastern side of the landfill. Landfill was recently mowed.

Southwestern side of the landfill. Landfill was recently mowed.

Tree growing on the southern portion of the landfill and within a drainage channel.

Location of former tree growing on the southern portion of the landfill and within a drainage channel. Tree was removed in November 2024 by Town of Cortland staff.

Signature:

MW-3BR2 experiencing upwelling of groundwater. High iron content makes it appear like leachate, but no odor.

MW-3SR2 experiencing upwelling of groundwater. High iron content makes it appear like leachate, but no odor.

Overall, vegetation is in good condition and well managed.

Overall, vegetation is in good condition and well managed.

Signature:

APPENDIX C

Laboratory Analytical Report

ANALYTICAL REPORT

Lab Number:	L2453613
Client:	CHA Companies One Park Place 300 South State St., Suite 600 Syracuse, NY 13202
ATTN:	Laura Cassella
Phone:	(315) 471-3920
Project Name:	SOUTH HILL DUMP
Project Number:	034236.000.0002402
Report Date:	10/03/24

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2453613-01	MW-1B-20240918	WATER	CORTLANDVILLE NY	09/18/24 09:25	09/18/24
L2453613-02	MW-2B-20240918	WATER	CORTLANDVILLE NY	09/18/24 10:30	09/18/24
L2453613-03	MW-2D-20240918	WATER	CORTLANDVILLE NY	09/18/24 10:10	09/18/24
L2453613-04	MW-3SR-20240918	WATER	CORTLANDVILLE NY	09/18/24 12:05	09/18/24
L2453613-05	MW-3BR-20240918	WATER	CORTLANDVILLE NY	09/18/24 12:10	09/18/24
L2453613-06	MW-4S-20240918	WATER	CORTLANDVILLE NY	09/18/24 11:20	09/18/24
L2453613-07	MW-4B-20240918	WATER	CORTLANDVILLE NY	09/18/24 11:00	09/18/24
L2453613-08	MW-3SR2-20240918	WATER	CORTLANDVILLE NY	09/18/24 13:20	09/18/24
L2453613-09	MW-3BR2-20240918	WATER	CORTLANDVILLE NY	09/18/24 13:10	09/18/24
L2453613-10	SW-001-20240918	WATER	CORTLANDVILLE NY	09/18/24 12:30	09/18/24
L2453613-11	CHA-001-20240918	WATER	CORTLANDVILLE NY	09/18/24 12:00	09/18/24
L2453613-12	TRIP BLANK-20240918	WATER	CORTLANDVILLE NY	09/18/24 00:00	09/18/24
L2453613-13	SED-001-20240918	SOIL	CORTLANDVILLE NY	09/18/24 12:35	09/18/24

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2453613
Project Number:	034236.000.0002402	**Report Date:**	10/03/24

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 and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet 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:**	L2453613
Project Number:	034236.000.0002402	**Report Date:**	10/03/24

Case Narrative (continued)

Report Submission

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

Total Metals

L2453613-13: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1976762-4 MSD recovery, performed on L2453613-02, is outside the acceptance criteria for calcium (64%). A post digestion spike was performed and was within acceptance criteria.

The WG1976762-3/-4 MS/MSD recoveries for iron (0%/0%), performed on L2453613-02, 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: Kelly Stenstrom

Title: Technical Director/Representative Date: 10/03/24

ORGANICS

VOLATILES

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-01
Client ID: MW-1B-20240918
Sample Location: CORTLANDVILLE NY

Date Collected: 09/18/24 09:25
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 13:34
Analyst: LAC

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-01
Client ID: MW-1B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 09:25
Date Received: 09/18/24
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	0.17	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	116		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	106		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-02
Client ID: MW-2B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 10:30
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 13:57
Analyst: LAC

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-02
Client ID: MW-2B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 10:30
Date Received: 09/18/24
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	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	108		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-03
Client ID: MW-2D-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 10:10
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 14:19
Analyst: LAC

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-03
Client ID: MW-2D-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 10:10
Date Received: 09/18/24
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	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	107		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-04
Client ID: MW-3SR-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:05
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 14:41
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	1.4		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-04
Client ID: MW-3SR-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:05
Date Received: 09/18/24
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	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	107		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-05
Client ID: MW-3BR-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:10
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 15:04
Analyst: LAC

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-05
Client ID: MW-3BR-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:10
Date Received: 09/18/24
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	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	110		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-06
Client ID: MW-4S-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 11:20
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 15:26
Analyst: LAC

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-06
Client ID: MW-4S-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 11:20
Date Received: 09/18/24
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	0.17	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	109		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-07
Client ID: MW-4B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 11:00
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 21:16
Analyst: MJV

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	3.9		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-07
Client ID: MW-4B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 11:00
Date Received: 09/18/24
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	0.17	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	1.5	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	105		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-08
Client ID: MW-3SR2-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 13:20
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/24/24 16:11
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	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	170		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-08
Client ID: MW-3SR2-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 13:20
Date Received: 09/18/24
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	0.17	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	19		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	111		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-09
Client ID: MW-3BR2-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 13:10
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/25/24 10:32
Analyst: PID

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	0.58	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	1.6		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-09
Client ID: MW-3BR2-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 13:10
Date Received: 09/18/24
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	0.17	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	5.1		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	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	103		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-10
Client ID: SW-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:30
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/25/24 10:57
Analyst: PID

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-10
Client ID: SW-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:30
Date Received: 09/18/24
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	0.17	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	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-11
Client ID: CHA-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:00
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/25/24 11:23
Analyst: PID

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	4.1		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-11
Client ID: CHA-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:00
Date Received: 09/18/24
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	0.17	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	1.6	J	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	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	106		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-12
Client ID: TRIP BLANK-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 00:00
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 09/25/24 11:48
Analyst: PID

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

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-12
Client ID: TRIP BLANK-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 00:00
Date Received: 09/18/24
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	0.17	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	4.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	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	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-13
Client ID: SED-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:35
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 09/28/24 14:17
Analyst: AJK
Percent Solids: 22%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	24	11.	1
1,1-Dichloroethane	ND		ug/kg	4.9	0.71	1
Chloroform	ND		ug/kg	7.3	0.68	1
Carbon tetrachloride	ND		ug/kg	4.9	1.1	1
1,2-Dichloropropane	ND		ug/kg	4.9	0.61	1
Dibromochloromethane	ND		ug/kg	4.9	0.68	1
1,1,2-Trichloroethane	ND		ug/kg	4.9	1.3	1
Tetrachloroethene	ND		ug/kg	2.4	0.96	1
Chlorobenzene	ND		ug/kg	2.4	0.62	1
Trichlorofluoromethane	ND		ug/kg	19	3.4	1
1,2-Dichloroethane	ND		ug/kg	4.9	1.2	1
1,1,1-Trichloroethane	ND		ug/kg	2.4	0.81	1
Bromodichloromethane	ND		ug/kg	2.4	0.53	1
trans-1,3-Dichloropropene	ND		ug/kg	4.9	1.3	1
cis-1,3-Dichloropropene	ND		ug/kg	2.4	0.77	1
Bromoform	ND		ug/kg	19	1.2	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.4	0.81	1
Benzene	ND		ug/kg	2.4	0.81	1
Toluene	ND		ug/kg	4.9	2.6	1
Ethylbenzene	ND		ug/kg	4.9	0.69	1
Chloromethane	ND		ug/kg	19	4.5	1
Bromomethane	ND		ug/kg	9.7	2.8	1
Vinyl chloride	ND		ug/kg	4.9	1.6	1
Chloroethane	ND		ug/kg	9.7	2.2	1
1,1-Dichloroethene	ND		ug/kg	4.9	1.2	1
trans-1,2-Dichloroethene	ND		ug/kg	7.3	0.67	1
Trichloroethene	4.4		ug/kg	2.4	0.67	1
1,2-Dichlorobenzene	ND		ug/kg	9.7	0.70	1

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-13
Client ID: SED-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:35
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	9.7	0.72	1
1,4-Dichlorobenzene	ND		ug/kg	9.7	0.83	1
Methyl tert butyl ether	ND		ug/kg	9.7	0.98	1
p/m-Xylene	ND		ug/kg	9.7	2.7	1
o-Xylene	ND		ug/kg	4.9	1.4	1
cis-1,2-Dichloroethene	0.88	J	ug/kg	4.9	0.85	1
Styrene	ND		ug/kg	4.9	0.96	1
Dichlorodifluoromethane	ND		ug/kg	49	4.4	1
Acetone	ND		ug/kg	49	23.	1
Carbon disulfide	ND		ug/kg	49	22.	1
2-Butanone	ND		ug/kg	49	11.	1
4-Methyl-2-pentanone	ND		ug/kg	49	6.2	1
2-Hexanone	ND		ug/kg	49	5.8	1
Bromochloromethane	ND		ug/kg	9.7	1.0	1
1,2-Dibromoethane	ND		ug/kg	4.9	1.4	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	4.9	1
Isopropylbenzene	ND		ug/kg	4.9	0.53	1
1,2,3-Trichlorobenzene	ND		ug/kg	9.7	1.6	1
1,2,4-Trichlorobenzene	ND		ug/kg	9.7	1.3	1
Methyl Acetate	ND		ug/kg	19	4.6	1
Cyclohexane	ND		ug/kg	49	2.6	1
1,4-Dioxane	ND		ug/kg	390	170	1
Freon-113	ND		ug/kg	19	3.4	1
Methyl cyclohexane	ND		ug/kg	19	2.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/24/24 08:20
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,08 Batch: WG1975613-5					
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:** L2453613

Project Number: 034236.000.0002402 **Report Date:** 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/24/24 08:20
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,08 Batch: WG1975613-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.17
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: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/24/24 08:20
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,08 Batch: WG1975613-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	98		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/24/24 20:52
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1976114-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/24/24 20:52
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1976114-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.17
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: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/24/24 20:52
Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1976114-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: SOUTH HILL DUMP **Lab Number:** L2453613

Project Number: 034236.000.0002402 **Report Date:** 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/25/24 09:32
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09-12 Batch: WG1976196-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/25/24 09:32
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09-12 Batch: WG1976196-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.17
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: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/25/24 09:32
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09-12 Batch: WG1976196-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	103		70-130

