Spring 2022 Groundwater Monitoring Report: Town of Hinesburg, Closed Solid Municipal Waste Landfill

907 Beecher Hill Rd., Hinesburg, VT
August 31, 2022

PROJECT NO.

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Title and Approval Page

Document Title

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Executive Summary

Stone Environmental, Inc (Stone) has prepared this report to summarize findings from semi-annual groundwater monitoring completed at the closed solid waste municipal landfill in Hinesburg, Vermont (Figure 1). The primary objective of this work was to assess groundwater and drinking water contamination related to leachate migration from the landfill. Stone has prepared this Semi-Annual Groundwater Monitoring Report on behalf of the Town of Hinesburg. Monitoring was completed in accordance with Stone's *Post Closure Plan, Town of Hinesburg, Closed Municipal Solid Waste Landfill*, dated November 3, 2021.

The landfill is located on a larger 38-acre parcel owned by the Town of Hinesburg. The landfill operated from 1972 until 1988 and the landfill was closed with a permanent cap by 1992. The landfill accepted municipal solid waste from the Town of Hinesburg and the Town of Richmond. The parcel is also the site of a Chittenden Solid Waste District (CSWD) transfer station, a Vermont Astronomical Society observatory (northeast corner, off Observatory Road), a sand and gravel pit located south of the landfill and the Town Highway Garage located southeast of the landfill. There are several residential properties adjoining the landfill to the west, located on Forest Edge Road. Beecher Brook is located approximately 550 feet east of the landfill and runs north to south.

A closure plan was prepared for the landfill in 1990, however the historic environmental monitoring requirements included in the closure plan were never implemented except for drinking water supply sampling at three locations for 20 years. During this monitoring, methylene chloride was detected below the Vermont Groundwater Enforcement Standard (VGES) and iron and manganese above secondary drinking water standard. In July 2021, the VT DEC collected five water supply well samples and found exceedances of VGES for methylene chloride at 152 Forest Edge Road and polyfluoroalkyl substances (PFAS) in the Hinesburg Highway Garage water supply. In June 2021, vinyl chloride and manganese exceeded the VGES in bedrock monitoring well MW-3D, downgradient of the landfill. A Site Investigation conducted by Stone in 2021 included the installation of additional monitoring wells, as well as point-of-entry treatment (POET) systems at 152 Forest Edge and the Hinesburg Highway Garage. Based on Site Investigation results, Stone provided a recommendation for semi-annual groundwater monitoring.

Groundwater monitoring fieldwork was completed from May 11 through June 9, 2022. Six monitoring wells were sampled and analyzed for PFAS, volatile organic compounds (VOCs), total metals, sodium, chloride, and chemical oxygen demand. Drinking water supply samples were collected from three locations including 152 Forest Edge Road, 56 Forest Edge Road/685 Beecher Hill Road, and Hinesburg Town Garage. Drinking water was analyzed for VOCs and PFAS. Surface water was monitored for physiochemical parameters upstream and downstream of the landfill.

Based on the results of the spring 2022 groundwater monitoring, Stone presents the following conclusions:

- PFHpA, PFHxS, and/or PFOA were detected in groundwater above their respective VGES in monitoring wells MW-3S, MW-3D, and MW-4S. Total regulated PFAS exceed VGES in each of these wells.
  - The monitoring wells with PFAS exceedances are located hydraulically downgradient from the landfill.

  - The downward hydraulic flow component from the overburden to bedrock aquifer, the steep overburden hydraulic gradient, and the lack of a confining layer (overburden soils consisted of sand and gravel) is allowing the leachate contamination to migrate significantly from the landfill. The extent of migration has not been defined to the southeast.
- Arsenic was detected above the VGES concentrations within groundwater collected from monitoring wells MW-2S, MW-3S, MW-3D and MW-4S. Manganese exceeded the VGES in MW-1R, MW-2S, MW-3S, and MW-3D.
  - The generally reducing groundwater environment observed surrounding the landfill may be driving reductive dissolution of heavy metals from landfill material or from native soils. Reducing conditions were not observed in MW-4D and this location did not have any total metal exceedances. Reducing conditions were not observed in MW-3S, however other leachate indicator parameters were detected in MW-3S, and total metals exceedances in MW-3S are likely related to heavy metals in the landfill material.
  - Manganese was detected in the upgradient well MW-1R where reducing conditions were present, however manganese concentrations increase downgradient of landfill.
- Chloride concentrations in groundwater samples ranged between below laboratory reporting limits (<5,000 µg/L; MW-1) to 35,600 µg/L (MW-3D). Sodium concentrations in groundwater ranged from 2,840 µg/L (MW-2S) to 75,400 µg/L (MW-3D).
  - Based on chloride and sodium concentrations, it appears that leachate is migrating from the landfill in both a southern and southeastern direction, where the bedrock aquifer southeast of the landfill has the highest concentrations of leachate indicator parameters.
- COD in groundwater was below laboratory reporting limits for all samples, except for the field duplicate collected at MW-4D (241 mg/L).
  - The relatively low COD concentrations are consistent with a mature closed landfill.
- Drinking water supply well, Hinesburg Highway Garage, has PFOA and total regulated PFAS concentrations above the DWHA/VGES. The PFAS contamination appears to be migrating through the bedrock aquifer in transmissive zones of weathered bedrock including soft seams of orange ochre (clay and sand).
  - Regulated PFAS compounds were detected in 152 Forest Edge Road and 56 Forest Edge Road water supplies below the DWHA/VGES.
  - The POET systems installed at Hinesburg Highway Garage and 152 Forest Edge Road are effective at removing monitored PFAS to below laboratory reporting limits in both the mid and effluent locations.
- No VOCs were detected above VGES concentrations in any of the groundwater samples.
- Methylene chloride was detected above the VGES in 152 Forest Edge Road drinking water supply. The source of methylene chloride has not been determined.
  - The POET system installed at 152 Forest Edge Road has breakthrough of methylene chloride below the DWHA/VGES in the mid location. Methylene chloride was not detected above the laboratory reporting limit in the effluent.
- Surface water physiochemical parameters upstream and downstream of the landfill were similar, with aerobic conditions in surface water and low conductivity. Leachate does not appear to be migrating to surface water.

Based on these data, Stone makes the following recommendations:

1. Continued semi-annual monitoring of seven monitoring wells, MW-1R, MW-2S/-2D, MW-3S/-3D, MW-4S/-4D for PFAS, VOCs, total metals including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc, chloride, sodium and COD.

    i. Monitoring well MW-2D will be rehabilitated prior to the October 2022 event.
1. Continued semi-annual monitoring of two surface water locations (upgradient and downgradient of the landfill) in Beecher Brook for physical and chemical field parameters including pH, specific conductance, temperature, DO, ORP, and turbidity.
2. Continued semi-annual monitoring of drinking water supplies including 152 Forest Edge Road, 56 Forest Edge Road/685 Beecher Hill Road, and Hinesburg Highway Garage for PFAS and VOCs.
    i. For 152 Forest Edge Road and Hinesburg Highway Garage POET systems, additional samples should be collected from the mid and effluent sample locations for PFAS and VOCs analysis.
3. Continued operations and maintenance of the POET systems.
    i. The lead carbon vessel at 152 Forest Edge Road is scheduled to be replaced, and the lag vessel will be moved to the lead.

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Cover Photo: Aerial view of closed Hinesburg landfill.

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1. Introduction

Stone Environmental, Inc (Stone) has prepared this report to summarize findings from spring 2022 semi-annual groundwater monitoring completed at the closed solid waste municipal landfill in Hinesburg, Vermont (Figure 1). The primary objective of this work was to assess groundwater and drinking water contamination related to leachate migration from the landfill. Stone has prepared this Semi-Annual Groundwater Monitoring Report on behalf of the Town of Hinesburg. Monitoring was completed in accordance with Stone's *Post Closure Plan, Town of Hinesburg, Closed Municipal Solid Waste Landfill*, dated November 18, 2021.

1.1. Site Description

The landfill is located at approximately 44.32285° north latitude and -73.07751° west longitude at an elevation of approximately 690 feet above sea level in the Town of Hinesburg, Vermont. The landfill is located on a larger 38-acre parcel owned by the Town of Hinesburg. The parcel is also the site of a Chittenden Solid Waste District (CSWD) transfer station, a Vermont Astronomical Society observatory (northeast corner, off Observatory Road), a sand and gravel pit located south of the landfill, and the Town Highway Garage located southeast of the landfill. There are several residential properties adjoining the landfill to the west, located on Forest Edge Road. Beecher Hill Brook is located approximately 550 feet east of the landfill and runs north to south.

The landfill operated from 1972 until 1988 and the landfill was closed with a permanent cap by 1992. The landfill accepted municipal solid waste from the Town of Hinesburg and the Town of Richmond.

1.2. Previous Environmental Investigations

In 1987, the Vermont Department of Environmental Conservation (VT DEC) performed a groundwater quality assessment of several onsite monitoring wells and sampled offsite water supply wells. A summary of the assessment indicated that organic and inorganic compounds were detected in various water supply wells; however, organic and inorganic compounds concentrations did not exceed relevant regulatory criteria. The groundwater assessment identified monitoring well CH28-05 as having the highest concentrations of organic and inorganic compounds. Following the groundwater quality assessment, based on the location of the landfill in a geologically sensitive area (bedrock underlying the landfill was suspected to be highly fractured), and limited future capacity of the landfill, the Town of Hinesburg agreed to permanently closed the landfill.

In 1990, a closure plan was approved for the landfill, prepared by Donald L. Hamlin, Consulting Engineers. Post-closure monitoring included semi-annual sampling of six groundwater monitoring wells, two surface water locations and six water supply wells for 20 years. The analysis in groundwater included eight dissolved metals (cadmium, chromium, copper, iron, manganese, nickel, lead, and zinc), chemical oxygen demand, chloride, pH, conductivity, and temperature. The analysis in surface water and water supply wells were the same except for total metals instead of dissolved metals. The water supply wells planned to be sampled included the following:

- T. Francis residence, drilled bedrock well (206 Forest Edge Road)
- R. Mellow residence, drilled bedrock well (It is surmised that R. Mellow residence is the same location as the Mello residence located at 182 Forest Edge Road)
- C. Imlah residence, drilled bedrock well (unknown address)
- Rolfe residence, drilled bedrock well (unknown address)
- Hinesburg Town Shed water supply, dug surface well (907 Beecher Hill Road)
- D. Smallwood residence, dug surface well fed by a spring which also serves the Hurd residence (56 Forest Edge Road and 685 Beecher Hill Road)

In 1991, the VT DEC Solid Waste Management Program performed groundwater, surface water, and nearby water supply well monitoring at the landfill. The monitoring reports are not available for review. It is our understanding that no additional monitoring of the groundwater monitoring wells occurred until 2021.

Three water supply wells located along Forests Edge Road were monitored by the Town of Hinesburg for 20 years (1988 until 2009); however, the monitoring reports are not available for review. In 2003, volatile organic compounds (VOCs), and metals analysis were added to the monitoring list. Between 2003 and 2009, methylene chloride was detected in one of three wells at concentrations below the Vermont Groundwater Enforcement Standards (VGES). Iron and manganese were detected in one of the three wells at concentrations above the secondary drinking water standards. The 2009 water supply well sampling results were available for the three water supply wells including Dinitz (152 Forest Edge Road), Hurd/Cioffori (56 Forest Edge Road and 685 Beecher Hill Road), and Hinesburg Town Garage (907 Beecher Hill Road). Methylene chloride was detected in the location Dinitz (152 Forest Edge Road).

In 2018, the Hinesburg Highway Garage had a new water supply well installed in bedrock to 245 feet. There is a Jaswell® seal installed to 210 feet with the water bearing fracture from 210 to 245 feet in limestone and soft ochre. The yield of the well was tested at 60 gallons per minute.

In 2020, Acorn Energy Solar planned to redevelop the landfill into a solar farm. Prior to the redevelopment, in July 2021, the VT DEC collected five water supply well samples, including the Turner residence (152 Forest Edge Road), the Hinesburg Highway Garage (907 Beecher Hill Road), the Dente and the Hurd/Cioffari residences (56 Forest Edge Road and 685 Beecher Hill Road, share a shallow dug well located on the Hurd/Cioffari property), the Mello residence (182 Forest Edge Road), and the Borys residence (794 Beecher Hill Road). Water supply samples were analyzed for VOCs and PFAS and results indicated exceedances of VGES for methylene chloride in the Turner residence and PFAS in the Hinesburg Highway Garage water supply.

In June 2021, Lincoln Applied Geology of Lincoln, Vermont (LAG) collected two groundwater samples from monitoring wells crossgradient and downgradient of the landfill. The monitoring wells were named arbitrarily as MW-2 and MW-5 and appeared to be screened in the bedrock (based on the closure plan from 1990, MW-2 is MW-2D and MW-5 is MW-3D). No VOCs were detected in MW-2 above laboratory reporting limits and metals were detected below VGES. Vinyl chloride and manganese exceeded the VGES in MW-5.

The VT DEC sampled additional water supply wells in September 2021 including 714 Beecher Hill Road and 413 North Road, and in October 2021 including 107 Observatory Road. There were no PFAS or VOCs detected above the laboratory reporting limit in these water supply wells.

Stone performed a Site Investigation in 2021 to assess groundwater and drinking water quality at the closed municipal solid waste landfill due to VOCs and PFAS contamination in nearby drinking water supply wells, including 152 Forest Edge Road and 907 Beecher Hill Road (Hinesburg Highway Garage). The Site Investigation also included the installation of point-of-entry treatment (POET) systems for the water supplies

at 152 Forest Edge Road and 907 Beecher Hill Road. The existing monitoring well network was expanded with two additional wells, MW-4S/MW-4D. The results of the groundwater assessment indicated perfluoroheptanoic acid (PFHpA), perfluorohexanesulfonic acid (PFHxS), and perfluorooctanoic acid (PFOA) were detected above the Vermont Groundwater Enforcement Standard (VGES) in MW-3S and MW-3D. Total regulated PFAS were measured above the VGES in monitoring wells MW-3S, MW-3D, MW-4S, and MW-4D. No VOCs were detected above the VGES in any of the groundwater samples. Arsenic was detected above the VGES in MW-2S, MW-2D, MW-3S and MW-4S and lead exceeded the VGES in MW-4D. Manganese exceeded the VGES in all monitoring wells. For drinking water, total regulated PFAS exceeded the Drinking Water Health Advisory (DWHA) level of 20 nanograms per liter (ng/L) and the VGES at 907 Beecher Hill Road (Hinesburg Highway Garage). Methylene chloride exceeded the DWHA/VGES at 152 Forest Edge Road.