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/24 11:46
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 13 Batch: WG1977841-5					
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	0.58	J	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
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/24 11:46
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 13 Batch: WG1977841-5					
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: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 09/28/24 11:46
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 13 Batch: WG1977841-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1975613-3 WG1975613-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		100		63-132	10		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	94		96		63-130	2		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	110		100		75-130	10		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	110		100		70-130	10		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	84		90		54-136	7		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		100		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	110		110		64-130	0		20
Bromomethane	76		75		39-139	1		20
Vinyl chloride	120		120		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1975613-3 WG1975613-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	99		100		70-130	1		20
1,3-Dichlorobenzene	100		110		70-130	10		20
1,4-Dichlorobenzene	100		110		70-130	10		20
Methyl tert butyl ether	98		99		63-130	1		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	130		130		36-147	0		20
Acetone	100		100		58-148	0		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	110		110		63-138	0		20
4-Methyl-2-pentanone	94		99		59-130	5		20
2-Hexanone	93		98		57-130	5		20
Bromochloromethane	95		93		70-130	2		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	86		95		41-144	10		20
Isopropylbenzene	110		120		70-130	9		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1975613-3 WG1975613-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	100		100		70-130	0		20
Cyclohexane	**170**	Q	**160**	Q	70-130	6		20
1,4-Dioxane	76		80		56-162	5		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	**170**	Q	**160**	Q	70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		102		70-130
Toluene-d8	103		105		70-130
4-Bromofluorobenzene	106		108		70-130
Dibromofluoromethane	96		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1976114-3 WG1976114-4								
Methylene chloride	93		91		70-130	2		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	95		96		70-130	1		20
Carbon tetrachloride	97		95		63-132	2		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	90		94		63-130	4		20
1,1,2-Trichloroethane	98		100		70-130	2		20
Tetrachloroethene	92		93		70-130	1		20
Chlorobenzene	98		99		75-130	1		20
Trichlorofluoromethane	110		97		62-150	13		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	95		94		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	88		97		70-130	10		20
cis-1,3-Dichloropropene	88		92		70-130	4		20
Bromoform	79		86		54-136	8		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	99		99		70-130	0		20
Toluene	97		99		70-130	2		20
Ethylbenzene	97		97		70-130	0		20
Chloromethane	100		95		64-130	5		20
Bromomethane	62		77		39-139	**22**	Q	20
Vinyl chloride	120		110		55-140	9		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1976114-3 WG1976114-4								
Chloroethane	**140**	Q	**150**	Q	55-138	7		20
1,1-Dichloroethene	95		93		61-145	2		20
trans-1,2-Dichloroethene	92		92		70-130	0		20
Trichloroethene	94		91		70-130	3		20
1,2-Dichlorobenzene	92		97		70-130	5		20
1,3-Dichlorobenzene	97		99		70-130	2		20
1,4-Dichlorobenzene	99		100		70-130	1		20
Methyl tert butyl ether	84		89		63-130	6		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	86		90		70-130	5		20
Styrene	95		100		70-130	5		20
Dichlorodifluoromethane	120		110		36-147	9		20
Acetone	79		86		58-148	8		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	96		110		63-138	14		20
4-Methyl-2-pentanone	85		96		59-130	12		20
2-Hexanone	73		94		57-130	**25**	Q	20
Bromochloromethane	92		95		70-130	3		20
1,2-Dibromoethane	88		99		70-130	12		20
1,2-Dibromo-3-chloropropane	68		84		41-144	**21**	Q	20
Isopropylbenzene	98		94		70-130	4		20
1,2,3-Trichlorobenzene	72		84		70-130	15		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1976114-3 WG1976114-4								
1,2,4-Trichlorobenzene	79		86		70-130	8		20
Methyl Acetate	86		100		70-130	15		20
Cyclohexane	110		95		70-130	15		20
1,4-Dioxane	**52**	Q	60		56-162	14		20
Freon-113	100		94		70-130	6		20
Methyl cyclohexane	97		83		70-130	16		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117		117		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	97		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-12 Batch: WG1976196-3 WG1976196-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	97		94		70-130	3		20
Carbon tetrachloride	100		95		63-132	5		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	97		96		63-130	1		20
1,1,2-Trichloroethane	100		99		70-130	1		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	99		97		75-130	2		20
Trichlorofluoromethane	92		87		62-150	6		20
1,2-Dichloroethane	97		94		70-130	3		20
1,1,1-Trichloroethane	99		96		67-130	3		20
Bromodichloromethane	96		94		67-130	2		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		98		70-130	2		20
Bromoform	95		93		54-136	2		20
1,1,2,2-Tetrachloroethane	100		99		67-130	1		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		99		70-130	1		20
Chloromethane	87		84		64-130	4		20
Bromomethane	74		72		39-139	3		20
Vinyl chloride	100		97		55-140	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-12 Batch: WG1976196-3 WG1976196-4								
Chloroethane	70		66		55-138	6		20
1,1-Dichloroethene	97		91		61-145	6		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	96		92		70-130	4		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	96		98		70-130	2		20
Methyl tert butyl ether	110		100		63-130	10		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	98		93		36-147	5		20
Acetone	85		80		58-148	6		20
Carbon disulfide	97		91		51-130	6		20
2-Butanone	92		86		63-138	7		20
4-Methyl-2-pentanone	100		96		59-130	4		20
2-Hexanone	97		89		57-130	9		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	97		92		41-144	5		20
Isopropylbenzene	110		110		70-130	0		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: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-12 Batch: WG1976196-3 WG1976196-4								
1,2,4-Trichlorobenzene	99		98		70-130	1		20
Methyl Acetate	100		91		70-130	9		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	120		110		56-162	9		20
Freon-113	95		90		70-130	5		20
Methyl cyclohexane	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	110		110		70-130
Dibromofluoromethane	99		97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 13 Batch: WG1977841-3 WG1977841-4								
Methylene chloride	87		80		70-130	8		30
1,1-Dichloroethane	100		89		70-130	12		30
Chloroform	93		85		70-130	9		30
Carbon tetrachloride	93		80		70-130	15		30
1,2-Dichloropropane	94		87		70-130	8		30
Dibromochloromethane	86		82		70-130	5		30
1,1,2-Trichloroethane	91		84		70-130	8		30
Tetrachloroethene	111		96		70-130	14		30
Chlorobenzene	100		91		70-130	9		30
Trichlorofluoromethane	95		75		70-139	24		30
1,2-Dichloroethane	94		88		70-130	7		30
1,1,1-Trichloroethane	99		86		70-130	14		30
Bromodichloromethane	86		81		70-130	6		30
trans-1,3-Dichloropropene	101		95		70-130	6		30
cis-1,3-Dichloropropene	96		89		70-130	8		30
Bromoform	81		76		70-130	6		30
1,1,2,2-Tetrachloroethane	93		86		70-130	8		30
Benzene	95		84		70-130	12		30
Toluene	101		90		70-130	12		30
Ethylbenzene	104		93		70-130	11		30
Chloromethane	83		69		52-130	18		30
Bromomethane	114		102		57-147	11		30
Vinyl chloride	93		75		67-130	21		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 13 Batch: WG1977841-3 WG1977841-4								
Chloroethane	106		91		50-151	15		30
1,1-Dichloroethene	98		80		65-135	20		30
trans-1,2-Dichloroethene	99		85		70-130	15		30
Trichloroethene	96		83		70-130	15		30
1,2-Dichlorobenzene	100		92		70-130	8		30
1,3-Dichlorobenzene	107		98		70-130	9		30
1,4-Dichlorobenzene	104		96		70-130	8		30
Methyl tert butyl ether	84		76		66-130	10		30
p/m-Xylene	107		96		70-130	11		30
o-Xylene	102		93		70-130	9		30
cis-1,2-Dichloroethene	92		82		70-130	11		30
Styrene	101		94		70-130	7		30
Dichlorodifluoromethane	55		44		30-146	22		30
Acetone	75		59		54-140	24		30
Carbon disulfide	90		74		59-130	20		30
2-Butanone	83		74		70-130	11		30
4-Methyl-2-pentanone	93		84		70-130	10		30
2-Hexanone	89		84		70-130	6		30
Bromochloromethane	90		84		70-130	7		30
1,2-Dibromoethane	93		88		70-130	6		30
1,2-Dibromo-3-chloropropane	80		73		68-130	9		30
Isopropylbenzene	106		94		70-130	12		30
1,2,3-Trichlorobenzene	98		83		70-130	17		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 13 Batch: WG1977841-3 WG1977841-4								
1,2,4-Trichlorobenzene	112		99		70-130	12		30
Methyl Acetate	83		76		51-146	9		30
Cyclohexane	99		83		59-142	18		30
1,4-Dioxane	92		89		65-136	3		30
Freon-113	94		78		50-139	19		30
Methyl cyclohexane	89		74		70-130	18		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		100		70-130
Toluene-d8	106		105		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	95		96		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

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): 01-06,08 QC Batch ID: WG1975613-6 WG1975613-7 QC Sample: L2453613-02 Client ID: MW-2B-20240918												
Methylene chloride	ND	10	11	110		11	110		70-130	0		20
1,1-Dichloroethane	ND	10	13	130		13	130		70-130	0		20
Chloroform	ND	10	12	120		12	120		70-130	0		20
Carbon tetrachloride	ND	10	12	120		11	110		63-132	9		20
1,2-Dichloropropane	ND	10	12	120		12	120		70-130	0		20
Dibromochloromethane	ND	10	9.7	97		9.4	94		63-130	3		20
1,1,2-Trichloroethane	ND	10	12	120		11	110		70-130	9		20
Tetrachloroethene	ND	10	11	110		10	100		70-130	10		20
Chlorobenzene	ND	10	11	110		10	100		75-130	10		20
Trichlorofluoromethane	ND	10	13	130		13	130		62-150	0		20
1,2-Dichloroethane	ND	10	12	120		12	120		70-130	0		20
1,1,1-Trichloroethane	ND	10	12	120		12	120		67-130	0		20
Bromodichloromethane	ND	10	11	110		11	110		67-130	0		20
trans-1,3-Dichloropropene	ND	10	10	100		9.9	99		70-130	1		20
cis-1,3-Dichloropropene	ND	10	8.7	87		8.9	89		70-130	2		20
Bromoform	ND	10	8.6	86		8.2	82		54-136	5		20
1,1,2,2-Tetrachloroethane	ND	10	12	120		11	110		67-130	9		20
Benzene	ND	10	11	110		11	110		70-130	0		20
Toluene	ND	10	11	110		11	110		70-130	0		20
Ethylbenzene	ND	10	12	120		11	110		70-130	9		20
Chloromethane	ND	10	13	130		14	**140**	Q	64-130	7		20
Bromomethane	ND	10	8.9	89		9.6	96		39-139	8		20
Vinyl chloride	ND	10	14	140		14	140		55-140	0		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

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): 01-06,08 QC Batch ID: WG1975613-6 WG1975613-7 QC Sample: L2453613-02 Client ID: MW-2B-20240918												
Chloroethane	ND	10	14	**140**	Q	13	130		55-138	7		20
1,1-Dichloroethene	ND	10	12	120		12	120		61-145	0		20
trans-1,2-Dichloroethene	ND	10	11	110		11	110		70-130	0		20
Trichloroethene	ND	10	11	110		11	110		70-130	0		20
1,2-Dichlorobenzene	ND	10	10	100		9.6	96		70-130	4		20
1,3-Dichlorobenzene	ND	10	10	100		9.8	98		70-130	2		20
1,4-Dichlorobenzene	ND	10	10	100		9.7	97		70-130	3		20
Methyl tert butyl ether	ND	10	9.4	94		9.6	96		63-130	2		20
p/m-Xylene	ND	20	22	110		21	105		70-130	5		20
o-Xylene	ND	20	21	105		20	100		70-130	5		20
cis-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Styrene	ND	20	21	105		20	100		70-130	5		20
Dichlorodifluoromethane	ND	10	14	140		14	140		36-147	0		20
Acetone	ND	10	12	120		13	130		58-148	8		20
Carbon disulfide	ND	10	13	130		12	120		51-130	8		20
2-Butanone	ND	10	13	130		12	120		63-138	8		20
4-Methyl-2-pentanone	ND	10	10	100		9.9	99		59-130	1		20
2-Hexanone	ND	10	9.4	94		9.4	94		57-130	0		20
Bromochloromethane	ND	10	9.7	97		9.8	98		70-130	1		20
1,2-Dibromoethane	ND	10	10	100		10	100		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	9.0	90		8.5	85		41-144	6		20
Isopropylbenzene	ND	10	11	110		11	110		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	9.2	92		9.0	90		70-130	2		20

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

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): 01-06,08 QC Batch ID: WG1975613-6 WG1975613-7 QC Sample: L2453613-02 Client ID: MW-2B-20240918												
1,2,4-Trichlorobenzene	ND	10	9.1	91		8.9	89		70-130	2		20
Methyl Acetate	ND	10	11	110		11	110		70-130	0		20
Cyclohexane	ND	10	18	**180**	Q	18	**180**	Q	70-130	0		20
1,4-Dioxane	ND	500	420	84		420	84		56-162	0		20
Freon-113	ND	10	13	130		13	130		70-130	0		20
Methyl cyclohexane	ND	10	16	**160**	Q	16	**160**	Q	70-130	0		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		111		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	104		102		70-130
Toluene-d8	103		103		70-130

PCBS

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-10
Client ID: SW-001-20240918
Sample Location: CORTLANDVILLE NY

Date Collected: 09/18/24 12:30
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 09/26/24 10:55
Analyst: MHG

Extraction Method: EPA 3510C
Extraction Date: 09/25/24 16:49
Cleanup Method: EPA 3665A
Cleanup Date: 09/25/24
Cleanup Method: EPA 3660B
Cleanup Date: 09/26/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	ND		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	ND		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	73		30-150	B

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-13
Client ID: SED-001-20240918
Sample Location: CORTLANDVILLE NY

Date Collected: 09/18/24 12:35
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/28/24 11:39
Analyst: EMR
Percent Solids: 22%

Extraction Method: EPA 3546
Extraction Date: 09/27/24 14:53
Cleanup Method: EPA 3665A
Cleanup Date: 09/28/24
Cleanup Method: EPA 3660B
Cleanup Date: 09/28/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	217	19.3	1	A
Aroclor 1221	ND		ug/kg	217	21.8	1	A
Aroclor 1232	ND		ug/kg	217	46.0	1	A
Aroclor 1242	ND		ug/kg	217	29.3	1	A
Aroclor 1248	ND		ug/kg	217	32.6	1	A
Aroclor 1254	ND		ug/kg	217	23.8	1	A
Aroclor 1260	ND		ug/kg	217	40.1	1	A
Aroclor 1262	ND		ug/kg	217	27.6	1	A
Aroclor 1268	ND		ug/kg	217	22.5	1	A
PCBs, Total	ND		ug/kg	217	19.3	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/25/24 21:40
Analyst: MHG

Extraction Method: EPA 3510C
Extraction Date: 09/25/24 00:08
Cleanup Method: EPA 3665A
Cleanup Date: 09/25/24
Cleanup Method: EPA 3660B
Cleanup Date: 09/25/24

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 10 Batch: WG1975830-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/28/24 11:09
Analyst: EMR

Extraction Method: EPA 3546
Extraction Date: 09/27/24 14:53
Cleanup Method: EPA 3665A
Cleanup Date: 09/28/24
Cleanup Method: EPA 3660B
Cleanup Date: 09/28/24

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 13 Batch: WG1977310-1						
Aroclor 1016	ND		ug/kg	48.3	4.28	A
Aroclor 1221	ND		ug/kg	48.3	4.84	A
Aroclor 1232	ND		ug/kg	48.3	10.2	A
Aroclor 1242	ND		ug/kg	48.3	6.50	A
Aroclor 1248	ND		ug/kg	48.3	7.24	A
Aroclor 1254	ND		ug/kg	48.3	5.28	A
Aroclor 1260	ND		ug/kg	48.3	8.92	A
Aroclor 1262	ND		ug/kg	48.3	6.13	A
Aroclor 1268	ND		ug/kg	48.3	5.00	A
PCBs, Total	ND		ug/kg	48.3	4.28	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	76		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

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: WG1975830-2 WG1975830-3									
Aroclor 1016	78		83		40-140	6		50	A
Aroclor 1260	81		90		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		87		30-150	A
Decachlorobiphenyl	81		91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		75		30-150	B
Decachlorobiphenyl	78		90		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 13 Batch: WG1977310-2 WG1977310-3									
Aroclor 1016	85		89		40-140	5		50	A
Aroclor 1260	93		98		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		69		30-150	A
Decachlorobiphenyl	74		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		67		30-150	B
Decachlorobiphenyl	71		75		30-150	B

METALS

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-01
Client ID: MW-1B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 09:25
Date Received: 09/18/24
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	0.132		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00028	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Barium, Total	0.02481		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Calcium, Total	25.5		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00036	J	mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Copper, Total	0.00045	J	mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Iron, Total	0.193		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Magnesium, Total	6.61		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Manganese, Total	0.03633		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 11:58	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00060	J	mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Potassium, Total	0.757		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Sodium, Total	6.81		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB
Zinc, Total	0.00358	J	mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:00	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-02
Client ID: MW-2B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 10:30
Date Received: 09/18/24
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	0.00502	J	mg/l	0.0100	0.00327	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Antimony, Total	0.00099	J	mg/l	0.00400	0.00042	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00018	J	mg/l	0.00050	0.00016	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Barium, Total	0.1517		mg/l	0.00050	0.00017	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Calcium, Total	35.8		mg/l	0.100	0.0394	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00039	J	mg/l	0.00100	0.00017	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Copper, Total	0.00062	J	mg/l	0.00100	0.00038	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Iron, Total	6.72		mg/l	0.0500	0.0191	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Magnesium, Total	8.51		mg/l	0.0700	0.0242	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Manganese, Total	0.1917		mg/l	0.00100	0.00044	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 11:48	EPA 7470A	1,7470A	JWN
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Potassium, Total	0.964		mg/l	0.100	0.0309	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Sodium, Total	5.92		mg/l	0.300	0.0293	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/26/24 14:08	10/02/24 20:24	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-03
Client ID: MW-2D-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 10:10
Date Received: 09/18/24
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	0.0191		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00175		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Barium, Total	0.03490		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Cadmium, Total	0.00010	J	mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Calcium, Total	55.7		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00049	J	mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00047	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Copper, Total	0.00103		mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Iron, Total	0.891		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Magnesium, Total	15.5		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Manganese, Total	0.5700		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:16	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00075	J	mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Potassium, Total	0.936		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Sodium, Total	4.07		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB
Zinc, Total	0.01607		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:18	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-04
Client ID: MW-3SR-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:05
Date Received: 09/18/24
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	0.229		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00051		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Barium, Total	0.1153		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Calcium, Total	80.5		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00085	J	mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00023	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Copper, Total	0.00061	J	mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Iron, Total	0.460		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Magnesium, Total	19.9		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Manganese, Total	0.05152		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:19	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00061	J	mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Potassium, Total	1.74		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Sodium, Total	6.60		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:22	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-05
Client ID: MW-3BR-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:10
Date Received: 09/18/24
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	0.00508	J	mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00053		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Barium, Total	0.02306		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Calcium, Total	3.49		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00030	J	mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00018	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Copper, Total	0.00044	J	mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Iron, Total	11.7		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Magnesium, Total	0.890		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Manganese, Total	0.2042		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:22	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00110	J	mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Potassium, Total	0.892		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Sodium, Total	9.12		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:27	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-06
Client ID: MW-4S-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 11:20
Date Received: 09/18/24
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	8.03		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00185		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Barium, Total	0.1408		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Beryllium, Total	0.00033	J	mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Cadmium, Total	0.00010	J	mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Calcium, Total	109.		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Chromium, Total	0.01795		mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00642		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Copper, Total	0.01317		mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Iron, Total	14.8		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Lead, Total	0.01364		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Magnesium, Total	22.2		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Manganese, Total	0.3114		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:26	EPA 7470A	1,7470A	JWN
Nickel, Total	0.01400		mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Potassium, Total	1.90		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Selenium, Total	0.00197	J	mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Sodium, Total	3.14		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Vanadium, Total	0.01218		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB
Zinc, Total	0.04497		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:31	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-07
Client ID: MW-4B-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 11:00
Date Received: 09/18/24
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	0.0924		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00057		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Barium, Total	0.1489		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Calcium, Total	65.0		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00504		mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00067		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Copper, Total	0.00886		mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Iron, Total	19.4		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Magnesium, Total	15.5		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Manganese, Total	0.09259		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:29	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00509		mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Potassium, Total	0.630		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Sodium, Total	5.52		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:36	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-08
Client ID: MW-3SR2-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 13:20
Date Received: 09/18/24
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	0.0644		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00048	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Barium, Total	0.1273		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Calcium, Total	92.7		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00039	J	mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00017	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Copper, Total	0.00068	J	mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Iron, Total	0.424		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Magnesium, Total	18.8		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Manganese, Total	0.05985		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Mercury, Total	0.00010	J	mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:32	EPA 7470A	1,7470A	JWN
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Potassium, Total	1.81		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Sodium, Total	21.6		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB
Zinc, Total	0.00502	J	mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:40	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-09
Client ID: MW-3BR2-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 13:10
Date Received: 09/18/24
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	0.00806	J	mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00021	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Barium, Total	0.03962		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Calcium, Total	21.0		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00022	J	mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Copper, Total	0.00075	J	mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Iron, Total	8.11		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Magnesium, Total	16.1		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Manganese, Total	0.1310		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Mercury, Total	0.00011	J	mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:36	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00068	J	mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Potassium, Total	0.882		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Sodium, Total	14.3		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:45	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-10
Client ID: SW-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:30
Date Received: 09/18/24
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	0.430		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00118		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Barium, Total	0.06956		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Calcium, Total	78.1		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00119		mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00101		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Copper, Total	0.00151		mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Iron, Total	0.852		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Lead, Total	0.00090	J	mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Magnesium, Total	11.7		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Manganese, Total	1.751		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Mercury, Total	0.00014	J	mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:39	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00208		mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Potassium, Total	3.45		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Sodium, Total	30.8		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB
Zinc, Total	0.00547	J	mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:49	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-11
Client ID: CHA-001-20240918
Sample Location: CORTLANDVILLE NY
Sample Depth:
Matrix: Water