2. Methods

2.1. Deviations to proposed scope of work

The following deviations of the post-closure plan occurred during the Spring 2022 monitoring:

1. The initial groundwater assessment was performed on May 11 and 18, 2022. Samples were packed on ice and delivered under chain of custody to Eurofins Test America (Eurofins) of South Burlington, Vermont in three separate coolers. The samples were shipped by Eurofins South Burlington to Eurofins New England located in Rhode Island. During shipment, two of the three coolers did not arrive at the laboratory as overnight delivery. When the two coolers did arrive four days later the samples were out of temperature (greater than 6 degrees Celsius). Stone contacted both the Town of Hinesburg and Vermont DEC Solid Waste Department on May 27, 2022 to indicated groundwater samples were received out of temperature and would be recollected on June 6 and June 9, 2022.
2. A groundwater sample was not collected from MW-2D. The bladder pump was lowered in the well on June 6, 2022 and became stuck at 111 feet below ground surface. The total depth of the well is 124 feet below ground surface. Stone attempted to retrieve the bladder pump without success. Stone plans to make a separate mobilization to retrieve the bladder pump or reinstall the monitoring well.
3. The low flow form is not available for MW-2S.
4. A field duplicate sample was not collected from well MW-4D for sodium and chloride because MW-4D went dry during sampling.
5. MW-3S was not analyzed for chloride due to laboratory oversight.

2.2. Monitoring well MW-1 Replacement

On May 4 and 6, 2022, Stone performed oversight for the reinstallation of monitoring well MW-1. MW-1 was previously gauged dry during two monitoring events (June 2021 and December 2021) and was determined to be screened above the water table. The steel protective casing was removed and the monitoring well screen and riser was removed using a drill rig. The borehole annular space was backfilled with sand.

Monitoring well MW-1 was replaced (MW-1R) and the shallow well was screened at the top of the water table. The monitoring well was installed using hollow stem auger transitioning to drive and waste techniques. The well construction is included in Table 1 below and the boring log is attached in Appendix B.

Table 1: Monitoring Well Construction

Monitoring Well	Construction Material	Screened Depth
MW-1R	2-inch PVC	37-47 feet bgs

Stone developed the newly installed well using a bailer and surged the well until clear. The purge water was contained in a 55-gallon drum pending disposal. The disposal pickup occurred on August 17, 2022.

2.3. Low Flow Groundwater Sampling

Six monitoring wells were sampled, including MW-1R, MW-2S, MW-3S/-3D, MW-4S/-4D. Groundwater samples were collected using low-flow methodology in accordance with Section III.C. of the Procedure Addressing Groundwater Quality Monitoring and response When a Groundwater Standard is reached or Exceeded at Municipal Solid Waste Landfills (the Procedure, VT DEC, 1999). Groundwater was sampled with dedicated ¼-inch outer diameter high density polyethylene (HDPE) tubing. Depth to water was measured with a water level meter, and physical and chemical field parameters (pH, specific conductance, temperature, dissolved oxygen [DO], and oxidation reduction potential [ORP]) were measured using a calibrated multi-parameter water quality meter equipped with a flow-through cell system. Turbidity was measured using a standalone turbidity meter. The monitoring wells were purged until the following parameters had stabilized:

- pH ± 0.1 unit
- Specific Conductance ± 3%
- ORP ± 10 mV
- DO ± 10%, or 3 consecutive readings below 0.5 mg/L
- Temperature ± 3%
- Turbidity ± 10%, or 3 consecutive readings below 5.0 nephelometric turbidity units (NTU)

Following stabilization, the groundwater samples were collected into pre-preserved laboratory- supplied bottle ware, placed in an ice-filled cooler and transported under chain of custody protocols to Eurofins. Groundwater samples were analyzed for the parameters listed in Section III.D(2) of the Procedure including chemical oxygen demand (COD) by EPA method 410.4, VOCs by EPA method 8260, sodium and chloride by EPA method 6010/6020 and Standard Methods 4500-CL-B, respectively, and total metals including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc by EPA method 6010/6020 and 7470 (for mercury). Additionally, the monitoring wells were analyzed for PFAS by method 537.1 modified with isotope dilution and including a 24-compound list.

2.4. Water Supply Well and POET Sampling

Drinking water supply samples were collected from three locations including 152 Forest Edge Road, 56 Forest Edge Road/685 Beecher Hill Road, and Hinesburg Town Garage located at 907 Beecher Hill Road.

For 56 Forest Edge Road/685 Beecher Hill Road, the drinking water sample was collected from the kitchen sink of 56 Forest Edge Road because the pressure tank could not be accessed. Previously the sample was reported to be collected from the dug well located on 685 Beecher Hill Road, however the property owners were not home at 685 Beecher Hill Road to grant access. The water was purged for 10 minutes prior to sample collection.

The water supplies at 152 Forest Edge Road and Hinesburg Town Garage are treated with point-of-entry treatment systems (POET) installed by Culligan Water Technologies (Culligan) of Colchester, Vermont.

Three water samples were collected per POET: a sample pre-treatment, a sample post-treatment, and a sample from between the carbon filters.

Drinking water samples were collected in appropriate containers, placed in an ice-filled cooler, and transported under chain of custody procedures to Eurofins Environment Testing America. Drinking water samples were analyzed for VOCs by EPA method 524.2 and PFAS by method 537.1 modified with isotope dilution and including a 24-compound list.

2.5. Surface Water Monitoring

Surface water parameters were measured at two locations within Beecher Brook, including SW-1 (upstream) and SW-2 (downstream). Surface water was measured for physical and chemical field parameters including pH, specific conductance, temperature, DO, ORP, and turbidity.

2.6. Investigation Derived Waste

Investigation derived wastes (IDW) generated during the post-closure monitoring include purge water, tubing, decontamination fluids, and personal protective equipment such as gloves. Solid IDW was disposed of as municipal waste. All purge water generated during the post-closure monitoring was contained in a DOT approved 55-gallon drum on-site. The 55-gallon drum was picked up for disposal on August 17, 2022 and the waste manifest will be submitted under separate cover.

3. Results

Analytical results are summarized in the following tables located in Appendix C. Laboratory analytical reports are provided as Appendix D.

- Table C-1: Groundwater PFAS Analytical Results
- Table C-2: Groundwater VOC Analytical Results
- Table C-3: Groundwater Metals Analytical Results
- Table C-4: Groundwater Wet Chemistry Analytical Results
- Table C-5: Drinking Water PFAS Analytical Results
- Table C-6: Drinking Water VOC Analytical Results
- Table C-7 through C-15: Time Series Analytical Results

3.1. Relevant Regulatory Criteria

Stone compared analytical results to the following relevant regulatory criteria:

- Groundwater: Vermont Groundwater Enforcement Standards (VGES), July 2019.
- Drinking Water: Vermont Department of Health Drinking Water Health Advisory (VTDOH DWHA), May 2019.
- Vermont Department of Environmental Conservation Environmental Protection Rules Chapter 21, Water Supply Rule March 17. 2020

3.2. Soil Assessment

Soils consisted of fine to coarse sand with some trace silt and gravel. A large boulder of gray and white quartz-sericite-chlorite was encountered during the installation of MW-1R from 36 to 40 feet bgs. Moist, red mottled sands were observed at 31 feet and 32 feet above the boulder.

3.3. Potentiometric Surface

Elevation of potentiometric surface in overburden monitoring wells relative to mean sea level, ranged between 641.38 feet (MW-1R) to 566.09 feet (MW-3S) as measured on May 11 and June 7 and 9, 2022. Direction of overburden groundwater flow is inferred to be generally to the southeast at an approximately 5.4% hydraulic gradient. Elevation of potentiometric surface in bedrock monitoring wells relative to mean sea level, ranged between 564.16 feet (MW-2D) to 544.41 feet (MW-3D) as measured on June 7 and June 9, 2022. Direction of bedrock groundwater flow is generally to the southeast at an approximately 2.8% hydraulic gradient. The bedrock aquifer may be influenced by fractures oriented in a different direction than to the southeast, as well as use of nearby water supply wells. Table 2 below represents the calculated groundwater elevations. The groundwater potentiometric surfaces in the overburden aquifer and the bedrock aquifer are shown in Figures 4 and 5, respectively.

Table 2: Groundwater Elevations, Spring 2022

Location ID	Date of Measurement	Top of Casing Elevation (feet)	Depth to Water (feet, TOC)	Water Table Elevation (feet)
MW-1R	June 7, 2022	676.51	35.13	641.38
MW-2S	--	658.79	--	--
MW-3S	May 11, 2022	598.25	32.16	566.09
MW-4S	June 7, 2022	624.35	37.84	586.51
MW-2D	June 7, 2022	656.02	91.86	564.16
MW-3D	June 9, 2022	596.17	51.76	544.41
MW-4D	June 7, 2022	623.17	70.78	552.39

3.4. Groundwater Quality Results

3.4.1. Physiochemical Parameters

The physiochemical properties measured at the end of low flow purging on May 11, June 7, and June 9, 2022 are presented in Table 3, below:

Table 3: Physical and Chemical Parameters, Spring 2022

Location	Temperature (°C)	pH (s.u.)	DO (mg/L)	ORP (mV)	Conductivity (µS)	Turbidity (NTU)
MW-1R	15.1	8.54	1.16	-116.9	132.5	283
MW-2S	--	--	--	--	--	--
MW-3S	12.7	6.70	0.10	44.0	963	29.7
MW-3D	12.7	6.79	0.18	-1.1	1760	7.39
MW-4S	12.7	5.99	0.39	-9.8	1416	8.15
MW-4D	12.0	7.19	2.19	53.4	547.3	88.0

Notes: °C – Degrees Centigrade; µs/cm – micro Siemens per centimeter; s.u. – standard units; mg/L – milligrams per liter; mV – millivolts; NTU – Nephelometric turbidity units.

Measured ORP values varied between -116.9 mV in MW-1R to 53.4 in MW-4D. DO values were low, except for MW-1R and MW-4D (less than 0.5 mg/L). Results are consistent with previous sampling where both MW-3S and MW-4D physiochemical parameters have an oxidizing environment and the remainder of the wells have reducing environments.

3.4.2. Per- and Polyfluoroalkyl Substances

PFHpA, PFHxS, and PFOA were detected in groundwater above their respective VGES in monitoring wells MW-3S and MW-3D. PFOA was detected above the VGES in monitoring well MW-4S. Total regulated PFAS (the sum of PFHpA, PFHxS, perfluorononanoic acid [PFNA], perfluorooctanesulfonic acid [PFOS] and PFOA) were detected above the VGES in monitoring wells MW-3S, MW-3D, and MW-4S. PFAS exceedances are summarized in Table 4, below. Regulated PFAS detections were below the VGES in MW-1R, MW-2S, and MW-4D.

Table 4: Regulated PFAS Exceedances in Groundwater, Spring 2022

Location	PFHpA	PFHxS	PFNA	PFOS	PFOA	Total Regulated PFAS
MW-1R	1.61 U	1.61 U	1.61 U	1.61 U	1.61 U	1.61 U
MW-2S	1.85 U	1.85 U	1.85 U	1.85 U	**6.04**	**6.04**
MW-3S	**8.07**	**4.08**	1.88 U	**1.97**	**31.7**	**45.8**
MW-3D	**42.1**	**25.8**	1.83 U	**4.78**	**119**	**192**
MW-4S	**8.75**	**3.31**	1.65 U	1.65 U	**24.2**	**36.3**
MW-4D	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
VGES (ng/L)	20	20	20	20	20	20

Notes: VGES – Vermont Groundwater Enforcement Standards; All results reported in nanograms per liter (ng/L); U – Analyte not detected, laboratory reporting limit provided; Bold- indicates the parameter was detected at or above the laboratory reporting limit; shaded cells indicate exceedance of the VGES, Total regulated PFAS - the sum of PFHpA, PFHxS, PFNA, PFOS and PFOA

3.4.3. Volatile Organic Compounds

No VOCs were detected above VGES concentrations in any of the groundwater samples collected during the spring 2022 sampling event. Benzene was detected below the VGES in MW-3D. Benzene and chlorobenzene were detected below their respective VGES standards in MW-4S. No regulated VOCs were detected above laboratory reporting limits for MW-1R, MW-2S, MW-3S, and MW-4D.

3.4.4. Total Metals

Arsenic was detected above the VGES concentrations within groundwater collected from monitoring wells MW-1R, MW-2S, MW-3S, MW-3D and MW-4S. Manganese was detected above the VGES in MW-1R, MW-2S, MW-3S, and MW-3D. Lead was detected below the VGES in MW-1R. Arsenic, lead, and manganese concentrations in groundwater are summarized in Table 5, below. Several other metals were detected below the VGES in groundwater samples, including chromium, copper, and nickel. Sodium, zinc, and iron were detected in groundwater samples, but do not have an established VGES.

Table 5: Total Metals Exceedances in Groundwater, Spring 2022

Location	Arsenic	Lead	Manganese
MW-1R	**7.1**	**10.4**	**308**
MW-2S	**136**	15 U	**1,010**
MW-3S	**36**	15 U	**2,930**
MW-3D	**14**	7.5 U	**2,340**
MW-4S	**201**	7.5 U	**201**
MW-4D	**4**	7.5 U	**227**
VGES (µg/L)	10	15	300

Notes: VGES – Vermont Groundwater Enforcement Standards; all results reported in micrograms per liter (µg/L); U – Analyte not detected, laboratory reporting limit provided; Bold- indicates the parameter was detected at or above the laboratory reporting limit; shaded cells indicate exceedance of the VGES.

3.4.5. Chloride

Chloride concentrations in groundwater samples ranged between below laboratory reporting limits (<2,000 micrograms per liter [µg/L]; MW-1R) to 35,600 µg/L (MW-3D). There is currently no VGES for chloride.

3.4.6. Chemical Oxygen Demand

COD in groundwater samples were below laboratory reporting limits (75 mg/L) in all sampled wells, except for a COD value of 241 mg/L for the field duplicate collected from MW-4D. There is currently no VGES for COD.

3.5. Water Supply Well Results

3.5.1. Per- and Polyfluoroalkyl Substances

PFAS including PFOA and the sum of the five regulated compounds exceeded the 20 ng/L DWHA/VGES in the influent sample collected from 907 Beecher Hill Road (Hinesburg Highway Garage). PFAS were detected below the DWHA/VGES in the 152 Forest Edge Road influent sample. All PFAS compounds were below laboratory reporting limits in samples collected between the carbon filters (mid) and following complete POET system treatment (effluent) for both locations. PFAS were detected below the DWHA/VGES in the 56 Forest Edge Road sample.

PFAS concentrations in drinking water samples are summarized in Table 6, below.