Date Collected: 09/18/24 12:00
Date Received: 09/18/24
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	0.0846		mg/l	0.0100	0.00327	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00049	J	mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 22:50	EPA 3005A	1,6020B	NTB
Barium, Total	0.1480		mg/l	0.00050	0.00017	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Calcium, Total	65.3		mg/l	0.100	0.0394	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Chromium, Total	0.00515		mg/l	0.00100	0.00017	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Cobalt, Total	0.00065		mg/l	0.00050	0.00016	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Copper, Total	0.00864		mg/l	0.00100	0.00038	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Iron, Total	18.2		mg/l	0.0500	0.0191	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Magnesium, Total	15.1		mg/l	0.0700	0.0242	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Manganese, Total	0.09242		mg/l	0.00100	0.00044	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Mercury, Total	0.00016	J	mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 12:42	EPA 7470A	1,7470A	JWN
Nickel, Total	0.00542		mg/l	0.00200	0.00055	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Potassium, Total	0.602		mg/l	0.100	0.0309	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Sodium, Total	5.28		mg/l	0.300	0.0293	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/24/24 14:02	10/02/24 19:54	EPA 3005A	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-13
Client ID: SED-001-20240918
Sample Location: CORTLANDVILLE NY
Date Collected: 09/18/24 12:35
Date Received: 09/18/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 22%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14300		mg/kg	169	45.6	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Antimony, Total	ND		mg/kg	84.6	6.42	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Arsenic, Total	13.6	J	mg/kg	16.9	3.52	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Barium, Total	1510		mg/kg	16.9	2.94	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Beryllium, Total	0.732	J	mg/kg	8.46	0.558	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	16.9	1.66	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Calcium, Total	17000		mg/kg	169	59.2	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Chromium, Total	26.1		mg/kg	16.9	1.62	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Cobalt, Total	40.1		mg/kg	33.8	2.81	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Copper, Total	23.7		mg/kg	16.9	4.36	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Iron, Total	29900		mg/kg	84.6	15.3	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Lead, Total	18.5	J	mg/kg	84.6	4.53	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Magnesium, Total	6340		mg/kg	169	26.0	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Manganese, Total	78600		mg/kg	67.6	10.8	40	09/24/24 12:08	09/26/24 23:11	EPA 3050B	1,6010D	DMC
Mercury, Total	ND		mg/kg	0.316	0.206	1	09/24/24 15:53	09/26/24 00:21	EPA 7471B	1,7471B	MJR
Nickel, Total	55.3		mg/kg	42.3	4.09	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Potassium, Total	1290	J	mg/kg	4230	244.	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Selenium, Total	ND		mg/kg	33.8	4.36	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	8.46	4.78	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Sodium, Total	315	J	mg/kg	3380	53.3	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Thallium, Total	ND		mg/kg	33.8	5.33	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Vanadium, Total	49.2		mg/kg	16.9	3.43	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC
Zinc, Total	104		mg/kg	84.6	4.95	10	09/24/24 12:08	09/26/24 22:51	EPA 3050B	1,6010D	DMC

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

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): 13 Batch: WG1975357-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Antimony, Total	ND		mg/kg	2.00	0.152	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Barium, Total	ND		mg/kg	0.400	0.070	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Calcium, Total	ND		mg/kg	4.00	1.40	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Copper, Total	ND		mg/kg	0.400	0.103	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Iron, Total	0.865	J	mg/kg	2.00	0.361	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Lead, Total	ND		mg/kg	2.00	0.107	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Manganese, Total	ND		mg/kg	0.400	0.064	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Nickel, Total	ND		mg/kg	1.00	0.097	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Potassium, Total	ND		mg/kg	100	5.76	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Silver, Total	ND		mg/kg	0.200	0.113	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Sodium, Total	ND		mg/kg	80.0	1.26	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Thallium, Total	ND		mg/kg	0.800	0.126	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC
Zinc, Total	ND		mg/kg	2.00	0.117	1	09/24/24 12:08	09/25/24 15:38	1,6010D	DMC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 13 Batch: WG1975359-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	09/24/24 15:53	09/25/24 13:03	1,7471B	JWN

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01,03-11 Batch: WG1975627-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Barium, Total	ND		mg/l	0.00050	0.00017	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Calcium, Total	ND		mg/l	0.100	0.0394	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Chromium, Total	ND		mg/l	0.00100	0.00017	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Copper, Total	ND		mg/l	0.00100	0.00038	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Iron, Total	ND		mg/l	0.0500	0.0191	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Manganese, Total	ND		mg/l	0.00100	0.00044	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Potassium, Total	ND		mg/l	0.100	0.0309	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Sodium, Total	ND		mg/l	0.100	0.0293	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/24/24 14:02	09/26/24 12:41	1,6020B	NTB

Prep Information

Digestion Method: EPA 3005A

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

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): 01-11 Batch: WG1975633-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	09/24/24 14:44	09/26/24 11:42	1,7470A	JWN

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): 02 Batch: WG1976762-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Antimony, Total	ND		mg/l	0.00400	0.00042	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Arsenic, Total	0.00016	J	mg/l	0.00050	0.00016	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Barium, Total	ND		mg/l	0.00050	0.00017	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Calcium, Total	ND		mg/l	0.100	0.0394	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Chromium, Total	ND		mg/l	0.00100	0.00017	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Copper, Total	ND		mg/l	0.00100	0.00038	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Iron, Total	ND		mg/l	0.0500	0.0191	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	0.00034	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Manganese, Total	ND		mg/l	0.00100	0.00044	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Nickel, Total	ND		mg/l	0.00200	0.00055	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Potassium, Total	ND		mg/l	0.100	0.0309	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Selenium, Total	ND		mg/l	0.00500	0.00173	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	0.00016	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Sodium, Total	0.110	J	mg/l	0.300	0.0293	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Thallium, Total	ND		mg/l	0.00100	0.00014	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	0.00341	1	09/26/24 14:08	10/02/24 19:13	1,6020B	NTB

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402
Lab Number: L2453613
Report Date: 10/03/24

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1975357-2								
Aluminum, Total	109		-		80-120	-		
Antimony, Total	109		-		80-120	-		
Arsenic, Total	103		-		80-120	-		
Barium, Total	110		-		80-120	-		
Beryllium, Total	114		-		80-120	-		
Cadmium, Total	107		-		80-120	-		
Calcium, Total	109		-		80-120	-		
Chromium, Total	111		-		80-120	-		
Cobalt, Total	110		-		80-120	-		
Copper, Total	112		-		80-120	-		
Iron, Total	112		-		80-120	-		
Lead, Total	109		-		80-120	-		
Magnesium, Total	107		-		80-120	-		
Manganese, Total	112		-		80-120	-		
Nickel, Total	111		-		80-120	-		
Potassium, Total	108		-		80-120	-		
Selenium, Total	107		-		80-120	-		
Silver, Total	110		-		80-120	-		
Sodium, Total	109		-		80-120	-		
Thallium, Total	105		-		80-120	-		
Vanadium, Total	113		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1975357-2					
Zinc, Total	111	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1975359-2					
Mercury, Total	95	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-11 Batch: WG1975627-2					
Aluminum, Total	96	-	80-120	-	
Antimony, Total	102	-	80-120	-	
Arsenic, Total	102	-	80-120	-	
Barium, Total	107	-	80-120	-	
Beryllium, Total	100	-	80-120	-	
Cadmium, Total	106	-	80-120	-	
Calcium, Total	112	-	80-120	-	
Chromium, Total	98	-	80-120	-	
Cobalt, Total	112	-	80-120	-	
Copper, Total	108	-	80-120	-	
Iron, Total	111	-	80-120	-	
Lead, Total	99	-	80-120	-	
Magnesium, Total	107	-	80-120	-	
Manganese, Total	111	-	80-120	-	
Nickel, Total	106	-	80-120	-	
Potassium, Total	114	-	80-120	-	
Selenium, Total	97	-	80-120	-	
Silver, Total	106	-	80-120	-	
Sodium, Total	106	-	80-120	-	
Thallium, Total	100	-	80-120	-	
Vanadium, Total	100	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-11 Batch: WG1975627-2					
Zinc, Total	107	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1975633-2					
Mercury, Total	94	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1976762-2					
Aluminum, Total	96	-	80-120	-	
Antimony, Total	90	-	80-120	-	
Arsenic, Total	93	-	80-120	-	
Barium, Total	106	-	80-120	-	
Beryllium, Total	97	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	80	-	80-120	-	
Chromium, Total	90	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	92	-	80-120	-	
Iron, Total	99	-	80-120	-	
Lead, Total	97	-	80-120	-	
Magnesium, Total	98	-	80-120	-	
Manganese, Total	96	-	80-120	-	
Nickel, Total	91	-	80-120	-	
Potassium, Total	91	-	80-120	-	
Selenium, Total	92	-	80-120	-	
Silver, Total	100	-	80-120	-	
Sodium, Total	97	-	80-120	-	
Thallium, Total	98	-	80-120	-	
Vanadium, Total	86	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1976762-2					
Zinc, Total	93	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

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): 13 QC Batch ID: WG1975357-3 WG1975357-4 QC Sample: L2452082-01 Client ID: MS Sample												
Aluminum, Total	8920	176	8970	**28**	Q	8730	**0**	Q	75-125	3		20
Antimony, Total	0.562J	44	43.0	98		41.3	95		75-125	4		20
Arsenic, Total	16.0	10.6	25.1	86		20.8	**46**	Q	75-125	19		20
Barium, Total	60.0	176	186	**72**	Q	185	**72**	Q	75-125	1		20
Beryllium, Total	0.319J	4.4	4.84	110		4.59	105		75-125	5		20
Cadmium, Total	ND	4.67	4.43	95		4.28	93		75-125	3		20
Calcium, Total	1190	880	2100	103		2130	108		75-125	1		20
Chromium, Total	23.4	17.6	34.8	**65**	Q	32.6	**53**	Q	75-125	7		20
Cobalt, Total	15.5	44	56.9	94		53.1	86		75-125	7		20
Copper, Total	28.7	22	47.0	83		46.0	80		75-125	2		20
Iron, Total	29600	88	29000	**0**	Q	27100	**0**	Q	75-125	7		20
Lead, Total	8.78	46.7	58.4	106		53.9	98		75-125	8		20
Magnesium, Total	3330	880	4100	87		4380	121		75-125	7		20
Manganese, Total	357	44	354	**0**	Q	407	115		75-125	14		20
Nickel, Total	32.0	44	70.2	87		66.4	79		75-125	6		20
Potassium, Total	580	880	1470	101		1370	91		75-125	7		20
Selenium, Total	ND	10.6	10.3	97		9.98	96		75-125	3		20
Silver, Total	ND	4.4	4.58	104		4.47	103		75-125	2		20
Sodium, Total	1030	880	1910	100		1790	87		75-125	6		20
Thallium, Total	ND	10.6	11.0	104		10.4	100		75-125	6		20
Vanadium, Total	16.3	44	61.0	102		57.8	95		75-125	5		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

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): 13	QC Batch ID: WG1975357-3				WG1975357-4		QC Sample: L2452082-01	Client ID:	MS Sample
Zinc, Total	64.3	44	112	108	97.5	76	75-125	14	20
Total Metals - Mansfield Lab Associated sample(s): 13	QC Batch ID: WG1975359-3				WG1975359-4		QC Sample: L2452082-01	Client ID:	MS Sample
Mercury, Total	ND	1.7	1.65	97	1.64	103	80-120	1	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

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): 01,03-11 QC Batch ID: WG1975627-3 QC Sample: L2409778-152 Client ID: MS Sample										
Aluminum, Total	0.003J	2	1.90	95		-	-	75-125	-	20
Antimony, Total	ND	0.5	0.5171	103		-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.1182	98		-	-	75-125	-	20
Barium, Total	0.1343	2	2.245	106		-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.04932	99		-	-	75-125	-	20
Cadmium, Total	ND	0.053	0.05448	103		-	-	75-125	-	20
Calcium, Total	37.1	10	47.1	100		-	-	75-125	-	20
Chromium, Total	0.0003J	0.2	0.1959	98		-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.5420	108		-	-	75-125	-	20
Copper, Total	ND	0.25	0.2669	107		-	-	75-125	-	20
Iron, Total	4.14	1	4.57	**43**	Q	-	-	75-125	-	20
Lead, Total	ND	0.53	0.5164	97		-	-	75-125	-	20
Magnesium, Total	7.90	10	18.2	103		-	-	75-125	-	20
Manganese, Total	0.1625	0.5	0.7214	112		-	-	75-125	-	20
Nickel, Total	ND	0.5	0.5425	108		-	-	75-125	-	20
Potassium, Total	1.02	10	11.9	109		-	-	75-125	-	20
Selenium, Total	ND	0.12	0.106	88		-	-	75-125	-	20
Silver, Total	ND	0.05	0.05282	106		-	-	75-125	-	20
Sodium, Total	5.77	10	16.0	102		-	-	75-125	-	20
Thallium, Total	ND	0.12	0.1180	98		-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.4897	98		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

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): 01,03-11 QC Batch ID: WG1975627-3 QC Sample: L2409778-152 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.5329	106	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1975633-3 WG1975633-4 QC Sample: L2453613-02 Client ID: MW-2B-20240918									
Mercury, Total	ND	0.005	0.00436	87	0.00489	98	75-125	11	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

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): 02 20240918	QC Batch ID: WG1976762-3				WG1976762-4	QC Sample: L2453613-02			Client ID: MW-2B-		
Aluminum, Total	0.00502J	2	1.98	99		1.98	99		75-125	0	20
Antimony, Total	0.00099J	0.5	0.4963	99		0.5024	100		75-125	1	20
Arsenic, Total	0.00018J	0.12	0.1056	88		0.1069	89		75-125	1	20
Barium, Total	0.1517	2	2.230	104		2.270	106		75-125	2	20
Beryllium, Total	ND	0.05	0.04883	98		0.05135	103		75-125	5	20
Cadmium, Total	ND	0.053	0.05317	100		0.05250	99		75-125	1	20
Calcium, Total	35.8	10	43.6	78		42.2	**64**	Q	75-125	3	20
Chromium, Total	0.00039J	0.2	0.1847	92		0.1870	94		75-125	1	20
Cobalt, Total	ND	0.5	0.4872	97		0.4923	98		75-125	1	20
Copper, Total	0.00062J	0.25	0.2335	93		0.2482	99		75-125	6	20
Iron, Total	6.72	1	6.05	**0**	Q	6.14	**0**	Q	75-125	1	20
Lead, Total	ND	0.53	0.5183	98		0.5134	97		75-125	1	20
Magnesium, Total	8.51	10	18.4	99		18.3	98		75-125	1	20
Manganese, Total	0.1917	0.5	0.6784	97		0.6936	100		75-125	2	20
Nickel, Total	ND	0.5	0.4706	94		0.4905	98		75-125	4	20
Potassium, Total	0.964	10	10.2	92		10.5	95		75-125	3	20
Selenium, Total	ND	0.12	0.0955	80		0.0982	82		75-125	3	20
Silver, Total	ND	0.05	0.04949	99		0.05014	100		75-125	1	20
Sodium, Total	5.92	10	16.2	103		16.2	103		75-125	0	20
Thallium, Total	ND	0.12	0.1152	96		0.1156	96		75-125	0	20
Vanadium, Total	ND	0.5	0.4463	89		0.4471	89		75-125	0	20

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

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): 02 20240918	QC Batch ID: WG1976762-3				WG1976762-4	QC Sample: L2453613-02	Client ID: MW-2B-		
Zinc, Total	ND	0.5	0.4832	97	0.4906	98	75-125	2	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-11 QC Batch ID: WG1975627-11 QC Sample: L2409778-152 Client ID: DUP Sample						
Lead, Total	ND	ND	mg/l	NC		20

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.000240

Lab Serial Dilution Analysis
Batch Quality Control

Lab Number: L2453613
Report Date: 10/03/24

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1976762-6 QC Sample: L2453613-02 Client ID: MW-2B-20240918						
Barium, Total	0.1517	0.1540	mg/l	2		20
Calcium, Total	35.8	35.6	mg/l	1		20
Iron, Total	6.72	6.86	mg/l	2		20
Magnesium, Total	8.51	8.65	mg/l	2		20
Manganese, Total	0.1917	0.1940	mg/l	1		20

INORGANICS
&
MISCELLANEOUS

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

SAMPLE RESULTS

Lab ID: L2453613-13
Client ID: SED-001-20240918
Sample Location: CORTLANDVILLE NY

Date Collected: 09/18/24 12:35
Date Received: 09/18/24
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	22.4		%	0.100	NA	1	-	09/20/24 10:45	121,2540G	ROI

Lab Duplicate Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236.000.0002402

Lab Number: L2453613

Report Date: 10/03/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1974138-1 QC Sample: L2453615-02 Client ID: DUP Sample						
Solids, Total	89.1	88.7	%	0		20

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2453613-01A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-01B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-01C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-01D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		SE-6020T(180),TL-6020T(180),BA-6020T(180),FE-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),CR-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),HG-T(28),MG-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),CO-6020T(180)
L2453613-02A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02A1	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02A2	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02B1	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02B2	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02C1	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02C2	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-02D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		SE-6020T(180),FE-6020T(180),TL-6020T(180),BA-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2453613-02D1	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		SE-6020T(180),FE-6020T(180),TL-6020T(180),BA-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2453613-02D2	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		SE-6020T(180),FE-6020T(180),TL-6020T(180),BA-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2453613-03A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-03B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-03C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-03D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),K-6020T(180),CR-6020T(180),CA-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),CD-6020T(180),AG-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L2453613-04A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-04B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-04C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-04D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		FE-6020T(180),BA-6020T(180),TL-6020T(180),SE-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),CO-6020T(180)
L2453613-05A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-05B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2453613-05C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-05D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),HG-T(28),CD-6020T(180),AL-6020T(180),MG-6020T(180),AG-6020T(180),CO-6020T(180)
L2453613-06A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-06B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-06C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-06D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		BA-6020T(180),TL-6020T(180),FE-6020T(180),SE-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),CD-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2453613-07A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-07B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-07C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-07D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),CD-6020T(180),AG-6020T(180),MG-6020T(180),HG-T(28),AL-6020T(180),CO-6020T(180)
L2453613-08A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-08B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-08C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2453613-08D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),CD-6020T(180),MG-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2453613-09A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-09B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-09C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-09D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),AL-6020T(180),MG-6020T(180),CO-6020T(180)
L2453613-10A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-10B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-10C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-10D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		SE-6020T(180),TL-6020T(180),FE-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),HG-T(28),AG-6020T(180),CD-6020T(180),AL-6020T(180),MG-6020T(180),CO-6020T(180)
L2453613-10E	Amber 120ml unpreserved	B	6	6	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2453613-10F	Amber 120ml unpreserved	B	6	6	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2453613-11A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-11B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-11C	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 034236.000.0002402

Lab Number: L2453613
Report Date: 10/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2453613-11D	Plastic 250ml HNO3 preserved	B	<2	<2	4.6	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AG-6020T(180),AL-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2453613-12A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-12B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2453613-13A	Vial MeOH preserved	A	NA		4.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2453613-13B	Vial water preserved	A	NA		4.1	Y	Absent	19-SEP-24 16:46	NYTCL-8260HLW-R2(14)
L2453613-13C	Vial water preserved	A	NA		4.1	Y	Absent	19-SEP-24 16:46	NYTCL-8260HLW-R2(14)
L2453613-13D	Plastic 2oz unpreserved for TS	A	NA		4.1	Y	Absent		TS(7)
L2453613-13E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.1	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),ZN-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),SB-TI(180),V-TI(180),CO-TI(180),MG-TI(180),MN-TI(180),HG-T(28),FE-TI(180),CD-TI(180),NA-TI(180),CA-TI(180),K-TI(180)
L2453613-13F	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8082(365)

*Values in parentheses indicate holding time in days

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2453613
Project Number:	034236.000.0002402	**Report Date:**	10/03/24

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:**	L2453613
Project Number:	034236.000.0002402	**Report Date:**	10/03/24

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.

Chlordane: 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.)

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2453613
Project Number:	034236.000.0002402	**Report Date:**	10/03/24

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2453613
Project Number:	034236.000.0002402	**Report Date:**	10/03/24

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 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
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.
Nonpotable Water: EPA RSK-175 Dissolved 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 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).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA

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

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

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

Page 1 of 2

Date Rec'd in Lab: 9/19/24

ALPHA Job #: L2453613

Client Information

Client: CHA Consulting Inc
Address: 300 S. State St.
Syracuse, NY 13202
Phone: 315-257-7250
Fax:
Email: kehannan@chasolutions.com

Project Information

Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 034236.000.0002402
(Use Project name as Project #)
Project Manager: Laura Cassalia
ALPHAQuote #: 27610-R1

Turn-Around Time

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

Deliverables

- ASP-A
- X ASP-B
- X EQuIS (1 File) NYS
- EQuIS (4 File)
- Other

Billing Information

- Same as Client Info

PO #: 034236003

Regulatory Requirement

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

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
- NJ
- NY
- Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

- VOCs 8260D
- TAL Metals 6020
- TCL PCBs 8082

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	VOCs 8260D	TAL Metals 6020	TCL PCBs 8082	Sample Specific Comments	Total Bottle
53013 01	MW-1B-20240918	9.18.24	0925	GW	KE/AH	X	X			4
02	MW-2B-20240918		1030			X	X			4
03	MW-2D-20240918		1010			X	X			4
04	MW-3SR-20240918		1205			X	X			4
05	MW-3BR-20240918		1210			X	X			4
06	MW-4S-20240918		1120			X	X			4
07	MW-4B-20240918		1100			X	X			4
08	MW-3SR2-20240918		1320			X	X			4
09	MW-3BR2-20240918		1310			X	X			4
10	SW-001-20240918		1230	SW		X	X	X		6

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

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

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

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

Relinquished By:	Date/Time	Received By:	Date/Time
	9.18.24 / 1435		9/19/24 1435
	9-19-24		9-19-24 05:30
			9/19/24

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA

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

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

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

Page 2 of 2

Date Rec'd in Lab: 9/19/24

ALPHA Job #: L2453613

Client Information

Client: CHA Consulting, Inc
Address: 300 S. State St.
Syracuse NY 13202
Phone: 315-257-7260
Fax:
Email: kehman@chasolutions.com

Project Information

Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 034236.000.0002402
(Use Project name as Project #)
Project Manager: Laura Cassalia
ALPHAQuote #: 27610-81

Turn-Around Time

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

Deliverables

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

Billing Information

[ ] Same as Client Info
PO #: 03423603

Regulatory Requirement

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

Disposal Site Information

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

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

Please specify Metals or TAL

ANALYSIS

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs 8260	TAL Metals 6020		VOCs 8260/5035	Total Solids	TAL Metals 6020	TCL PCBs 8082		Sample Specific Comments	Total Bottle
53613 01	CHA-D01-20240918	9.18.24	1200	GW	KE/AH	X	X								4
02	CHA-MSD01-20240918		1030	GW	↓	X	X							MS/MSD collected at MW-2B	4
02	CHA-MSD01-20240918		1030	GW	↓	X	X								4
12	Trip Blank-20240918		—	Labwater	—	X									2
13	SED-001-20240918		1235	SE	KE/AH				X	X	X	X			6

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

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

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

Container Type	V	P		V	P	A	A		
Preservative	B	C		F/D	A	A	A		

Relinquished By:	Date/Time	Received By:	Date/Time
	9.18.24/1435		9/18/24 1435
	9.18.24		9-18-24
	0830		9/18/24 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)

9/19/24

ANALYTICAL REPORT

Lab Number:	L2433023
Client:	CHA Companies One Park Place 300 South State St., Suite 600 Syracuse, NY 13202
ATTN:	Samantha Miller
Phone:	(315) 471-3920
Project Name:	SOUTH HILL DUMP
Project Number:	034236
Report Date:	06/28/24

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (9110), MN (025-999-495), NJ (MA015), NY (11627), NC (685), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708A1), USFWS (Permit #A24920).