Table 6: Regulated PFAS Exceedances in Drinking Water, Spring 2022

Location	Sample ID	PFHpA	PFHxS	PFNA	PFOS	PFOA	Total Regulated PFAS
Hinesburg Highway Garage	907 Beecher-INF	**9.89**	**6.66**	1.62 U	1.62 U	**29.2**	**45.8**
	907 Beecher-MID	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U
	907 Beecher-EFF	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U
Turner Residence	152 Forest Edge Rd-INF	**2.70**	1.88 U	1.88 U	1.88 U	**2.69**	**5.39**
	152 Forest Edge Rd-MID	1.88 U	1.88 U	1.88 U	1.88 U	1.88 U	1.88 U
	152 Forest Edge Rd-EFF	1.78 U	1.78 U	1.78 U	1.78 U	1.78 U	1.78 U
	56 Forest Edge Rd	1.68 U	1.68 U	1.68 U	**4.46**	**3.35**	**7.81**
DWHA (ng/L)		20	20	20	20	20	20

Notes: DWHA – Drinking Water Health Advisory; All results reported in nanograms per liter; U – Analyte not detected, laboratory reporting limit provided; Bold- indicates the parameter was detected at or above the laboratory reporting limit; shaded cells indicate exceedance of the VGES, Total regulated PFAS - the sum of PFHpA, PFHxS, PFNA, PFOS and PFOA

3.5.2. Volatile Organic Compounds

Methylene chloride exceeded the DWHA/VGES in the influent of the 152 Forest Edge Road POET treatment system. Methylene chloride was detected above the laboratory reporting limit between the carbon filters (mid) at 152 Forest Edge Road at a concentration of 4.33 µg/L, however, was not detected above the

laboratory reporting limit in the effluent location. Methyl tert-butyl ether was detected below the DWHA/VGES in the influent sample from 907 Beecher Hill Road. All VOCs at the 907 Beecher Hill Road location were below laboratory reporting limits in samples collected between the carbon filters and following complete POET system treatment for both locations.

No regulated VOCs were detected in the drinking water sample collected at 56 Forest Edge Road. Several VOCs without established DWHA/VGES were detected in drinking water samples, including chloroform, ethyl ether, freon 12, and tetrahydrofuran.

VOC detections in drinking water samples are summarized in Table 7, below.

Table 7: Regulated VOC Detections in Drinking Water, Spring 2022

Sample ID	Chloroform	Ethyl Ether	Methylene Chloride	Tetrahydrofuran	Freon 12	Methyl tert-butyl ether
907 Beecher-INF	0.5 U	**8.23**	0.5 U	**19**	**2.84**	**0.909**
907 Beecher-MID	0.5 U	0.5 U	0.5 U	7.0 U	0.5 U	0.5 U
907 Beecher-EFF	0.5 U	0.5 U	0.5 U	7.0 U	0.5 U	0.5 U
152 Forest Edge Rd-INF	0.5 U	**6.95**	**11.8**	**16.6**	0.5 U	0.5 U
152 Forest Edge Rd-MID	0.5 U	0.5 U	**4.33**	7.0 U	0.5 U	0.5 U
152 Forest Edge Rd-EFF	0.5 U	0.5 U	0.5 U	7.0 U	0.5 U	0.5 U
56 Forest Edge Rd	**0.662**	0.5 U	0.5 U	7.0 U	0.5 U	0.5 U
DWHA (ng/L)	NE	NE	5.0	NE	NE	11.0

Notes: DWHA – Drinking Water Health Advisory; All results reported in nanograms per liter; U – Analyte not detected, laboratory reporting limit provided; Bold- indicates the parameter was detected at or above the laboratory reporting limit; shaded cells indicate exceedance of the VGES; NE – standard not established.

3.6. Surface Water Results

3.6.1. Physiochemical Parameters

The physiochemical properties measured for surface waters in Beecher Brook on May 11, 2022 are presented in Table 7, below:

Table 8: Physical and Chemical Parameters of Surface Waters, Summer 2022

Location	Temperature (°C)	pH (s.u.)	DO (mg/L)	ORP (mV)	Conductivity (µS)	Turbidity (NTU)
SW-1	15.1	6.82	9.76	121	0	3.80
SW-2	15.9	7.03	9.96	119	0	2.70

Notes: °C – Degrees Centigrade; µs/cm – micro Siemens per centimeter; s.u. – standard units; mg/L – milligrams per liter; mV – millivolts; NTU – Nephelometric turbidity units.

3.7. Quality Assurance Summary

3.7.1. Field Duplicates

Field duplicate samples were collected for groundwater and drinking water samples during the semi-annual groundwater monitoring field work. Field duplicate sample results are summarized along with the analytical data in Appendix C.

To assess precision of the analytical results, relative percent difference (RPD) values were calculated for each primary-duplicate sample pair using the following formula:

$$RPD = \frac{|C_1 - C_2|}{\frac{C_1 + C_2}{2}} \times 100$$

Where: C1 = Concentration of a given target analyte in the Primary Sample, and

C2 = Concentration of a given target analyte in the Field Duplicate sample

A field duplicate groundwater sample was collected from monitoring well MW-4D. The RPD for Freon 12, the only detected VOC, was 2%. RPDs for total metals in groundwater ranged from 19% for manganese to 61% for iron. RPDs for groundwater PFAS, chloride, and COD could not be calculated since analytes were not detected above laboratory reporting limits in the primary-duplicate sample pair. RPD values for iron and copper exceed the EPA acceptance criteria of 30% for aqueous samples. During collection of the MW-4D-FD field duplicate sample for metals analysis, turbidity increased because the well was purging dry. The metals sample for the primary-field duplicate pair was heterogeneous. Metals did not exceed the VGES in MW-4D and the data is still considered usable.

A field duplicate drinking water sample was collected from the influent water at the 907 Beecher Hill Road POET system. RPDs for VOCs ranged from 1% for ethyl ether, Freon 12, and tetrahydrofuran to 7% for methyl tert-butyl ether. RPDs for PFAS ranged from 1% for PFHxS to 5% for perfluorohexanoic acid (PFHxA). All drinking water RPDs were within the EPA acceptance criteria of 30% for aqueous samples.

3.7.2. Trip Blanks

One trip blank was included for the June 2019 shipment submitted to the laboratory for VOC analysis. VOCs were not detected in the trip blank. A trip blank was not included with the May 2019 shipment.

3.7.3. Field Reagent Blank

A field reagent blank for PFAS analysis was collected from 907 Beecher Hill Road. PFAS were not detected above the laboratory reporting limit in the field reagent blank.

3.7.4. Equipment Blank

An equipment was collected from the bladder pump following decontamination procedures for VOCs, PFAS, metals, and COD analysis. The only compound that was detected above laboratory reporting limits in the equipment blank was sodium, likely due to the water source used to collect the sample.

3.7.5. Hold Time

Sample MW-3S was prepared outside of hold time for PFAS analysis. The sample was prepared on June 8, 2022 and the sample was collected on May 11, 2022, where hold time is 14 days for the analysis. The sample results for PFAS were similar to the December 2021 results and the data is considered usable.

4. Conceptual Site Model

The following Conceptual Site Model (CSM) provides a set of working hypotheses that describe key aspects of the landfill. The CSM includes a discussion of the physical, geologic, and hydraulic attributes of the landfill and surrounding area, how chemicals were released at the landfill, their transport pathways, fate mechanisms, and potential routes of exposure to ecological and human receptors. The CSM provides the context from which the site investigation and long-term environmental monitoring is developed and a framework to make sound Site management decisions.

4.1. Geology

According to the Bedrock Geologic Map of Vermont (Ratcliffe, et al., 2011), bedrock at the landfill is mapped as phyllite described as light-gray to light-green, quartz-sericite-chlorite. According to the Wehran Enviro Tech 1990 Landfill Assessment, the landfill is located near a fault line known as the Hinesburg Thrust Fault. The thrust fault consists of eastern foliated metamorphic schists and phyllites of the Green Mountains thrust to the west over the Champlain lowland and generally unfoliated dolomites and limestone.

During a geophysical investigation performed by Wehran Enviro Tech in 1990, the seismic refraction data shows approximate depths to bedrock increasing from the northwest to the southeast beneath the landfill, with the shallowest bedrock at approximately 18 feet below ground surface (bgs) in the northwest portion and the deepest bedrock at approximately 58 feet bgs in the southeast portion of the landfill. Additionally, significant changes in depth to bedrock was observed on a northern transect, trending west to east, suggesting a buried cliff or sharp drop off beneath the landfill. Lastly, there maybe two different bedrock types beneath the landfill or a fractured/weather rock unit on the western portion of the landfill.

During monitoring well installation performed by Wehran Enviro Tech in 1990, depth to bedrock was observed in MW-3D at 69 feet bgs, located southeast of the landfill. Bedrock was described as grayish very thinly foliated decomposed phyllite with some quartz rock fragments and weather dolostone. The Hinesburg Town Highway Garage water supply well installed in 2018 by Vermont Well & Pump is located north of the garage building and southeast of the landfill. Depth to bedrock was observed at 28 feet bgs and was described as gray limestone with intermitted soft seams of orange ochre (clay and sand) to 245 feet. During the SI, depth to bedrock was observed at 60 feet in MW-4D south of the landfill and described as foliated phyllite.

According to the Surficial Geologic Map of Vermont (Doll, Ed., 1970), soils at the Site are predominantly sand and gravel, with minor silt and cobble. The soil deposit is a kame terrace with predominantly well-draining permeable sands and gravels. During monitoring well installation performed by Wehran Enviro Tech in 1990, surficial soils were observed as gravel and sand fining downwards and becoming very dense with trace silt at 35 feet bgs. Silt was observed at 65 feet bgs above bedrock southeast of the landfill and west of the landfill. During this SI, soils were observed as fine to medium sand with stratified layering of angular, sub rounded and rounded sands with some trace silt and gravel. During the re-installation of MW-1, soils were observed as fine sand with layers of coarser sand and gravel with denser sands encountered at 46 feet bgs.

4.2. Hydrogeology

The topography at the Site slopes to the southeast. Beecher Brook crosses the eastern and southeastern portion of the Site. The overburden groundwater flow direction is to the south-southeast towards the Beecher Brook. The bedrock groundwater flow direction was computed with three monitoring wells, where there may be a southwesterly component to groundwater flow direction in the bedrock aquifer not represented by the current monitoring well network.

There is likely a regional component of groundwater flow in bedrock that is recharged primarily from the Green Mountain highland areas east of the landfill. A portion of recharge to the bedrock aquifer will be local and occur when precipitation infiltrates into the landfilled materials, producing landfill leachate, and then recharges the overburden groundwater and with a downward flow component, as observed between overburden and bedrock groundwater elevations, percolate into open fractures, bedding planes, or other features in the bedrock surface. Weathered bedrock consisting of a clay like material with ochre color was observed in the Hinesburg Highway Garage water supply well and may act as a preferential pathway for landfill leachate to migrate.

4.3. Contaminant Sources, Distribution, Fate and Transport

4.3.1. Leachate Indicator Parameters

Leachate indicator parameters including chloride and sodium were detected at high concentrations in the overburden and bedrock aquifer south and southeast of the landfill. Chloride and sodium were at lower concentrations in the upgradient well MW-1R and west of the landfill. It appears that leachate is migrating from the landfill in both a southern and southeastern direction, and the bedrock aquifer southeast of the landfill has the highest concentrations of leachate indicator parameters.

4.3.2. VOCs

VOCs are in the bedrock groundwater southeast and southwest of the landfill including vinyl chloride and methylene chloride, respectively. Additionally, diethyl ether and tetrahydrofuran were detected in two bedrock water supply wells, one located southwest of the landfill, and one located southeast of the landfill. It should be noted that vinyl chloride was not detected in groundwater during the June 2022 event.

Vinyl chloride is a chlorinated solvent and is produced by reductive dechlorination of tetrachloroethylene and trichloroethylene in anaerobic groundwater conditions. The sources of chlorinated solvents may be from automotive service garages using chlorinated solvents as degreasers or from dry cleaners using chlorinated solvents as a solvent to clean stains on clothing. It is unknown if the landfill accepted waste from either automotive service garages or dry cleaners. Once released to the environment, chlorinated solvents are typically sorbed to soil and organic matter, have moderate to low aqueous solubility, and generally biodegrade only under anaerobic conditions. Under aerobic conditions, degradation generally occurs very slowly. Following release, migration of liquids through the vadose zone will be dictated by even small variations in grain size, pore diameters, and saturation. When the water table is encountered, CVOCs are susceptible to further horizontal spreading. Vertical spreading may occur based on whether there is a downward flow component. Vinyl chloride has not been detected in any of the water supply wells near the landfill and appears to be limited to the bedrock groundwater immediately adjacent to the landfill.

Methylene chloride is used in many different industries including paint stripping, pharmaceutical manufacturing, paint remover manufacturing, and metal cleaning and degreasing. Municipal solid waste accepted at the landfill may have included methylene chloride within small containers. Once released to the

environment, methylene chloride will migrate to groundwater. Methylene chloride is not readily biodegradable but has been shown to biodegrade over a range of rates under aerobic and anaerobic conditions (EPA, 2017). Methylene chloride has been detected in one water supply well southwest of the landfill but has not been detected in the overburden or bedrock aquifer adjacent to the landfill. It appears there is a data gap in the monitoring well network adjacent to the landfill due to a lack of methylene chloride detection or methylene chloride is emanating from a different source not associated with the landfill.

Other compounds detected near the landfill are diethyl ether and tetrahydrofuran. Diethyl ether is a used as an inhalation anesthetic, a refrigerant, in diesel fuels, in dry cleaning, as an extractant and tetrahydrofuran is used as a solvent.

4.3.3. PFAS

PFAS have been produced on a commercial scale since the 1950s. Landfills are sources of PFAS because they accept consumer products treated with hydrophobic, stain resistant coatings that contain PFAS. Given the production timeline of PFAS, consumers products landfilled since the 1950s are potential sources to the environment (ITRC, 2020). Municipal solid waste accepted at the Hinesburg landfill between 1972 until 1988 may have potentially contained consumer goods contaminated with PFAS. In addition, the Hinesburg landfill may have accepted sewage sludge from Hinesburg's and Richmond's wastewater treatment plant that may have contained PFAS. It is unknown if is the landfill accepted industrial waste.

PFAS are in the overburden and bedrock groundwater southeast, south and southwest of the landfill. Once PFAS enters the subsurface environment, the longer chain compounds may preferentially sorb to organic carbon in the saturated zone and the shorter chain compounds dissolve in groundwater. It would be expected to see the shorter chain compounds at the leading edge of a dissolved phase plume, both horizontally and vertically. In addition, the terminal sulfonate compounds tend to adsorb more strongly than the terminal carboxylates compounds of equal chain length (ITRC, 2020).

PFAS detected in bedrock groundwater southeast of the landfill include perfluorobutanoic acid (PFBA), perfluoropentanoic acid (PFPeA), perfluorobutanesulfonic acid (PFBS), perfluorohexanoic acid (PFHxA), PFHpA, perfluorohexanesulfonic acid (PFHxS), and PFOA. Most of the PFAS detected southeast of the landfill are short chain terminal carboxylates. Only short chain terminal carboxylates were detected in bedrock groundwater southwest of the landfill including PFBA, PFHpA, PFHxA, PFOA, and PFPeA, indicating that the leading edge of the plume maybe near the Turner Residence located at 152 Forest Edge Road.

Overburden and bedrock groundwater adjacent to the landfill and closer to the source area included the terminal sulfonate compounds, PFOS, and fluorotelomer PFAS including 6:2 fluorotelomer sulfonic acid (6:2 FTS, intermediate environmental transformation product).

4.3.4. Total Metals

The generally reducing groundwater environment observed surrounding the landfill may be driving reductive dissolution of arsenic, manganese, and iron from landfill material or from native soils. The highest concentrations of arsenic were observed in the overburden groundwater south of the landfill, the highest concentrations of manganese were observed in the overburden and bedrock groundwater southeast of the landfill and iron concentrations were relatively similar west, south and southeast of the landfill. It should be noted that reductive conditions were detected upgradient of the landfill at MW-1R and elevated concentrations of manganese were detected above VGES. Manganese concentrations generally increase downgradient of the landfill.

4.4. Sensitive Receptors Evaluation

VOCs and PFAS contamination near the landfill has been evaluated for its potential to adversely affect sensitive receptors. Table 9 presents the potentially affected media, pathways, and receptors.

Table 9: Sensitive Receptors Evaluation

Potentially Affected Media	Potential Pathways	Sensitive Receptors/ Potential Risk
Surface Water	Overland flow of stormwater runoff and groundwater discharge	Beecher Brook / Low, aerobic conditions were detected in Beecher Brook
Surface Soil	Direct contact to contaminated materials	Site users/ Low- the landfill cap prevents direct contact with surface soils
Sub Surface Soil	Leaching or mixing of contaminants	Groundwater/ High
Groundwater	Advection of contaminated groundwater plume	Groundwater Users/ High

5. Conclusions and Recommendations

Based on the results of the spring 2022 groundwater monitoring, Stone presents the following conclusions:

- PFHpA, PFHxS, and/or PFOA were detected in groundwater above their respective VGES in monitoring wells MW-3S, MW-3D, and MW-4S. Total regulated PFAS exceed VGES in each of these wells.
  - The monitoring wells with PFAS exceedances are located hydraulically downgradient from the landfill.
  - The downward hydraulic flow component from the overburden to bedrock aquifer, the steep overburden hydraulic gradient, and the lack of a confining layer (overburden soils consisted of sand and gravel) is allowing the leachate contamination to migrate significantly from the landfill. The extent of migration has not been defined to the southeast.
- Arsenic was detected above the VGES concentrations within groundwater collected from monitoring wells MW-2S, MW-3S, MW-3D and MW-4S. Manganese exceeded the VGES in MW-1R, MW-2S, MW-3S, and MW-3D.
  - The generally reducing groundwater environment observed surrounding the landfill may be driving reductive dissolution of heavy metals from landfill material or from native soils. Reducing conditions were not observed in MW-4D and this location did not have any total metal exceedances. Reducing conditions were not observed in MW-3S, however other leachate indicator parameters were detected in MW-3S, and total metals exceedances in MW-3S are likely related to heavy metals in the landfill material.
  - Manganese was detected in the upgradient well MW-1R where reducing conditions were present, however manganese concentrations increase downgradient of landfill.
- Chloride concentrations in groundwater samples ranged between below laboratory reporting limits (<5,000 µg/L; MW-1) to 35,600 µg/L (MW-3D). Sodium concentrations in groundwater ranged from 2,840 µg/L (MW-2S) to 75,400 µg/L (MW-3D).
  - Based on chloride and sodium concentrations, it appears that leachate is migrating from the landfill in both a southern and southeastern direction, where the bedrock aquifer southeast of the landfill has the highest concentrations of leachate indicator parameters.
- COD in groundwater was below laboratory reporting limits for all samples, except for the field duplicate collected at MW-4D (241 mg/L).
  - The relatively low COD concentrations are consistent with a mature closed landfill.
- Drinking water supply well, Hinesburg Highway Garage, has PFOA and total regulated PFAS concentrations above the DWHA/VGES. The PFAS contamination appears to be migrating through the bedrock aquifer in transmissive zones of weathered bedrock including soft seams of orange ochre (clay and sand).
  - Regulated PFAS compounds were detected in 152 Forest Edge Road and 56 Forest Edge Road water supplies below the DWHA/VGES.
  - The POET systems installed at Hinesburg Highway Garage and 152 Forest Edge Road are effective at removing monitored PFAS to below laboratory reporting limits in both the mid and effluent locations.

- No VOCs were detected above VGES concentrations in any of the groundwater samples.
- Methylene chloride was detected above the VGES in 152 Forest Edge Road drinking water supply. The source of methylene chloride has not been determined.
  - The POET system installed at 152 Forest Edge Road has breakthrough of methylene chloride below the DWHA/VGES in the mid location. Methylene chloride was not detected above the laboratory reporting limit in the effluent.
- Surface water physiochemical parameters upstream and downstream of the landfill were similar, with aerobic conditions in surface water and low conductivity. Leachate does not appear to be migrating to surface water.

Based on these data, Stone makes the following recommendations:

1. Continued semi-annual monitoring of seven monitoring wells, MW-1R, MW-2S/-2D, MW-3S/-3D, MW-4S/-4D for PFAS, VOCs, total metals including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc, chloride, sodium and COD.
   i. Monitoring well MW-2D will be rehabilitated prior to the October 2022 event.
2. Continued semi-annual monitoring of two surface water locations (upgradient and downgradient of the landfill) in Beecher Brook for physical and chemical field parameters including pH, specific conductance, temperature, DO, ORP, and turbidity.
3. Continued semi-annual monitoring of drinking water supplies including 152 Forest Edge Road, 56 Forest Edge Road/685 Beecher Hill Road, and Hinesburg Highway Garage for PFAS and VOCs.
   i. For 152 Forest Edge Road and Hinesburg Highway Garage POET systems, additional samples should be collected from the mid and effluent sample locations for PFAS and VOCs analysis.
4. Continued operations and maintenance of the POET systems.
   i. The lead carbon vessel at 152 Forest Edge Road is scheduled to be replaced, and the lag vessel will be moved to the lead.

6. References

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Appendix A: Figures

LEGEND

Site Boundary

Figure 1: Location Map

Hinesburg Landfill Spring 2022
Semi-Annual Monitoring Report

Prepared for Town of Hinesburg

STONE ENVIRONMENTAL

Source: Esri World Imagery, VCGI
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 1 - Location Map Exported: 8/17/2022 11:09 AM by swalser

LEGEND

- Site Boundary
- Property Boundary
- Waterbody
- Hazardous Waste Sites
- Hazardous Waste Generators

Public Water Sources
- Inactive

Private Wells
- GPS Location
- screen digitized
- E911 Address
- Unknown

N 0 250 500
Feet

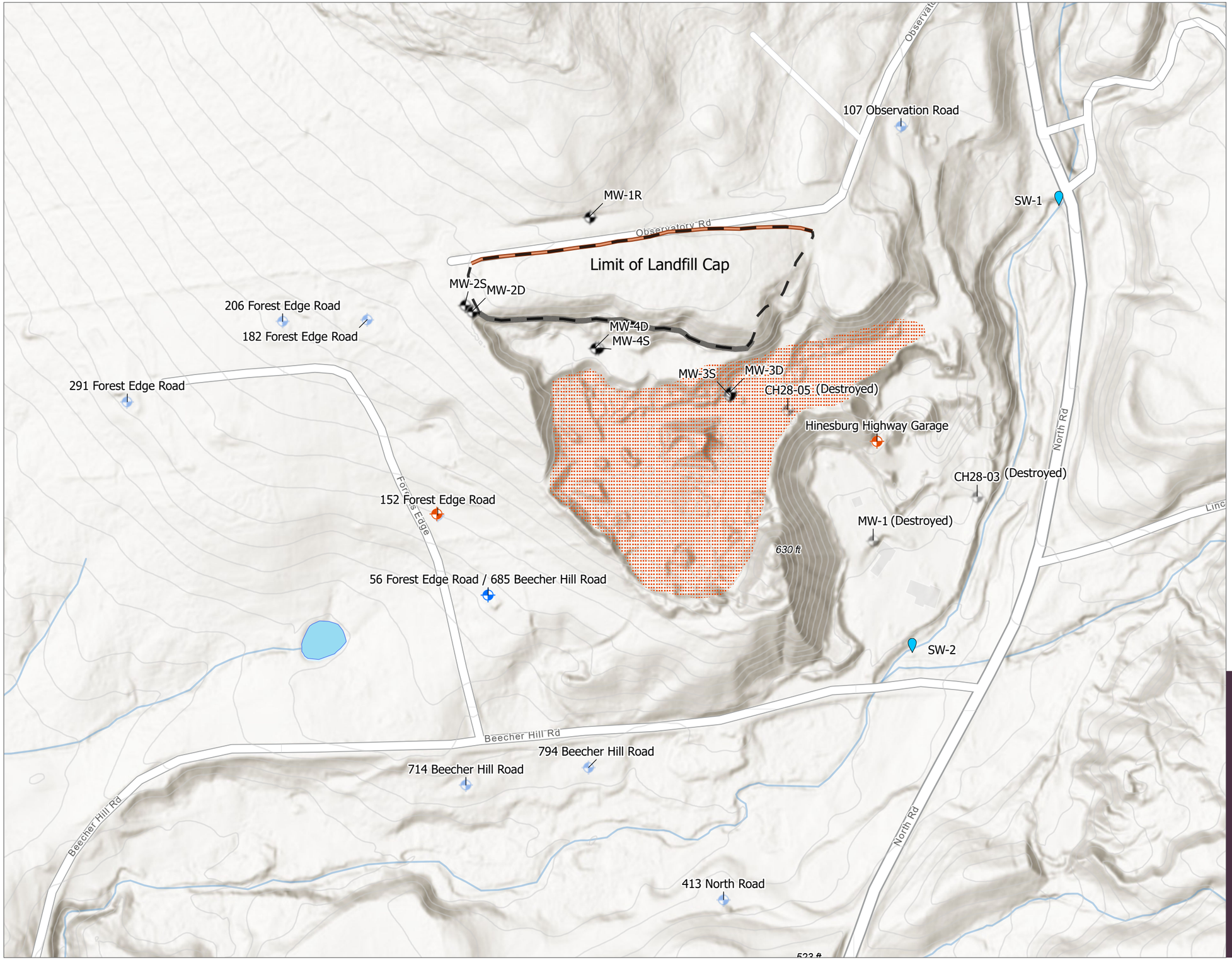
Figure 2: Vicinity Map

Hinesburg Landfill Spring 2022
Semi-Annual Monitoring Report

Prepared for Town of Hinesburg

STONE ENVIRONMENTAL

Source: Esri World Imagery, VCGI, ANR Atlas
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 2 - Vicinity Map Exported: 8/17/2022 11:08 AM by swalser



LEGEND

- Site Boundary
- Property Boundary
- Sand and Gravel Pit
- Limit of Landfill Cap
- VT 10 ft Contour Lines
- Stone Apron
- Drainage Swale

Historic Sample Location

- Drinking Water
- Monitoring Well

Post-Closure Monitoring Sample Locations

- Monitoring Well
- Drinking Water with POET System
- Drinking Water
- Surface Water

Source: Esri World Imagery, VCGI, Holt Gilmour survey December 29, 2021

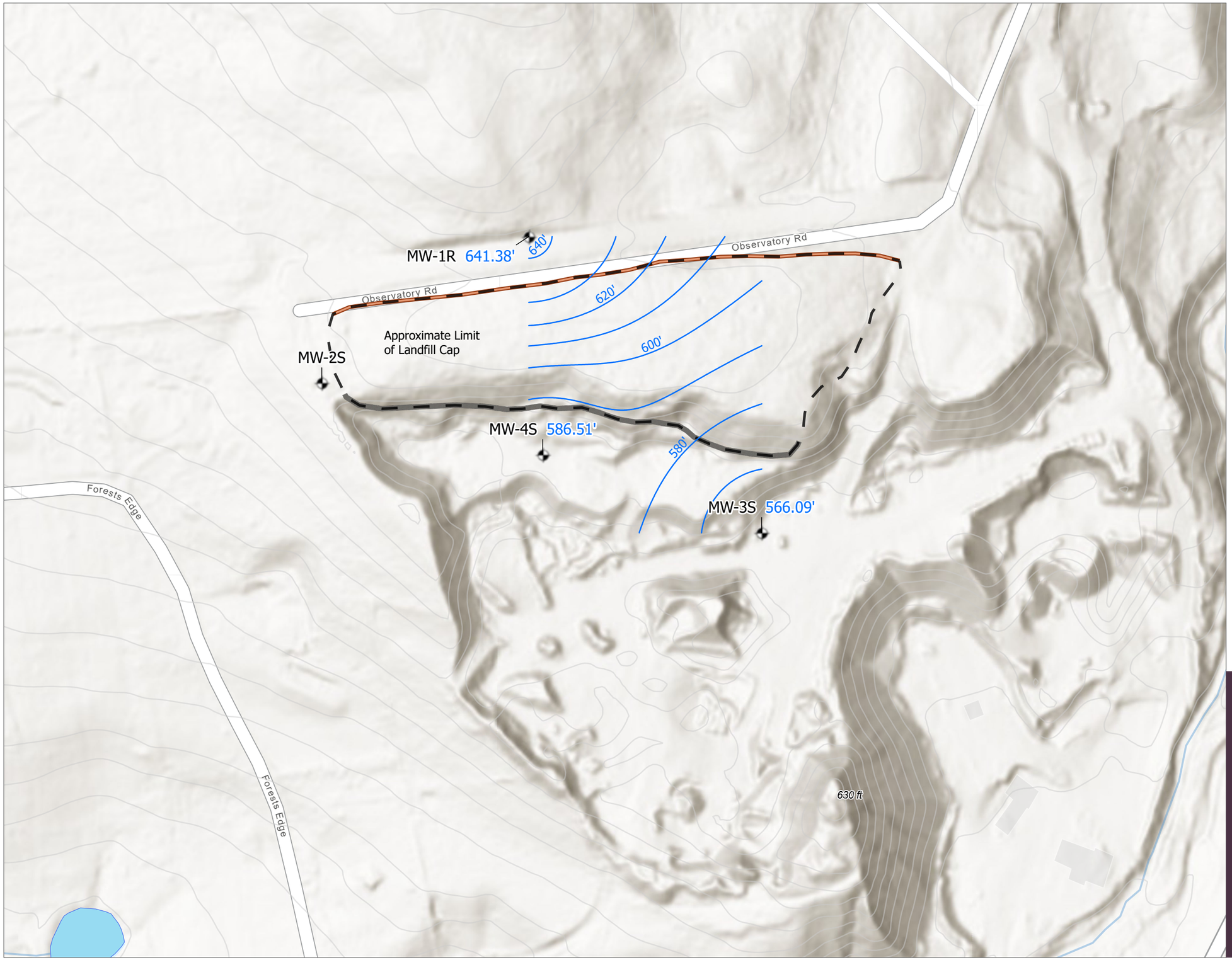
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 3 - Site Map Exported: 8/31/2022 4:36 PM by arice