Project Name: SOUTH HILL DUMP
Project Number: 034236

Lab Number: L2433023
Report Date: 06/28/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2433023-01	MW-1B-20240612	WATER	CORTLANDVILLE, NY	06/12/24 08:10	06/12/24
L2433023-02	MW-3BR2-20240612	WATER	CORTLANDVILLE, NY	06/12/24 08:50	06/12/24
L2433023-03	MW-3SR2-20240612	WATER	CORTLANDVILLE, NY	06/12/24 08:55	06/12/24
L2433023-04	MW-4B-20240612	WATER	CORTLANDVILLE, NY	06/12/24 09:20	06/12/24
L2433023-05	MW-4S-20240612	WATER	CORTLANDVILLE, NY	06/12/24 09:30	06/12/24
L2433023-06	CHA-1-20240612	WATER	CORTLANDVILLE, NY	06/12/24 09:00	06/12/24

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2433023
Project Number:	034236	**Report Date:**	06/28/24

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:**	L2433023
Project Number:	034236	**Report Date:**	06/28/24

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.

Perfluorinated Alkyl Acids by 1633

L2433023-01R, -02R, -04R, -05R, -06R, WG1939088-1R, WG1939088-2R, WG1939088-3R, WG1939088-4R, and WG1939088-5R: The sample was re-analyzed due to QC failures in the original analysis. The results of the re-analysis are reported.

L2433023-02R: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

L2433023-03RE: The sample was re-extracted within holding time due to QC failures in the original extraction. The results of the re-extraction are reported.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 06/28/24

ORGANICS

SEMIVOLATILES

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-01
Client ID: MW-1B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:10
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 21:18
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	47		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-01 R
Client ID: MW-1B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:10
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 06/27/24 08:53
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	3.00	J	ng/l	6.11	0.978	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.06	0.817	1
Perfluorobutanesulfonic Acid (PFBS)	0.741	J	ng/l	1.53	0.512	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.11	1.60	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.53	0.451	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.53	0.267	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.53	0.306	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.53	0.367	1
Perfluorooctanoic Acid (PFOA)	0.840	J	ng/l	1.53	0.664	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.11	2.06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.53	0.412	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.53	0.481	1
Perfluorooctanesulfonic Acid (PFOS)	0.947	J	ng/l	1.53	0.695	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.53	0.619	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.11	2.38	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.53	0.474	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.53	0.833	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.53	0.664	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.53	0.351	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.53	0.412	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.53	0.825	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.53	0.703	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.53	0.573	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.53	0.405	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.11	0.856	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.11	0.962	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.53	0.580	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-01 R
Client ID: MW-1B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:10
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.11	1.26	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.11	1.26	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.53	0.664	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.53	0.703	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.3	3.59	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.3	1.87	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.06	0.435	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.06	0.405	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.06	0.336	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.06	1.80	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.64	2.52	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	38.2	8.94	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	38.2	6.03	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-01 R
Client ID: MW-1B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:10
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	84		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	83		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	90		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	107		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	81		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	85		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	86		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	100		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	88		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	90		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	76		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	74		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	81		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	96		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	80		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	76		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	115		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	80		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	62		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	74		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	56		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	56		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	85		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	81		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-02
Client ID: MW-3BR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:50
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 22:16
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	68.0	J	ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-02 R
Client ID: MW-3BR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:50
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 06/27/24 09:31
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	7.68	J	ng/l	12.8	2.05	1
Perfluoropentanoic Acid (PFPeA)	2.51	J	ng/l	6.40	1.71	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	3.20	1.07	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	12.8	3.34	1
Perfluorohexanoic Acid (PFHxA)	1.90	J	ng/l	3.20	0.944	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	3.20	0.560	1
Perfluoroheptanoic Acid (PFHpA)	1.25	J	ng/l	3.20	0.640	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	3.20	0.768	1
Perfluorooctanoic Acid (PFOA)	5.22		ng/l	3.20	1.39	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	12.8	4.32	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	3.20	0.864	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	3.20	1.01	1
Perfluorooctanesulfonic Acid (PFOS)	2.86	J	ng/l	3.20	1.46	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	3.20	1.30	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	12.8	4.98	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	3.20	0.992	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	3.20	1.74	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	3.20	1.39	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	3.20	0.736	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	3.20	0.864	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	3.20	1.73	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	3.20	1.47	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	3.20	1.20	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	3.20	0.848	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	12.8	1.79	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	12.8	2.02	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	3.20	1.22	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-02 R
Client ID: MW-3BR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:50
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	12.8	2.64	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	12.8	2.64	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	3.20	1.39	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	3.20	1.47	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	32.0	7.52	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	32.0	3.92	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	6.40	0.912	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	6.40	0.848	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	6.40	0.704	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	6.40	3.78	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	16.0	5.28	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	80.0	18.7	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	80.0	12.6	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-02 R
Client ID: MW-3BR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:50
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	71		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	70		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	76		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	95		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	69		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	62		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	69		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	85		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	68		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	70		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	63		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	61		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	53		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	56		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	56		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	56		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	58		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	52		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	36		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	60		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	43		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	41		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	55		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	52		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-03
Client ID: MW-3SR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:55
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 22:35
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	52.8	J	ng/l	142	32.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	43		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-03 RE
Client ID: MW-3SR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:55
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 06/28/24 06:55
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/27/24 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	3.57	J	ng/l	5.95	0.952	1
Perfluoropentanoic Acid (PFPeA)	1.67	J	ng/l	2.98	0.796	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.49	0.498	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.95	1.55	1
Perfluorohexanoic Acid (PFHxA)	1.57		ng/l	1.49	0.439	1
Perfluoropentanesulfonic Acid (PFPeS)	0.357	J	ng/l	1.49	0.260	1
Perfluoroheptanoic Acid (PFHpA)	1.12	J	ng/l	1.49	0.298	1
Perfluorohexanesulfonic Acid (PFHxS)	1.08	J	ng/l	1.49	0.357	1
Perfluorooctanoic Acid (PFOA)	7.10		ng/l	1.49	0.647	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.95	2.01	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.49	0.402	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.49	0.469	1
Perfluorooctanesulfonic Acid (PFOS)	8.14		ng/l	1.49	0.677	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.49	0.602	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.95	2.31	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.49	0.461	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.49	0.811	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.49	0.647	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.49	0.342	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.49	0.402	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.49	0.803	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.49	0.684	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.49	0.558	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.49	0.394	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.95	0.833	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.95	0.937	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.49	0.565	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-03 RE
Client ID: MW-3SR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:55
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.95	1.23	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.95	1.23	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.49	0.647	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.49	0.684	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.9	3.50	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.9	1.82	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.98	0.424	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.98	0.394	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	2.98	0.327	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.98	1.76	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.44	2.45	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.2	8.70	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.2	5.87	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-03 RE
Client ID: MW-3SR2-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 08:55
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	64		41-123
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	58		29-123
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	62		41-125
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	110		10-290
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	62		40-121
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	62		27-156
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	59		46-115
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	58		39-121
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	69		10-261
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	57		38-114
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	52		32-114
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	50		28-115
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	66		10-213
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	60		10-172
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	50		16-123
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	46		14-108
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	59		10-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	49		10-126
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	47		10-145
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	57		35-142
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	44		11-94
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	47		11-97
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	52		10-137
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	53		10-130

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-04
Client ID: MW-4B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:20
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 22:54
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	186.		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-04 R
Client ID: MW-4B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:20
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 06/27/24 09:57
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.85	J	ng/l	5.94	0.950	1
Perfluoropentanoic Acid (PFPeA)	0.950	J	ng/l	2.97	0.794	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.48	0.497	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.94	1.55	1
Perfluorohexanoic Acid (PFHxA)	0.646	J	ng/l	1.48	0.438	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.48	0.260	1
Perfluoroheptanoic Acid (PFHpA)	0.341	J	ng/l	1.48	0.297	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.48	0.356	1
Perfluorooctanoic Acid (PFOA)	1.25	J	ng/l	1.48	0.646	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.94	2.00	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.48	0.401	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.48	0.468	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.48	0.675	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.48	0.601	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.94	2.31	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.48	0.460	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.48	0.809	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.48	0.646	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.48	0.341	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.48	0.401	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.48	0.802	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.48	0.683	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.48	0.557	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.48	0.393	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.94	0.831	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.94	0.935	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.48	0.564	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-04 R
Client ID: MW-4B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:20
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.94	1.22	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.94	1.22	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.48	0.646	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.48	0.683	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.8	3.49	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.8	1.82	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.97	0.423	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.97	0.393	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	2.97	0.327	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.97	1.75	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.42	2.45	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.1	8.68	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.1	5.86	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-04 R
Client ID: MW-4B-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:20
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	90		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	87		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	108		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	132		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	90		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	84		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	91		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	111		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	86		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	92		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	88		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	81		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	127		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	72		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	77		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	77		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	64		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	65		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	36		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	73		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	65		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	66		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	59		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	59		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-05
Client ID: MW-4S-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:30
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 23:13
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-05 R
Client ID: MW-4S-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:30
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 06/27/24 10:10
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.42	J	ng/l	5.84	0.934	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.92	0.781	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.46	0.489	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	5.84	1.52	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.46	0.431	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.46	0.256	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.46	0.292	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.46	0.350	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.46	0.635	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	5.84	1.97	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.46	0.394	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.46	0.460	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.46	0.664	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.46	0.591	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	5.84	2.27	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.46	0.453	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.46	0.796	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.46	0.635	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.46	0.336	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.46	0.394	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.46	0.788	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.46	0.672	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.46	0.548	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.46	0.387	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	5.84	0.818	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	5.84	0.920	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.46	0.555	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-05 R
Client ID: MW-4S-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:30
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	5.84	1.20	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	5.84	1.20	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.46	0.635	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.46	0.672	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	14.6	3.43	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	14.6	1.79	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	2.92	0.416	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	2.92	0.387	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	2.92	0.321	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	2.92	1.72	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.30	2.41	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	36.5	8.54	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	36.5	5.76	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-05 R
Client ID: MW-4S-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:30
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	94		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	91		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	101		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	115		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	92		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	88		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	89		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	113		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	91		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	94		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	91		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	87		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	68		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	95		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	80		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	78		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	89		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	78		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	53		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	79		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	58		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	59		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	73		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	71		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-06
Client ID: CHA-1-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:00
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 23:33
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270E-SIM - Mansfield Lab						
1,4-Dioxane	190.		ng/l	142	32.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	45		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-06 R
Client ID: CHA-1-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:00
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 144,1633
Analytical Date: 06/27/24 11:41
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.15	J	ng/l	6.04	0.966	1
Perfluoropentanoic Acid (PFPeA)	1.03	J	ng/l	3.02	0.808	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.51	0.506	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.04	1.58	1
Perfluorohexanoic Acid (PFHxA)	0.815	J	ng/l	1.51	0.445	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.51	0.264	1
Perfluoroheptanoic Acid (PFHpA)	0.332	J	ng/l	1.51	0.302	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.51	0.362	1
Perfluorooctanoic Acid (PFOA)	1.26	J	ng/l	1.51	0.656	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.04	2.04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.51	0.408	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.51	0.475	1
Perfluorooctanesulfonic Acid (PFOS)	0.687	J	ng/l	1.51	0.687	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.51	0.611	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.04	2.35	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.51	0.468	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.51	0.822	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.51	0.656	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.51	0.347	1
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.51	0.408	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.51	0.815	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.51	0.694	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.51	0.566	1
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.51	0.400	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.04	0.845	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.04	0.951	1
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.51	0.574	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-06 R
Client ID: CHA-1-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:00
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.04	1.24	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.04	1.24	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.51	0.656	1
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.51	0.694	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	15.1	3.55	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	15.1	1.85	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.02	0.430	1
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.02	0.400	1
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.02	0.332	1
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.02	1.78	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	7.55	2.49	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	37.7	8.83	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	37.7	5.95	1

Project Name: SOUTH HILL DUMP **Lab Number:** L2433023

Project Number: 034236 **Report Date:** 06/28/24

SAMPLE RESULTS

Lab ID: L2433023-06 R
Client ID: CHA-1-20240612
Sample Location: CORTLANDVILLE, NY

Date Collected: 06/12/24 09:00
Date Received: 06/12/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	79		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	78		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	82		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	99		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	80		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	85		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	76		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	89		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	83		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	79		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	70		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	74		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	60		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	80		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	67		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	73		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	80		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	70		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	53		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	74		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	61		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	63		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	72		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	70		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/17/24 20:02
Analyst: CSP

Extraction Method: EPA 3510C
Extraction Date: 06/16/24 12:13

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270E-SIM - Mansfield Lab for sample(s): 01-06 Batch: WG1934946-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	43		15-110

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 06/27/24 08:14
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-02,04-06 Batch: WG1939088-1 R					
Perfluorobutanoic Acid (PFBA)	3.42	J	ng/l	6.40	1.02
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.20	0.856
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.60	0.536
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.40	1.67
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.60	0.472
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.60	0.280
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.60	0.320
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.60	0.384
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.60	0.696
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.40	2.16
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.60	0.432
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.60	0.504
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.60	0.728
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.60	0.648
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.40	2.49
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.60	0.496
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.60	0.872
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.60	0.696
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.60	0.368
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.60	0.432
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.60	0.864
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.60	0.736
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.60	0.600
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.60	0.424
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.40	0.896
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.40	1.01

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 06/27/24 08:14
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-02,04-06 Batch: WG1939088-1 R					
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.60	0.608
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.40	1.32
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.40	1.32
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.60	0.696
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.60	0.736
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	16.0	3.76
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	16.0	1.96
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.20	0.456
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.20	0.424
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.20	0.352
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.20	1.89
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.00	2.64
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	40.0	9.36
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	40.0	6.31

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 06/27/24 08:14
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/25/24 15:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 01-02,04-06 Batch: WG1939088-1 R					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	91		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	92		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	94		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	99		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	94		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	96		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	89		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	106		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	95		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	86		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	89		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	89		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	65		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	88		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	88		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	79		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	95		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	89		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	64		20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	85		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	55		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	57		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	76		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	75		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 06/28/24 06:16
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/27/24 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 03 Batch: WG1940442-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	6.40	1.02
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	3.20	0.856
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.60	0.536
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	6.40	1.67
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.60	0.472
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.60	0.280
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.60	0.320
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.60	0.384
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.60	0.696
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	6.40	2.16
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.60	0.432
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.60	0.504
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.60	0.728
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.60	0.648
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	6.40	2.49
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.60	0.496
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.60	0.872
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.60	0.696
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.60	0.368
Perfluorooctanesulfonamide (PFOSA)	ND		ng/l	1.60	0.432
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.60	0.864
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.60	0.736
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.60	0.600
Perfluorotetradecanoic Acid (PFTeDA)	ND		ng/l	1.60	0.424
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	6.40	0.896
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	6.40	1.01
Perfluorododecanesulfonic Acid (PFDoS)	ND		ng/l	1.60	0.608

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 06/28/24 06:16
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/27/24 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 03 Batch: WG1940442-1					
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	6.40	1.32
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	6.40	1.32
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND		ng/l	1.60	0.696
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND		ng/l	1.60	0.736
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND		ng/l	16.0	3.76
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND		ng/l	16.0	1.96
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND		ng/l	3.20	0.456
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND		ng/l	3.20	0.424
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND		ng/l	3.20	0.352
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND		ng/l	3.20	1.89
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND		ng/l	8.00	2.64
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND		ng/l	40.0	9.36
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND		ng/l	40.0	6.31

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 144,1633
Analytical Date: 06/28/24 06:16
Analyst: AC

Extraction Method: EPA 1633
Extraction Date: 06/27/24 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab for sample(s): 03 Batch: WG1940442-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	86		41-123
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	90		29-123
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	86		41-125
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	102		10-290
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	80		40-121
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	85		27-156
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	84		46-115
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	86		39-121
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	92		10-261
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	82		38-114
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	85		32-114
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	82		28-115
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	96		10-213
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	83		10-172
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	81		16-123
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	78		14-108
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	82		10-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	83		10-126
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	66		10-145
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	87		35-142
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	55		11-94
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	60		11-97
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	83		10-137
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	80		10-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236

Lab Number: L2433023

Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270E-SIM - Mansfield Lab	Associated sample(s): 01-06		Batch: WG1934946-2 WG1934946-3					
1,4-Dioxane	123		123		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	43		47		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 Batch: WG1939088-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	118		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	114		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	105		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	106		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	116		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	117		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	106		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	107		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	114		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	108		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	117		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	112		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	104		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	104		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	123		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	110		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	125		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	116		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	93		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	106		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	111		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	115		-		40-150	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 Batch: WG1939088-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTrDA)	126		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	110		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	109		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	106		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	50		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	63		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	54		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	124		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	104		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	116		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	123		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	115		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	108		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	105		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	117		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	94		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	89		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	42		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236

Lab Number: L2433023

Report Date: 06/28/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 Batch: WG1939088-2 LOW LEVEL								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	85				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	82				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	91				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	97				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	79				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	78				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	75				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	96				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	79				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	79				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	66				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	72				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	51				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	46				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	63				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	68				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	40				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	51				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	24				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	79				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	46				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	42				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	47				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	42				20-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 Batch: WG1939088-3								
Perfluorobutanoic Acid (PFBA)	96		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	100		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	94		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	92		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	98		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	103		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	98		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	93		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	84		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	100		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	93		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	94		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	97		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	104		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	100		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	104		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	103		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	100		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	100		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	99		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	109		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	98		-		40-150	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 Batch: WG1939088-3								
Perfluorotridecanoic Acid (PFTrDA)	132		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	117		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	98		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	110		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	86		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	87		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	94		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	123		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	121		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	107		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	108		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	105		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	101		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	90		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	83		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	91		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	79		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	48		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236

Lab Number: L2433023

Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 Batch: WG1939088-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	92				20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	85				20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	103				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	121				20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	90				20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	82				20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	92				20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	111				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	96				20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	95				20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	98				20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	83				20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	80				20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	99				20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	85				20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	81				20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	93				20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	83				20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	57				20-150
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	75				20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	51				20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	55				20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	77				20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	79				20-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 03 Batch: WG1940442-2 LOW LEVEL								
Perfluorobutanoic Acid (PFBA)	96		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	97		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	99		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	103		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	105		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	109		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	99		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	106		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	99		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	105		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	96		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	93		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	107		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	102		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	101		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	90		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	108		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	87		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	98		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	94		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	121		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	98		-		40-150	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 03 Batch: WG1940442-2 LOW LEVEL								
Perfluorotridecanoic Acid (PFTrDA)	96		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	104		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	97		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	109		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	82		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	105		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	98		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	93		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	93		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	107		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	108		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	94		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	90		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	96		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	108		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	99		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	93		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	78		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236

Lab Number: L2433023

Report Date: 06/28/24

Parameter	Low Level LCS %Recovery	Qual	Low Level LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 03 Batch: WG1940442-2 LOW LEVEL

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	80				41-123
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	85				29-123
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	78				41-125
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	93				10-290
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	78				40-121
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	81				27-156
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	74				46-115
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	80				39-121
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	83				10-261
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	79				38-114
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	77				32-114
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	74				28-115
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	86				10-213
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	81				10-172
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	82				16-123
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	76				14-108
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	81				10-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	76				10-126
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	63				10-145
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	80				35-142
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	58				11-94
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	60				11-97
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	78				10-137
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	76				10-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 03 Batch: WG1940442-3								
Perfluorobutanoic Acid (PFBA)	108		-		40-150	-		30
Perfluoropentanoic Acid (PFPeA)	110		-		40-150	-		30
Perfluorobutanesulfonic Acid (PFBS)	110		-		40-150	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	115		-		40-150	-		30
Perfluorohexanoic Acid (PFHxA)	117		-		40-150	-		30
Perfluoropentanesulfonic Acid (PFPeS)	118		-		40-150	-		30
Perfluoroheptanoic Acid (PFHpA)	106		-		40-150	-		30
Perfluorohexanesulfonic Acid (PFHxS)	105		-		40-150	-		30
Perfluorooctanoic Acid (PFOA)	101		-		40-150	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	113		-		40-150	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	100		-		40-150	-		30
Perfluorononanoic Acid (PFNA)	112		-		40-150	-		30
Perfluorooctanesulfonic Acid (PFOS)	105		-		40-150	-		30
Perfluorodecanoic Acid (PFDA)	104		-		40-150	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	120		-		40-150	-		30
Perfluorononanesulfonic Acid (PFNS)	101		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	99		-		40-150	-		30
Perfluoroundecanoic Acid (PFUnA)	96		-		40-150	-		30
Perfluorodecanesulfonic Acid (PFDS)	109		-		40-150	-		30
Perfluorooctanesulfonamide (PFOSA)	110		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	107		-		40-150	-		30
Perfluorododecanoic Acid (PFDoA)	112		-		40-150	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 03 Batch: WG1940442-3								
Perfluorotridecanoic Acid (PFTrDA)	105		-		40-150	-		30
Perfluorotetradecanoic Acid (PFTeDA)	109		-		40-150	-		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	110		-		40-150	-		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	122		-		40-150	-		30
Perfluorododecanesulfonic Acid (PFDoS)	89		-		40-150	-		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	125		-		40-150	-		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	118		-		40-150	-		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	119		-		40-150	-		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	105		-		40-150	-		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	128		-		40-150	-		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	126		-		40-150	-		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	103		-		40-150	-		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	96		-		40-150	-		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	108		-		40-150	-		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	115		-		40-150	-		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	111		-		40-150	-		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	110		-		40-150	-		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	102		-		40-150	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236

Lab Number: L2433023

Report Date: 06/28/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 03 Batch: WG1940442-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	60				41-123
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	61				29-123
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	61				41-125
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	66				10-290
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	56				40-121
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	58				27-156
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	57				46-115
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	61				39-121
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	61				10-261
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	57				38-114
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	63				32-114
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	57				28-115
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	66				10-213
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	66				10-172
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	63				16-123
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	59				14-108
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	69				10-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	60				10-126
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	48				10-145
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	56				35-142
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	52				11-94
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	53				11-97
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	60				10-137
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	61				10-130

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270E-SIM - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1934946-4 WG1934946-5 QC Sample: L2433023-01 Client ID: MW-1B-20240612												
1,4-Dioxane	ND	4810	5960	124		5930	123		40-140	1		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		40		15-110