Figure 3: Site Map with Post-Closure Monitoring Locations

Hinesburg Landfill Spring 2022 Semi-Annual Monitoring Report

Prepared For Town of Hinesburg

STONE ENVIRONMENTAL



N

0 80 160

Feet

LEGEND

- Site Boundary
- Property Boundary
- Limit of Landfill Cap
- VT 10 ft Contour Lines
- Stone Apron
- Drainage Swale
- Monitoring Well
- Groundwater Contour

Source: Esri World Imagery, VCGI, Holt Gilmour survey December 29, 2021
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 4 - Shallow Contours
Exported: 8/17/2022 11:05 AM by swalser

Figure 4: Potentiometric Surface in Overburden Groundwater

Hinesburg Landfill Spring 2022
Semi-Annual Monitoring Report

Prepared For Town of Hinesburg

STONE ENVIRONMENTAL

N

0 80 160

Feet

LEGEND

- Site Boundary
- Property Boundary
- Limit of Landfill Cap
- VT 10 ft Contour Lines
- Stone Apron
- Drainage Swale
- Monitoring Well
- Groundwater Contour

Source: Esri World Imagery, VCGI, Holt Gilmour survey December 29, 2021
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 5 - Deep Contours
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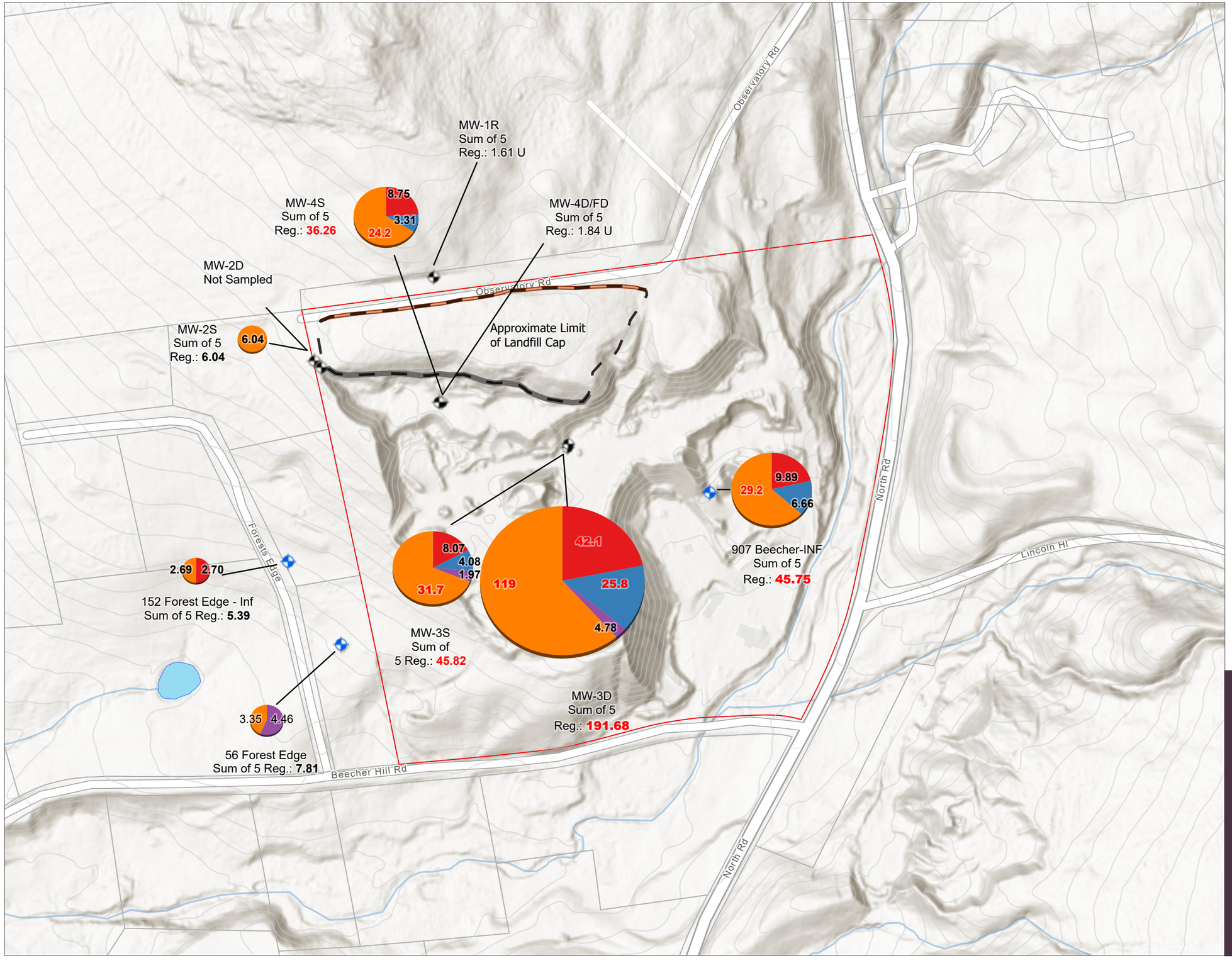
Figure 5: Potentiometric Surface in Bedrock Aquifer

Hinesburg Landfill Spring 2022
Semi-Annual Monitoring Report

Prepared For Town of Hinesburg

STONE ENVIRONMENTAL



N

0 150 300

Feet

LEGEND

- Stone Apron
- Drainage Swale
- VT 10 ft Contour Lines
- Site Boundary
- Property Boundary
- Approximate Limits of Landfill Cap
- Waterbody
- Drinking Water
- Monitoring Well

5 Regulated PFAS Concentrations

- PFHpA
- PFHxS
- PFNA
- PFOS
- PFOA

Sum

31
19
2.4

Notes:
U - Analyte not detected; limit of quantitation listed
Bold results indicate detections of the analyte
Red results indicate an exceedance of the DWHA/VGES enforcement standard of 20 ng/L
Only detections of the five regulated compounds shown: PFHpA, PFHxS, PFNA, PFOS, PFOA

Source: Esri World Imagery, VCGI, Holt Gilmour survey December 29, 2021

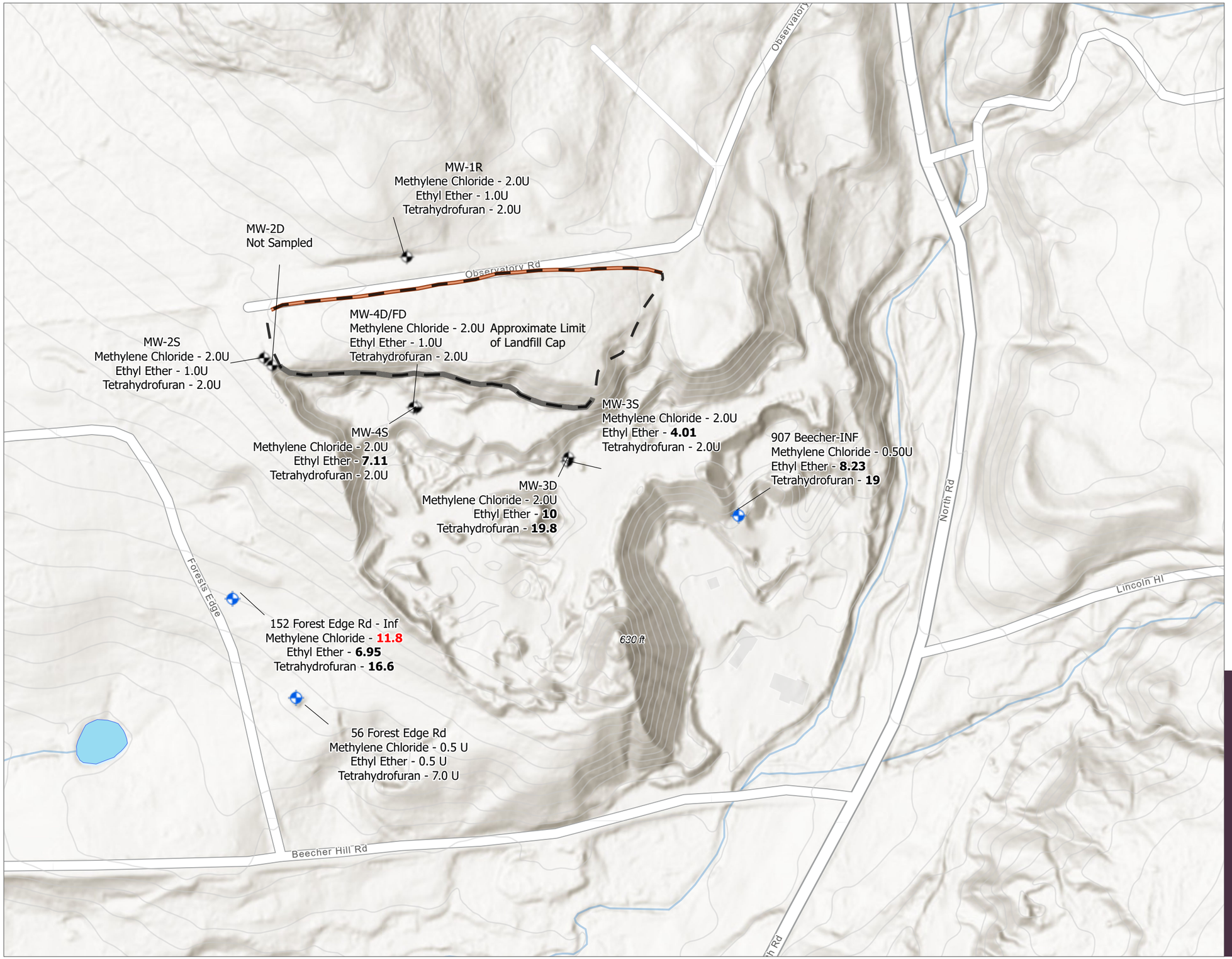
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 6 - PFAS in Groundwater Exported: 8/17/2022 10:54 AM by swalser

Figure 6: PFAS Concentrations in Groundwater and Drinking Water

Hinesburg Landfill Spring 2022 Semi-Annual Monitoring Report

Prepared For Town of Hinesburg

STONE ENVIRONMENTAL



N

0 125 250

Feet

LEGEND

- Monitoring Well
- Drinking Water
- Approximate Limits of Landfill Cap
- Stone Apron
- Drainage Swale
- VT 10 ft Contour Lines
- Site Boundary
- Property Boundary
- Waterbody

Notes:
U - Analyte not detected; limit of quantitation listed
Bold results indicate detections of the analyte
Red results indicate an exceedance of the DWHA/VGES enforcement standard

DWHA/VGES Standards:
Methylene Chloride - 2.0 ug/L (VGES Not Established)
Ethyl Ether - Not Established
Tetrahydrofuran - Not Established

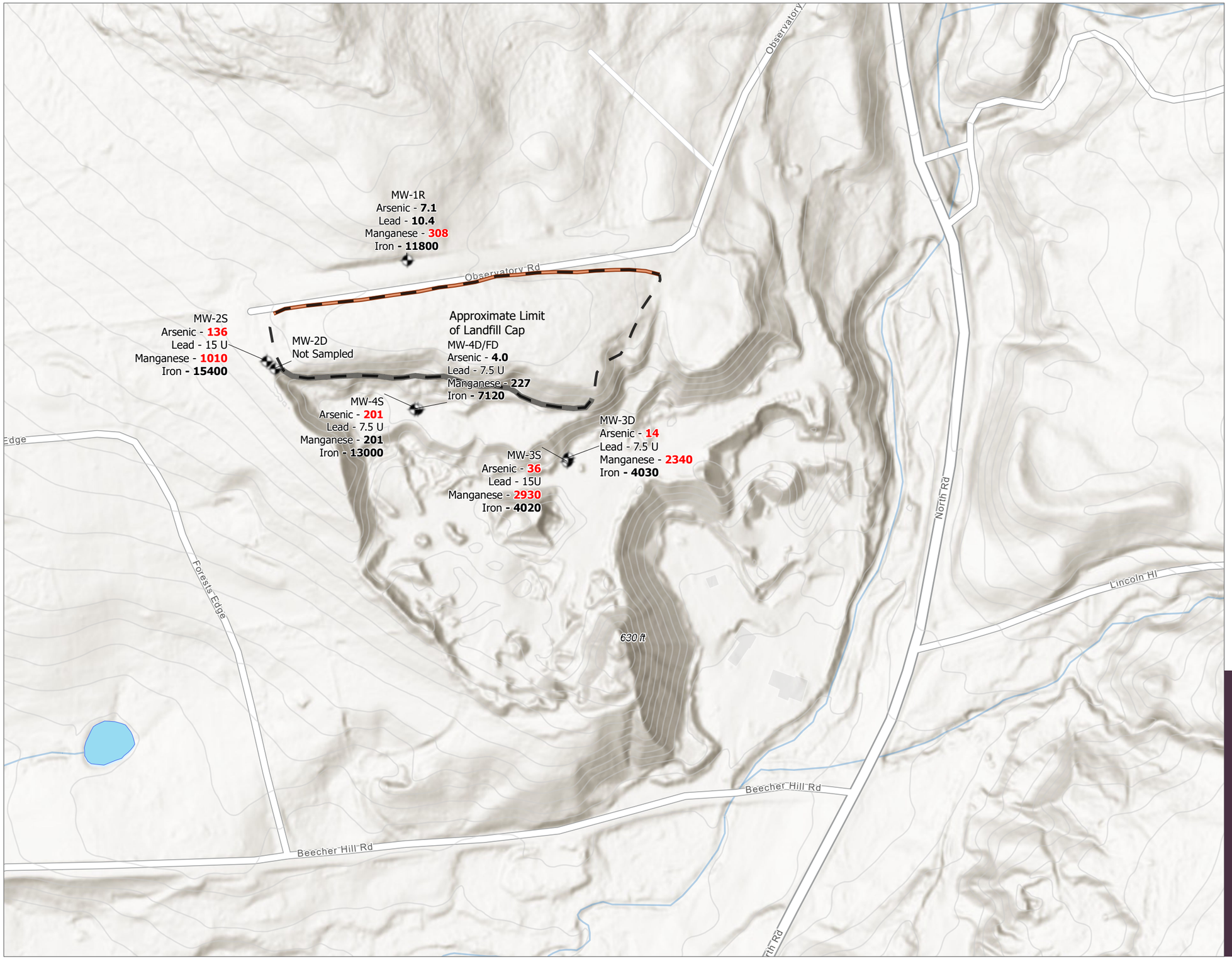
Source: Esri World Imagery, VCGI, Holt Gilmour survey December 29, 2021
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 7 - VOCs in Groundwater
Exported: 8/17/2022 10:52 AM by swalser