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 QC Batch ID: WG1939088-4 WG1939088-5 QC Sample: L2433023-01 Client ID: MW-1B-20240612												
Perfluorobutanoic Acid (PFBA)	3.00J	73	71.1	93		69.0	90		40-150	3		30
Perfluoropentanoic Acid (PFPeA)	ND	36.5	35.5	97		35.0	96		40-150	1		30
Perfluorobutanesulfonic Acid (PFBS)	0.741J	16.2	15.4	90		16.0	94		40-150	4		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	68.5	65.0	95		64.6	94		40-150	1		30
Perfluorohexanoic Acid (PFHxA)	ND	18.3	17.5	96		17.0	93		40-150	3		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	17.2	18.1	105		17.7	103		40-150	2		30
Perfluoroheptanoic Acid (PFHpA)	ND	18.3	16.7	91		16.7	91		40-150	0		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	16.7	15.7	94		15.2	91		40-150	3		30
Perfluorooctanoic Acid (PFOA)	0.840J	18.3	15.3	79		15.0	78		40-150	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	69.4	66.2	95		66.8	96		40-150	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	17.4	17.6	101		18.5	106		40-150	5		30
Perfluorononanoic Acid (PFNA)	ND	18.3	17.8	98		16.5	90		40-150	8		30
Perfluorooctanesulfonic Acid (PFOS)	0.947J	16.9	17.5	98		17.9	100		40-150	2		30
Perfluorodecanoic Acid (PFDA)	ND	18.3	18.0	99		17.8	97		40-150	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	70.1	73.2	104		68.9	98		40-150	6		30
Perfluorononanesulfonic Acid (PFNS)	ND	17.6	17.6	100		17.5	100		40-150	1		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	18.3	20.1	110		19.5	107		40-150	3		30
Perfluoroundecanoic Acid (PFUnA)	ND	18.3	19.1	105		19.8	108		40-150	4		30
Perfluorodecanesulfonic Acid (PFDS)	ND	17.6	16.0	91		17.7	100		40-150	10		30
Perfluorooctanesulfonamide (PFOSA)	ND	18.3	18.3	100		18.2	100		40-150	1		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	18.3	16.2	89		17.4	95		40-150	7		30
Perfluorododecanoic Acid (PFDoA)	ND	18.3	19.2	105		17.9	98		40-150	7		30

Matrix Spike Analysis
Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 QC Batch ID: WG1939088-4 WG1939088-5 QC Sample: L2433023-01 Client ID: MW-1B-20240612												
Perfluorotridecanoic Acid (PFTrDA)	ND	18.3	24.5	134		24.9	136		40-150	2		30
Perfluorotetradecanoic Acid (PFTeDA)	ND	18.3	19.8	108		19.2	105		40-150	3		30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	73	72.6	99		69.8	96		40-150	4		30
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND	69	74.5	108		72.7	105		40-150	2		30
Perfluorododecanesulfonic Acid (PFDoS)	ND	17.7	12.6	71		14.3	81		40-150	13		30
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND	68.3	52.3	77		54.1	79		40-150	3		30
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND	69	52.8	76		56.2	81		40-150	6		30
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA)	ND	18.3	20.4	112		20.9	114		40-150	2		30
N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA)	ND	18.3	20.9	114		20.2	111		40-150	3		30
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE)	ND	183	190	104		197	108		40-150	4		30
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE)	ND	183	188	103		193	106		40-150	3		30
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	ND	36.5	38.7	106		36.9	101		40-150	5		30
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	ND	36.5	36.9	101		37.0	101		40-150	0		30
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA)	ND	32.5	31.0	95		31.1	96		40-150	0		30
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	ND	36.5	30.1	82		31.4	86		40-150	4		30
3-Perfluoropropyl Propanoic Acid (3:3FTCA)	ND	91.3	92.3	101		82.7	90		40-150	11		30
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA)	ND	456	412	90		406	89		40-150	1		30
3-Perfluoroheptyl Propanoic Acid (7:3FTCA)	ND	456	248	54		247	54		40-150	0		30

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP
Project Number: 034236
Lab Number: L2433023
Report Date: 06/28/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 QC Batch ID: WG1939088-4 WG1939088-5 QC Sample: L2433023-01 Client ID: MW-1B-20240612

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Decanesulfonic Acid (13C2-8:2FTS)	66		68		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Hexanesulfonic Acid (13C2-4:2FTS)	111		109		20-150
1H,1H,2H,2H-Perfluoro-1-[1,2-13C2]Octanesulfonic Acid (13C2-6:2FTS)	90		91		20-150
N-Ethyl-d5-Perfluoro-1-Octanesulfonamide (D5-NEtFOSA)	51		56		20-150
N-Ethyl-d5-perfluoro-1-octanesulfonamidoacetic Acid (D5-NEtFOSAA)	80		81		20-150
N-Ethyl-d9-Perfluorooctanesulfonamidoethanol (D9-NEtFOSE)	55		70		20-150
N-Methyl-d3-Perfluoro-1-Octanesulfonamide (D3-NMeFOSA)	59		54		20-150
N-Methyl-d3-perfluoro-1-octanesulfonamidoacetic Acid (D3-NMeFOSAA)	77		73		20-150
N-Methyl-d7-Perfluorooctanesulfonamidoethanol (D7-NMeFOSE)	60		70		20-150
Perfluoro-1-[1,2,3-13C3]Hexanesulfonic Acid (13C3-PFHxS)	88		90		20-150
Perfluoro-1-[13C8]Octanesulfonamide (13C8-PFOSA)	72		77		20-150
Perfluoro-1-[13C8]Octanesulfonic Acid (13C8-PFOS)	86		85		20-150
Perfluoro-1-[2,3,4-13C3]Butanesulfonic Acid (13C3-PFBS)	101		100		20-150
Perfluoro-n-[1,2,3,4,5,6,7-13C7]Undecanoic Acid (13C7-PFUnA)	72		77		20-150
Perfluoro-n-[1,2,3,4,5,6-13C6]Decanoic Acid (13C6-PFDA)	83		88		20-150
Perfluoro-n-[1,2,3,4,6-13C5]Hexanoic Acid (13C5-PFHxA)	92		86		20-150
Perfluoro-n-[1,2,3,4-13C4]Heptanoic Acid (13C4-PFHpA)	89		85		20-150
Perfluoro-n-[1,2-13C2]Dodecanoic Acid (13C2-PFDoA)	64		74		20-150
Perfluoro-n-[1,2-13C2]Tetradecanoic Acid (13C2-PFTeDA)	44		55		20-150
Perfluoro-n-[13C4]Butanoic Acid (13C4-PFBA)	90		92		20-150
Perfluoro-n-[13C5]Pentanoic Acid (13C5-PFPeA)	89		86		20-150
Perfluoro-n-[13C8]Octanoic Acid (13C8-PFOA)	112		114		20-150
Perfluoro-n-[13C9]Nonanoic Acid (13C9-PFNA)	90		92		20-150

Matrix Spike Analysis

Batch Quality Control

Project Name: SOUTH HILL DUMP

Project Number: 034236

Lab Number: L2433023

Report Date: 06/28/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by EPA 1633 - Mansfield Lab Associated sample(s): 01-02,04-06 QC Batch ID: WG1939088-4 WG1939088-5 QC Sample: L2433023-01 Client ID: MW-1B-20240612												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	79		77		20-150

Project Name: SOUTH HILL DUMP
Project Number: 034236

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Report Date: 06/28/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2433023-01A	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-01A1	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1633-DRAFT(28),A2-1,4-DIOXANE-SIM(7)
L2433023-01A2	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1633-DRAFT(28),A2-1,4-DIOXANE-SIM(7)
L2433023-01B	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-01B1	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1633-DRAFT(28),A2-1,4-DIOXANE-SIM(7)
L2433023-01B2	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1633-DRAFT(28),A2-1,4-DIOXANE-SIM(7)
L2433023-01C	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01C1	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01C2	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01D	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01D1	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01D2	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01E	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01E1	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-01E2	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-02A	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-02B	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-02C	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-02D	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-02E	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-03A	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-03B	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 034236

Lab Number: L2433023
Report Date: 06/28/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2433023-03C	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-03D	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-03E	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-04A	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-04B	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-04C	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-04D	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-04E	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-05A	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-05B	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-05C	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-05D	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-05E	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-06A	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-06B	Amber 250ml unpreserved	A	6	6	4.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2433023-06C	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-06D	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)
L2433023-06E	Plastic 500ml unpreserved	B	NA		2.7	Y	Absent		A2-1633-DRAFT(28)

*Values in parentheses indicate holding time in days

Project Name: SOUTH HILL DUMP
Project Number: 034236
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PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA/PFTeDA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS/PFDoS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
Perfluoropropanesulfonic Acid	PFPrS	423-41-6
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA/PFOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1
PERFLUOROETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUOROETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafluoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

Project Name: SOUTH HILL DUMP
Project Number: 034236
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PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
FLUOROTELOMER CARBOXYLIC ACIDS (FTCAs)		
3-Perfluoroheptyl Propanoic Acid	7:3FTCA	812-70-4
2H,2H,3H,3H-Perfluorooctanoic Acid	5:3FTCA	914637-49-3
3-Perfluoropropyl Propanoic Acid	3:3FTCA	356-02-5

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2433023
Project Number:	034236	**Report Date:**	06/28/24

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

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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.

Chlordane: 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.)

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

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Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

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

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

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	SOUTH HILL DUMP	**Lab Number:**	L2433023
Project Number:	034236	**Report Date:**	06/28/24

REFERENCES

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

144 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS. Draft EPA Method 1633, EPA Document 821-D-22-001, June 2022.

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 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
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.
Nonpotable Water: EPA RSK-175 Dissolved 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 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).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

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

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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

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

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

Page 1 of 1 — 2 coolers

Date Rec'd in Lab: 6/13/24

ALPHA Job #: L2433023

Client Information

Client: CHA Consulting Inc.
Address: 300 S. State St. Syracuse NY 13202
Phone: 315-257-7250
Fax:
Email: kehmann@chasolutions.com

Project Information

Project Name: South Hill Dump
Project Location: Cortlandville, NY
Project #: 034236
(Use Project name as Project #)
Project Manager: Sam Miller
ALPHAQuote #:

Turn-Around Time

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

Deliverables

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

Billing Information

☐ Same as Client Info
PO #: 03423602

Regulatory Requirement

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

Disposal Site Information

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

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

2 coolers

Please specify Metals or TAL.

ANALYSIS

PFAAs 1633
1,4 Dioxane 8270DE SIM

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	PFAAs 1633	1,4 Dioxane 8270DE SIM	Sample Specific Comments	Total Bottle
33023-01	MW-1B-20240612	6·12·24	0810	GW	AH/KE	X	X		5
-02	MS-20240612		0810			X	X		5
-03	MSD-20240612		0810 KE			X	X		5
-04	MW-3BR2-20240612	0850	~~0855~~ KE			X	X		5
-05	MW-3SR2-20240612		0855			X	X		5
-06	MW-4B-20240612		0920			X	X		5
-07	MW-4S-20240612		0930			X	X		5
-08	CHA-1-20240612		0900			X	X		5

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	A									
Preservative	A	A									

Relinquished By:	Date/Time	Received By:	Date/Time
	6·12·24 / 1055	AHL	6/12/24 1445
		Tyler Tackett	6/13/24 02:00
	6-13-24 935		6/13/24 0930
	6/13/24 1040	Dylan Beaulieu AHL	6/13/24 10'40

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

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

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