Figure 7: VOC Concentrations in Groundwater and Drinking Water

Hinesburg Landfill Spring 2022 Semi-Annual Monitoring Report

Prepared For Town of Hinesburg

STONE ENVIRONMENTAL



N 0 180 360
Feet

LEGEND

- Monitoring Well
- Approximate Limits of Landfill Cap
- Stone Apron
- Drainage Swale
- VT 10 ft Contour Lines
- Site Boundary
- Property Boundary
- Waterbody

Notes:
U - Analyte not detected; limit of quantitation listed
Bold results indicate detections of the analyte
Red results indicate an exceedance of the VGES enforcement standard

VGES Standards:
Arsenic - 10 ug/L
Lead - 15 ug/L
Manganese - 300 ug/L
Iron - Not established

Source: Esri World Imagery, VCGI, Holt Gilmour survey December 29, 2021
Path: O:\PROJ-21\EAR\20211205 Town of Hinesburg Landfill\GIS\20211205 Hinesburg Landfill\20211205 Hinesburg Landfill.aprx Figure 8 - Metals in Groundwater
Exported: 8/17/2022 10:51 AM by swalser

Figure 8: Total Metal Concentrations in Groundwater

Hinesburg Landfill Spring 2022 Semi-Annual Monitoring Report

Prepared For Town of Hinesburg

STONE ENVIRONMENTAL

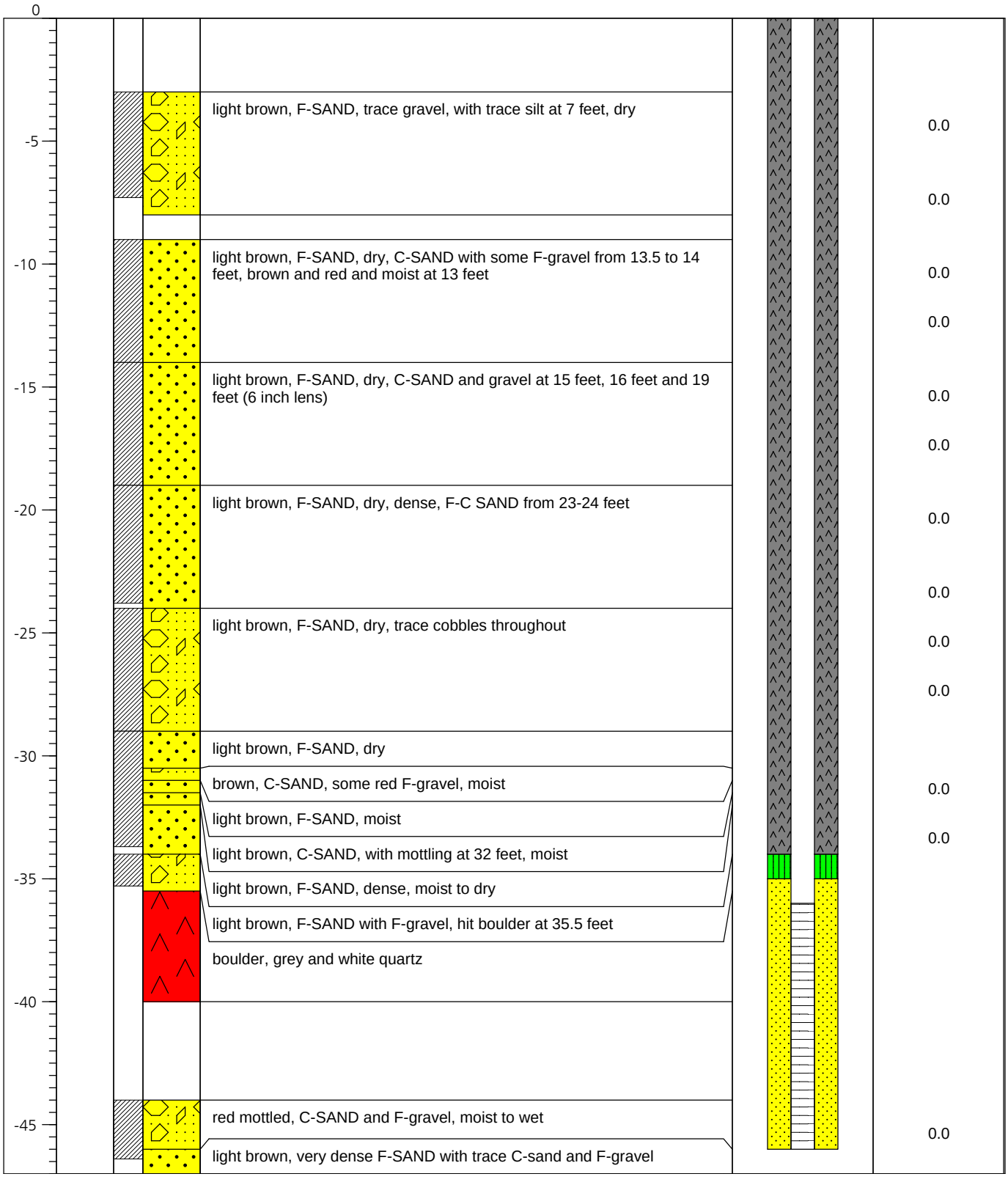
Appendix B: Field Notes and Boring Log

SOIL BORING LOG
WELL NO. MW-1R
Hinesburg Landfill

DATE DRILLED: 5/4/2022
COMPANY: Platform Drilling

2" PVC Monitoring Well
LOGGED BY: K. Mattice

STONE ENVIRONMENTAL



STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF
SEI Project Number:	202-11205
Client:	Hinesburg
Project Manager:	KJM

Comments:

WELL ID	MW-1R		Equipment ID / SN
Sample Date	6/7/22	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump X Peri Pump ___ Impeller Pump___ Bailer Other	Water Quality Sonde:	
Sampling Personnel	KJM	Turbidity Meter:	
Weather	P. sunny 70°F	Other:	

Fill 10/ Discharge 50

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: 45 feet Measuring Point Description: Well Screen Length:

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
47 feet	35.13 feet	= ___ feet	X 0.155 liters/feet (1-inch well) X ~~0.347 liters/feet (1.5-inch well)~~ X 0.617 liters/feet (2-inch well)	= ___ liters

Time purging began (military):	1036	3 X One Well Volume	liters
Time purging ended (military):		5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
40.95	5,200	1102	200	15.1	34.4	8.35	1.14	128.3	481
40.95	5,500	1105	100	15.4	21.2	8.44	1.16	128.9	465
41.07	5,800	1108	100	15.2	-35.5	8.52	1.21	131.4	334
41.24	6,100	1111	100	14.8	-62.8	8.52	1.11	131.7	374
41.29	6,700	1116	100	14.8	-82.7	8.48	1.09	131.9	369
41.41	7,100	1120	100	15.0	-96.3	8.53	1.07	131.9	325
41.55	7,400	1123	100	14.7	-103.7	8.50	1.13	132.0	316
41.65	7900	1128	100	14.7	-108.7	8.49	1.15	132.1	354
41.70	8,200	1131	100	14.9	-115.0	8.55	1.14	132.2	344
41.77	8,500	1134	100	15.1	-116.9	8.54	1.16	132.5	283

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis
MW-1R	1135	KJM	3 x 40 mL	HCL	VOC
			2 x 250 mL	NONE	PFAS
			1 x 250 mL	H2SO4	COD, Metals
			1 x 500 mL	HNO3	Chloride, Sodium
			1 x 250 mL	NONE	

Additional Comments: Decrease flow rate from 200 to 100 mL/min due to drawdown

Sampling Personnel Signature: KJMattice Date: 6/7/22

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF
SEI Project Number:	20211005
Client:	Hinesburg
Project Manager:	KJM

Comments: pump stuck in well @ 111' Did not sample

WELL ID	MW-20		Equipment ID / SN
Sample Date	6/7/22	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump ✓ Peri Pump ___ Impeller Pump__ Bailer Other	Water Quality Sonde:	
Sampling Personnel	KJM	Turbidity Meter:	
Weather	P-sunny / 70°F	Other:	

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: 120 feet Measuring Point Description: Well Screen Length:

Total Well Depth (btoc) 124 feet - Depth to Water (btoc) 91.86 feet = _____ feet Height of Water Column

X 0.155 liters/feet (1-inch well)
X 0.347 liters/feet (1.5-inch well)
X 0.617 liters/feet (2-inch well)

One Well Volume = _____ liters

Time purging began (military):	3 X One Well Volume	liters
Time purging ended (military):	5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis	Additional Comments

Sampling Personnel Signature kmentrek Date 6/7/22

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF
SEI Project Number:	20211205
Client:	
Project Manager:	Katrina Mattice

Comments:

WELL ID	MW-3s		Equipment ID / SN
Sample Date	May 11, 2022	Pump:	6519
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	6328
Sampling Method	Bladder Pump ____ Peri Pump ____ Impeller Pump__ Bailer ____ Other _____ Bladder Pump	Water Quality Sonde:	6758
Sampling Personnel		Turbidity Meter:	6015
Weather	Sunny 80	Other:	HDPE

Calculate Purge Volumes

Time of water level measurement (military): 12:30 | Depth of Pump/Intake: 47.00 feet | Measuring Point Description: | Well Screen Length:

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
49.40 feet	- 32.16 feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.347 liters/feet (1.5-inch well) X 0.617 liters/feet (2-inch well)	= 10.64 liters

Time purging began (military): 13:19	3 X One Well Volume	31.91	liters
Time purging ended (military): 15:52	5 X One Well Volume		liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (ºC) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
32.75	1,000	14:47	175.00	13.9	32	6.65	0.54	879	825.00
33.63	2,800	14:53	300.00	13.0	25	6.61	0.33	875	454.00
34.00	6,700	15:06	300.00	12.9	15	6.67	0.25	892	150.00
34.00	8,500	15:12	300.00	13.0	21	6.68	0.21	913	107.00
34.00	10,900	15:20	300.00	12.9	14	6.68	0.16	927	64.10
34.00	12,700	15:26	300.00	12.7	23	6.69	0.13	940	41.40
34.00	14,500	15:32	300.00	12.7	32	6.69	0.13	944	39.20
34.00	16,300	15:38	300.00	12.9	41	6.69	0.13	949	34.00
34.00	18,200	15:44	300.00	12.6	44	6.70	0.11	961	34.20
34.00	20,000	15:50	300.00	12.7	44	6.70	0.10	963	29.70

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ____Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis	Additional Comments
MW-3s	15:52		2 x 250 mL Plastic 1, 3 x 40mL VOA		PFAS 537, VOC 8260, PP Metals 6010,	

Sampling Personnel Signature _____ Date May 11, 2022

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF
SEI Project Number:	2021
Client:	
Project Manager:	KJM

Comments: Fill 45/Discharge 15 paused purging from 1439 to 1553

WELL ID	~~MW-20~~ MW-3D		Equipment ID / SN
Sample Date	6/9/22	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump ___ Peri Pump ___ Impeller Pump__ Bailer Other	Water Quality Sonde:	
Sampling Personnel	KJM	Turbidity Meter:	
Weather	rain - cloudy / 60°F	Other:	

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: ~~79~~ 69 feet Measuring Point Description: Well Screen Length:

Total Well Depth (btoc) 81 feet - Depth to Water (btoc) 51.76 feet = Height of Water Column _____ feet

X 0.155 liters/feet (1-inch well)
X 0.347 liters/feet (1.5-inch well)
X 0.617 liters/feet (2-inch well)

= One Well Volume _____ liters

Time purging began (military):	1405	3 X One Well Volume	liters
Time purging ended (military):		5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
53.65	1500	1415	150	14.3	135.3	6.47	3.92	1444	24.5
54.21	1950	1418		13.7	109.9	6.61	1.31	1414	19.9
55.50	2400	1421		13.2	99.2	6.69	1.12	1385	21.3
56.05	2850	1424		13.2	87.0	6.75	0.99	1369	20.7
56.60	3300	1427		13.1	80.2	6.77	0.95	1361	21.0
56.85	3750	1430		13.0	67.9	6.79	0.93	1350	19.4
57.15	4200	1433		13.0	60.6	6.81	0.93	1349	16.6
57.85	4650	1436		12.9	54.1	6.81	0.87	1351	17.5
~~55.25~~ 57.25	5100	1439		13.0	46.7	6.84	0.80	1349	13.3
~~55.25~~ 57.25	5550	1555		12.6	27.5	6.70	0.73	1392	10.5
56.40	6000	1605		12.7	4.9	6.75	0.21	1747	9.51
56.88	6450	1610		12.4	0.8	6.77	0.18	1762	8.12
57.40	6900	1615		12.7	-1.1	6.79	0.18	1760	7.39

Total Vol. Removed: 7 Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis
MW-3D	1620	KJM	3x40mL	HCl	VOCs
			2x250mL	Trizma	APAS
			1x250mL	H2SO4	COD
			1x250mL	—	Sodium & Chloride
			1x500mL	HNO3	metals

Additional Comments: Drop pump to 69' due to short Airline

Sampling Personnel Signature KJM Date 6/9/22

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF
SEI Project Number:	20211205
Client:	Hinesburg
Project Manager:	KJM

Comments: Discharge 15/Fill 45 Changed to 10/50

WELL ID	MW-4S		Equipment ID / SN
Sample Date	6/7/22	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump ✓ Peri Pump ___ Impeller Pump___ Bailer Other	Water Quality Sonde:	
Sampling Personnel	KJM	Turbidity Meter:	
Weather	P. Sunny 75°F	Other:	

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: 46 feet Measuring Point Description: Well Screen Length:

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
48.5 feet	37.84 feet	= ___ feet	X 0.155 liters/feet (1-inch well) X 0.347 liters/feet (1.5-inch well) X 0.617 liters/feet (2-inch well)	= ___ liters

Time purging began (military):	1430	3 X One Well Volume	liters
Time purging ended (military):		5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
37.95	7,500	1527	125	13.6	-3.5	5.71	0.76	1407	139
37.95	7875	1530	125	12.9	-6.5	585	0.55	1412	27.0
37.95	8250	1533	125	13.2	-7.1	590	0.51	1414	13.8
37.95	8625	1536	125	12.7	-8.4	5.96	0.48	1411	11.9
37.95	9000	1539	125	12.7	-9.8	5.99	0.39	1416	8.15

Total Vol. Removed: 9 Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis
MW-4S	1545	KJM	3x40mL	HCL	VOC
			2x250mL	Trizma	PCAS

Additional Comments: purge while collecting DW sample from garage for 1hr 6/7/22

Sampling Personnel Signature: Kjma Hice Date

1x250mL — Sodium & Chloride
1x250mL H2SO4 COD
1x500m HNO3 metals

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF
SEI Project Number:	
Client:	
Project Manager:	

Comments: Discharge 20/Fill 40

WELL ID	MW-4D		Equipment ID / SN
Sample Date	6/7/22	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump ~~Peri Pump~~ ___ Impeller Pump__ Bailer Other	Water Quality Sonde:	
Sampling Personnel	KSM	Turbidity Meter:	
Weather	Cloudy / 70°F	Other:	

Calculate Purge Volumes

Time of water level measurement (military): | Depth of Pump/Intake: 87 feet | Measuring Point Description: | Well Screen Length:

Total Well Depth (btoc): 89.08 feet − Depth to Water (btoc): 70.78 feet = Height of Water Column: _____ feet

X 0.155 liters/feet (1-inch well)
X 0.347 liters/feet (1.5-inch well)
X 0.617 liters/feet (2-inch well)

= One Well Volume: _____ liters

Time purging began (military):	1630	3 X One Well Volume	liters
Time purging ended (military):		5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
73.65	4,500	1706	125	12.6	77.0	6.28	2.08	553.5	131
75.00	4875	1709	125	12.0	67.2	6.82	1.92	549.8	116
76.20	5250	1712	125	11.9	62.3	7.00	1.97	546.5	119
77.05	5625	1715	125	12.0	56.9	7.12	2.03	547.6	94.7
77.60	6000	1718	125	11.9	55.2	7.16	2.07	546.4	75.5
78.35	6375	1721	125	12.0	53.4	7.19	2.19	547.3	88.0

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis
MW-4D	1725	KSM	3x40ml	HCL	VOC

Additional Comments: MW-4D-FD turbid @ End of sampling

Sampling Personnel Signature: Kyle Thce Date: 6/7/22

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Hinesburg LF	Comments:
SEI Project Number:	20211205	
Client:		
Project Manager:	Katrina Mattice	

WELL ID	SW-1		Equipment ID / SN
Sample Date	May 11, 2022	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump ____ Peri Pump ____ Impeller Pump__ Bailer ____ Other _____ Other	Water Quality Sonde:	6758
Sampling Personnel	Sandra Walser	Turbidity Meter:	6015
Weather		Other:	

Calculate Purge Volumes

Time of water level measurement (military): 14:05 Depth of Pump/Intake: _____ feet Measuring Point Description: Well Screen Length:

Total Well Depth (btoc) - Depth to Water (btoc) = Height of Water Column

_____ feet - _____ feet = _____ feet

X 0.155 liters/feet (1-inch well)
X 0.347 liters/feet (1.5-inch well)
X 0.617 liters/feet (2-inch well)

One Well Volume = 0 liters

Time purging began (military): 14:05	3 X One Well Volume	0	liters
Time purging ended (military):	5 X One Well Volume		liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (ºC) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
6.68	2,100	14:05	120.00	15.1	121	6.82	9.76	0	3.80

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ____Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis	Additional Comments
		Sandra Walser				

Sampling Personnel Signature _____ Date May 11, 2022

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	hinesburg lf	Comments:
SEI Project Number:	20211205	
Client:		Surface water measurements
Project Manager:	Katrina Mattice	

WELL ID	SW-2		Equipment ID / SN
Sample Date	May 11, 2022	Pump:	
SOP/SSP #'s Followed	SEI SOP 5.49.1	Water Level Indicator:	
Sampling Method	Bladder Pump ____ Peri Pump ____ Impeller Pump__ Bailer ____ Other _____ Other	Water Quality Sonde:	6770
Sampling Personnel	Sandra Walser, Rebecca Mitchell	Turbidity Meter:	6127
Weather		Other:	

Calculate Purge Volumes

Time of water level measurement (military): 14:33 Depth of Pump/Intake: _____ feet Measuring Point Description: Well Screen Length:

Total Well Depth (btoc)		Depth to Water (btoc)		Height of Water Column		One Well Volume
_____	feet	_____	feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.347 liters/feet (1.5-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

Time purging began (military): 14:33	3 X One Well Volume	liters
Time purging ended (military):	5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (ºC) (± 3%)	ORP (mV) (± 10 mV)	pH (su) (± 0.1 su)	DO (mg/L) (± 10% or 3 consecutive readings < 0.5 mg/L))	Conductivity (µS) (± 3%)	Turbidity (NTU) (± 10% or 3 consecutive readings <5 NTU)
		14:33		15.9	119	7.03	9.96	0	2.70

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ____Parameters Stable for 3 consecutive measurements

Sample Identification	Time Collected (Military)	Sampled By (Initials)	Container	Preservation	Analysis	Additional Comments
		Sandra Walser,				

Sampling Personnel Signature _____ Date May 11, 2022

STONE ENVIRONMENTAL INC

SUPPLY WELL SAMPLING FORM

Project Name:	Hinesburg Landfill
SEI Project Number:	20211205
Client:	Town of Hinesburg
Project Manager:	Katrina Mattice

Location ID	907 Beecher Hill Rd		
Sample Date	6/7/22		
Property Contact Name, Address and Phone Number	Michael Anthony		
Water Supply Type (bedrock, shallow well, spring, etc..)	Bedrock		
Well Location and GPS Coordinates	confirmed		
Septic Location and GPS Coordinates			
Water Treatment (softener, filter, etc..)	POET		
Sample Location (Pressure Tank, Outside Spigot, etc..)	POET		
SOP/SSP #'s Followed	SOPs SEI-5.57.1		SEI Equipment ID
Sampling Method	grab	Turbidimeter	
Sampling Personnel	KJM	Water Quality Sonde SN	
Weather	P. Sunny | 75°F		

Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)

Total Purge Time: 10 Minutes (√) Meters Calibrated (√)

Sample ID	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Analysis	Comments:
907 Beecher-INF	1438	3x40mL 2x250mL	KJM	VOLS/PFAS	• Field Duplicate on INF
907 Beecher-MID	1434				• Field Reagent Blank = ~~06~~ 907 Beecher-FB @ ~~1443~~ 1428
907 Beecher-EFF	1430				
907 Beecher-FD	1438				

Sample Area Inventory/Use:
Compressor room

Site Sketch Showing General Location of Supply Well, House, Septic, Road

Sampling Personnel Signature kmattice Date 6/7/22

STONE ENVIRONMENTAL INC

SUPPLY WELL SAMPLING FORM

Project Name:	Hinesburg Landfill
SEI Project Number:	20211205
Client:	Town of Hinesburg
Project Manager:	Katrina Mattice

Location ID	56 Forest Edge Rd		
Sample Date	6/9/22		
Property Contact Name, Address and Phone Number	Kevin Dente, 802-356-5330		
Water Supply Type (bedrock, shallow well, spring, etc..)	Dug well		
Well Location and GPS Coordinates	Did not collect @ Beecher Hill property/NOT HOOKED		
Septic Location and GPS Coordinates			
Water Treatment (softener, filter, etc..)	UV light, Sediment Filter		
Sample Location (Pressure Tank, Outside Spigot, etc..)	Kitchen sink (could not access pressure tank		
SOP/SSP #'s Followed	SOPs SEI-5.57.1		SEI Equipment ID
Sampling Method	grab	Turbidimeter	
Sampling Personnel	KJM	Water Quality Sonde SN	
Weather	P. Cloudy / 60°F		

Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)

Total Purge Time: 10 Minutes (√) __Meters Calibrated (√)

Sample ID	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Analysis	Comments:
56 Forest Edge	1830	3x40mL	KJM	VOC	dish soap
		2x250mL	KJM	PFAS	

Sample Area Inventory/Use:

Site Sketch Showing General Location of Supply Well, House, Septic, Road

Sampling Personnel Signature Katrina Mattice Date 6/9/22

Stone Environmental, Inc. Field Instrument Calibration Record

Project Name: Hinesburg LF **Date:** 5/17/22 **Sampler (Sig/Date):**
SEI Project Number: 2021[illegible]205 **Task:** low flow GW
Project Location: Hinesburg, VT **Checked By/Date:** KRM/AAR 5/17/22
Weather Conditions (AM): cool, sunny **Weather Conditions (PM):** cool, rainy

MULTI-PARAMETER WATER QUALITY METER

Meter Type: YSI **Model NO.:** **Unit ID NO.:** 6770

AM Calibration — Start Time 6:45 /End Time 7:15

Post Calibration Check — Start Time 1621 /End Time 1642

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.03	±0.1 pH Units			
pH (7)	SU	7.0	7.08	±0.1 pH Units	7.0	7.06	±0.3 pH Units
pH (10)	SU	10.0	10.13	±0.1 pH Units			
ORP	mV	220	205.3	±10 mV	220	212.7	±10 mV
Specific Conductance	µs/cm	447	447.2	±0.5% of Standard	447	297	±5% of Standard
Dissolved Oxygen	%	100	~~101.7~~ 102.1	±2% of Standard	100	97.3	±0.5 mg/L of sat. val.
Temperature	°C		18.9			18.8	
Baro. Press.	mmHg		735.7 mmHg			736	

TURBIDITY METER

Meter Type: geotech **Model NO.:** **Unit ID NO.:** 6015

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	NTU	20	20	±0.3 NTU of stan. Of	20	18.5	±0.3 NTU of stan. Of
	NTU	100	99.2	1.0 NTU or less. ±5%	100	97.3	1.0 NTU or less. ±5%
	NTU	800	800	of standards >5 NTU	800	771	of standards >5 NTU

PHOTIONIZATION DETECTOR

Meter Type: **Model NO.:** **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	0.0		within 5 ppmv of BG	0.0		within 5 ppmv of BG
Span Gas	ppmv	100		±10% of standard	100		±10% of standard

O_2-LEL 4 GAS METER

Meter Type: **Model NO.:** **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		±10% of standard	50		±10% of standard
O_2	%	20.9		±10% of standard	20.9		±10% of standard
H_2S	ppmv	25		±10% of standard	25		±10% of standard
CO	ppmv	50		±10% of standard	50		±10% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each parameter listed above.
☐ Equipment **not** calibrated within the Acceptance Criteria specified for each parameter listed above**.

MATERIALS RECORD

Deionized/Distilled Water Source:
Trip Blank Source:
Sample Preservative Source:
Disposable Filter Type:
DO Calibration Fluids Source:
Other:

Calibration Standard Lot #		Exp. Date
pH (4)	1GL535	12/23
pH (7)	2GA810	12/24
pH (10)	2GC371	3/24
ORP	2GC491	12/22
Spec. Conductivity	2GA625	1/23
Turb. Stan. 20	350	7/23
Turb. Stan. 100	350	7/23
Turb. Stan. 800	350	7/23
PID Scan Gas		
$O_{2\ LEL}$		
Other		

NOTES:

STONE ENVIRONMENTAL

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations. **= If meter reading is not within acceptance criteria , clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the intstrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

Stone Environmental, Inc. Field Instrument Calibration Record

Project Name: Hinesburg Lt | **Date:** 6/7/22 | **Sampler (Sig/Date):**
SEI Project Number: 20211205 | **Task:** 2-2
Project Location: Hinesburg VT | **Checked By/Date:**
Weather Conditions (AM): P. Sunny / 70°F | **Weather Conditions (PM):**

MULTI-PARAMETER WATER QUALITY METER

Meter Type: YSI PRO | **Model NO.:** | **Unit ID NO.:**

AM Calibration — **Start Time** 1040 / **End Time** 1050

Post Calibration Check — **Start Time** / **End Time**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.02	±0.1 pH Units			
pH (7)	SU	7.0	6.99	±0.1 pH Units	7.0		±0.3 pH Units
pH (10)	SU	10.0	10.03	±0.1 pH Units			
ORP	mV	~~230~~ 240	230.6	±10 mV			±10 mV
Specific Conductance	µs/cm	1413 @25C	1414	±0.5% of Standard			±5% of Standard
Dissolved Oxygen	%	100	99.8	±2% of Standard			±0.5 mg/L of sat. val.
Temperature	°C	23.3	—				
Baro. Press.	mmHg	741.1	—				

TURBIDITY METER

Meter Type: Geotech | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	NTU	0.1	0.15	±0.3 NTU of stan. Of 1.0 NTU or less. ±5% of standards >5 NTU			±0.3 NTU of stan. Of 1.0 NTU or less. ±5% of standards >5 NTU
	NTU	20	20.6				
	NTU	100	101				

PHOTIONIZATION DETECTOR

Meter Type: | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	0.0		within 5 ppmv of BG	0.0		within 5 ppmv of BG
Span Gas	ppmv	100		±10% of standard	100		±10% of standard

O_2-LEL 4 GAS METER

Meter Type: | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		±10% of standard	50		±10% of standard
O_2	%	20.9		±10% of standard	20.9		±10% of standard
H_2S	ppmv	25		±10% of standard	25		±10% of standard
CO	ppmv	50		±10% of standard	50		±10% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each parameter listed above.
☐ Equipment **not** calibrated within the Acceptance Criteria specified for each parameter listed above**.

MATERIALS RECORD

Deionized/Distilled Water Source:
Trip Blank Source:
Sample Preservative Source:
Disposable Filter Type:
DO Calibration Fluids Source:
Other:

Calibration Standard Lot #		Exp. Date
pH (4)	1GL535	Dec 23
pH (7)		
pH (10)		
ORP		
Spec. Conductivity		
Turb. Stan. ____		
Turb. Stan. ____		
Turb. Stan. ____		
PID Scan Gas		
$O_{2\ LEL}$		
Other		

NOTES:

STONE ENVIRONMENTAL

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Stone Environmental, Inc. Field Instrument Calibration Record

Project Name: Hinesburg LF | **Date:** 6/9/22 | **Sampler (Sig/Date):**
SEI Project Number: 20211205 | **Task:** 2.2
Project Location: Hinesburg VT | **Checked By/Date:**
Weather Conditions (AM): Rain / 60°F | **Weather Conditions (PM):**

MULTI-PARAMETER WATER QUALITY METER

Meter Type: YSI PRO | **Model NO.:** | **Unit ID NO.:** 0770

AM Calibration — **Start Time** 1145 / **End Time** 1200

Post Calibration Check — **Start Time** 1715 / **End Time** 1725

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.06	±0.1 pH Units			
pH (7)	SU	7.0	7.01	±0.1 pH Units	7.0	7.18	±0.3 pH Units
pH (10)	SU	10.05	10.05	±0.1 pH Units			
ORP	mV	236.6	236.5	±10 mV	236.5	241.8	±10 mV
Specific Conductance	µs/cm	1309 @ 21°C	1310	±0.5% of Standard	1309	1329	±5% of Standard
Dissolved Oxygen	%	100	101	±2% of Standard	100	87%	±0.5 mg/L of sat. val.
Temperature	°C	17.1°C					
Baro. Press.	mmHg	736.4	—				

TURBIDITY METER

Meter Type: geotech | **Model NO.:** 5956 | **Unit ID NO.:** 6015

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	NTU	0.1	0.02	±0.3 NTU of stan. Of 1.0 NTU or less. ±5% of standards >5 NTU	0.1	0.02	±0.3 NTU of stan. Of 1.0 NTU or less. ±5% of standards >5 NTU
	NTU	20	19.9		20	18.7	
	NTU	800	803		100	98.3	

PHOTIONIZATION DETECTOR

Meter Type: | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	0.0		within 5 ppmv of BG	0.0		within 5 ppmv of BG
Span Gas	ppmv	100		±10% of standard	100		±10% of standard

O_2-LEL 4 GAS METER

Meter Type: | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		±10% of standard	50		±10% of standard
O_2	%	20.9		±10% of standard	20.9		±10% of standard
H_2S	ppmv	25		±10% of standard	25		±10% of standard
CO	ppmv	50		±10% of standard	50		±10% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each parameter listed above.
☐ Equipment **not** calibrated within the Acceptance Criteria specified for each parameter listed above**.

MATERIALS RECORD

Deionized/Distilled Water Source:
Trip Blank Source:
Sample Preservative Source:
Disposable Filter Type:
DO Calibration Fluids Source:
Other:

NOTES:

Calibration Standard Lot #		Exp. Date
pH (4)		
pH (7)		
pH (10)		
ORP		
Spec. Conductivity		
Turb. Stan. ____		
Turb. Stan. ____		
Turb. Stan. ____		
PID Scan Gas		
$O_{2\ LEL}$		
Other		

STONE ENVIRONMENTAL

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Stone Environmental, Inc. Field Instrument Calibration Record

Project Name: Hinesburg CF | **Date:** | **Sampler (Sig/Date):**
SEI Project Number: 20211025 | **Task:** low-flow GW
Project Location: Hinesburg, VT | **Checked By/Date:**
Weather Conditions (AM): | **Weather Conditions (PM):**

MULTI-PARAMETER WATER QUALITY METER

Meter Type: YSI
Model NO.:
Unit ID NO.: 6770

AM Calibration — Start Time _____ / End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.09	±0.1 pH Units
pH (7)	SU	7.0	6.99	±0.1 pH Units
pH (10)	SU	10.0	9.91	±0.1 pH Units
ORP	mV	220	219.9	±10 mV
Specific Conductance	µs/cm	447	447.6	±0.5% of Standard
Dissolved Oxygen	%	100	99.6	±2% of Standard
Temperature	°C		17.0	
Baro. Press.	mmHg		744.8	

Post Calibration Check — Start Time _____ / End Time _____

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0		±0.3 pH Units
220		±10 mV
447		±5% of Standard
100		±0.5 mg/L of sat. val.

TURBIDITY METER

Meter Type: geotech | **Model NO.:** | **Unit ID NO.:** 6015

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
	NTU	20	18.1	±0.3 NTU of stan. Of 1.0 NTU or less. ±5% of standards >5 NTU
	NTU	100	109	
	NTU	800	840	

Standard Value	Meter Value	*Acceptance Criteria (PM)
20		±0.3 NTU of stan. Of 1.0 NTU or less. ±5% of standards >5 NTU
100		
800		

PHOTIONIZATION DETECTOR

Meter Type: | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
Background	ppmv	0.0		within 5 ppmv of BG
Span Gas	ppmv	100		±10% of standard

Standard Value	Meter Value	*Acceptance Criteria (PM)
0.0		within 5 ppmv of BG
100		±10% of standard

O_2-LEL 4 GAS METER

Meter Type: | **Model NO.:** | **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
Methane	%	50		±10% of standard
O_2	%	20.9		±10% of standard
H_2S	ppmv	25		±10% of standard
CO	ppmv	50		±10% of standard

Standard Value	Meter Value	*Acceptance Criteria (PM)
50		±10% of standard
20.9		±10% of standard
25		±10% of standard
50		±10% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each parameter listed above.
☐ Equipment **not** calibrated within the Acceptance Criteria specified for each parameter listed above**.

MATERIALS RECORD

Deionized/Distilled Water Source:
Trip Blank Source:
Sample Preservative Source:
Disposable Filter Type:
DO Calibration Fluids Source:
Other:

NOTES:

Calibration Standard Lot #		Exp. Date
pH (4)	1GL535	12/23
pH (7)	2GA310	12/24
pH (10)	2GC371	3/24
ORP	2GC491	12/22
Spec. Conductivity	2GA625	1/23
Turb. Stan. 20	35D	7/23
Turb. Stan. 100	35D	7/23
Turb. Stan. 800	35D	7/23
PID Scan Gas		
$O_{2\ LEL}$		
Other		

STONE ENVIRONMENTAL

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations. If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the intstrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

Stone Environmental, Inc. Field Instrument Calibration Record

Project Name: Hinesburg LF | **Date:** 5/11/22 | **Sampler (Sig/Date):**
SEI Project Number: 20211205 | **Task:** low-flow groundwater
Project Location: Hinesburg | **Checked By/Date:** KRM/SLW
Weather Conditions (AM): ~~cold~~ 50s, sunny | **Weather Conditions (PM):** warm / 80s, sunny

MULTI-PARAMETER WATER QUALITY METER

Meter Type: YSI
Model NO.:
Unit ID NO.: 6758

AM Calibration — **Start Time** 0825 / **End Time** 0859

Post Calibration Check — **Start Time** 1700 / **End Time** 1717

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.06	±0.1 pH Units			
pH (7)	SU	7.0	7.15	±0.1 pH Units	7.0	7.07	±0.3 pH Units
pH (10)	SU	10.0	10.14	±0.1 pH Units			
ORP	mV	220	219.4	±10 mV	220	161.6	±10 mV
Specific Conductance	µs/cm	336	336.0	±0.5% of Standard	464	690	±5% of Standard
Dissolved Oxygen	%	100	99.1	±2% of Standard	100	97.1	±0.5 mg/L of sat. val.
Temperature	°C		10.6			28.9	
Baro. Press.	mmHg		756.2			757.5	

TURBIDITY METER

Meter Type: **Model NO.:** **Unit ID NO.:** 6015

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	NTU	20	19.9	±0.3 NTU of stan. Of	20	19.1	±0.3 NTU of stan. Of
	NTU	100	101	1.0 NTU or less. ±5%	100	96.0	1.0 NTU or less. ±5%
	NTU	800	795	of standards >5 NTU	800	752	of standards >5 NTU

PHOTIONIZATION DETECTOR

Meter Type: **Model NO.:** **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	0.0		within 5 ppmv of BG	0.0		within 5 ppmv of BG
Span Gas	ppmv	100		±10% of standard	100		±10% of standard

O_2-LEL 4 GAS METER

Meter Type: **Model NO.:** **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		±10% of standard	50		±10% of standard
O_2	%	20.9		±10% of standard	20.9		±10% of standard
H_2S	ppmv	25		±10% of standard	25		±10% of standard
CO	ppmv	50		±10% of standard	50		±10% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each parameter listed above.
☐ Equipment **not** calibrated within the Acceptance Criteria specified for each parameter listed above**.

MATERIALS RECORD

Deionized/Distilled Water Source:
Trip Blank Source:
Sample Preservative Source:
Disposable Filter Type:
DO Calibration Fluids Source:
Other:

NOTES:

	Calibration Standard Lot #	Exp. Date
pH (4)	1GE080	May/23
pH (7)	1G1516	Sep/23
pH (10)	2GA310	Jan/24
ORP	2GC491	Dec/22
Spec. Conductivity	2GA625	Jan/23
Turb. Stan. 20	350	07/23
Turb. Stan. 100	350	07/23
Turb. Stan. 800	350	07/23
PID Scan Gas		
O_2 LEL		
Other		

STONE ENVIRONMENTAL

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Stone Environmental, Inc. Field Instrument Calibration Record

Project Name: Ithaca LF | **Date:** 5/11/22 | **Sampler (Sig/Date):**
SEI Project Number: ~~209~~ Ithaca, VT 20211205 | **Task:** low-flow groundwater
Project Location: | **Checked By/Date:** KRM 5/11/22
Weather Conditions (AM): cool, sunny | **Weather Conditions (PM):** 80s, sunny

MULTI-PARAMETER WATER QUALITY METER

Meter Type: YSI
Model NO.:
Unit ID NO.: 6770

AM Calibration — **Start Time** 825 / **End Time** 843

Post Calibration Check — **Start Time** 1709 / **End Time** 1731

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.07	±0.1 pH Units			
pH (7)	SU	7.0	7.19	±0.1 pH Units	7.0	6.94	±0.3 pH Units
pH (10)	SU	10.0	10.15	±0.1 pH Units			
ORP	mV	220	211.1	±10 mV	220	219.1	±10 mV
Specific Conductance	µs/cm	330	401.6	±0.5% of Standard	464	309	±5% of Standard
Dissolved Oxygen	%	100	102.1	±2% of Standard	100	90.9	±0.5 mg/L of sat. val.
Temperature	°C		8.4			28.0	
Baro. Press.	mmHg		756.2			750.9	

TURBIDITY METER

Meter Type: **Model NO.:** **Unit ID NO.:** 6027

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	NTU	20	20.2	±0.3 NTU of stan. Of	20	18.5	±0.3 NTU of stan. Of
	NTU	100	101	1.0 NTU or less. ±5%	100	95.0	1.0 NTU or less. ±5%
	NTU	800	805	of standards >5 NTU	800	781	of standards >5 NTU

PHOTIONIZATION DETECTOR

Meter Type: **Model NO.:** **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	0.0		within 5 ppmv of BG	0.0		within 5 ppmv of BG
Span Gas	ppmv	100		±10% of standard	100		±10% of standard

O_2-LEL 4 GAS METER

Meter Type: **Model NO.:** **Unit ID NO.:**

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		±10% of standard	50		±10% of standard
O_2	%	20.9		±10% of standard	20.9		±10% of standard
H_2S	ppmv	25		±10% of standard	25		±10% of standard
CO	ppmv	50		±10% of standard	50		±10% of standard

☐ Equipment calibrated within the Acceptance Criteria specified for each parameter listed above.
☐ Equipment **not** calibrated within the Acceptance Criteria specified for each parameter listed above**.

MATERIALS RECORD

Deionized/Distilled Water Source:
Trip Blank Source:
Sample Preservative Source:
Disposable Filter Type:
DO Calibration Fluids Source:
Other:

NOTES:

	Calibration Standard Lot #	Exp. Date
pH (4)	1GE080	May/23
pH (7)	2GA310	Jan/24
pH (10)	1GE516	Sep/23
ORP	2GC491	Dec/22
Spec. Conductivity	2GA625	Jan/23
Turb. Stan. 20	220	09/22
Turb. Stan. 100	230	09/22
Turb. Stan. 800	230	09/22
PID Scan Gas		
$O_{2\,LEL}$		
Other		

STONE ENVIRONMENTAL

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations. **= If meter reading is not within acceptance criteria , clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the intstrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

Appendix C: Tables

Table C-1
Groundwater PFAS Sample Analytical Results

Sample ID		VGES	MW-1R		MW-2S		MW-3S		MW-3D	
Sample Date	CAS#		6/7/2022	Q	5/18/2022	Q	5/11/2022	Q	6/9/2022	Q
		(ng/l)								
4:2 Fluorotelomersulfonic acid (4:2FTS A)	757124-72-4	NE	1.61	U	1.85	U	1.88	UH	1.83	U
6:2 Fluorotelomersulfonic acid (6:2FTS A)	27619-97-2	NE	4.03	U	4.63	U	4.7	UH	**24.5**	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	39108-34-4	NE	2.42	U	2.78	U	2.82	UH	2.74	U
NEtFOSAA	2991-50-6	NE	2.42	U	2.78	U	2.82	UH	2.74	U
NMeFOSAA	2355-31-9	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	1.61	U	1.85	U	**2.42**	H	**5.00**	
Perfluorobutanoic acid (PFBA)	375-22-4	NE	4.03	U	4.63	U	**10.8**	H	**27.4**	
Perfluorodecanesulfonic acid (PFDS)	335-77-3	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorodecanoic acid (PFDA)	335-76-2	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorododecanoic acid (PFDoA)	307-55-1	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	1.61	U	1.85	U	**8.07**	H	**42.1**	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	1.61	U	1.85	U	**4.08**	H	**25.8**	
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	1.61	U	**5.5**		**15.8**	H	**58.6**	
Perfluorononanesulfonic acid (PFNS)	68259-12-1	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorononanoic acid (PFNA)	375-95-1	20	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.61	U	1.85	U	**1.97**	H	**4.78**	
Perfluorooctanoic acid (PFOA)	335-67-1	20	1.61	U	**6.04**		**31.7**	H	**119**	
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	NE	1.61	U	1.85	U	1.88	UH	**4.5**	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	1.61	U	**3.26**		**7.77**	H	**28.5**	
Perfluorotetradecanoic acid (PFTA)	376-06-7	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Perfluoroundecanoic acid (PFUnA)	2058-94-8	NE	1.61	U	1.85	U	1.88	UH	1.83	U
Total Regulated PFAS		20	1.61	U	**6.04**		**45.8**		**192**	

Sample ID		VGES	MW-4S		MW-4D		MW-4D-FD		EB-060922	
Sample Date	CAS#		6/7/2022	Q	6/7/2022	Q	6/7/2022	Q	6/9/2022	Q
		(ng/l)								
4:2 Fluorotelomersulfonic acid (4:2FTS A)	757124-72-4	NE	1.65	U	1.84	U	1.85	U	2.05	U
6:2 Fluorotelomersulfonic acid (6:2FTS A)	27619-97-2	NE	4.13	U	4.59	U	4.62	U	5.13	U
8:2 Fluorotelomersulfonic acid (8:2FTS A)	39108-34-4	NE	2.48	U	2.75	U	2.77	U	3.08	U
NEtFOSAA	2991-50-6	NE	2.48	U	2.75	U	2.77	U	3.08	U
NMeFOSAA	2355-31-9	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorobutanoic acid (PFBA)	375-22-4	NE	**8.95**		4.59	U	4.62	U	5.13	U
Perfluorodecanesulfonic acid (PFDS)	335-77-3	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorodecanoic acid (PFDA)	335-76-2	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorododecanoic acid (PFDoA)	307-55-1	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	**8.75**		1.84	U	1.85	U	2.05	U
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	**3.31**		1.84	U	1.85	U	2.05	U
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	**11.6**		1.84	U	1.85	U	2.05	U
Perfluorononanesulfonic acid (PFNS)	68259-12-1	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorononanoic acid (PFNA)	375-95-1	20	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	**24.2**		1.84	U	1.85	U	2.05	U
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	**5.81**		1.84	U	1.85	U	2.05	U
Perfluorotetradecanoic acid (PFTA)	376-06-7	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	NE	1.65	U	1.84	U	1.85	U	2.05	U
Perfluoroundecanoic acid (PFUnA)	2058-94-8	NE	1.65	U	1.84	U	1.85	U	2.05	U
Total Regulated PFAS		20	**36.3**		1.84	U	2.85	U	2.05	U

Key:
VGES - Vermont Groundwater Enforcement Standard, July 2019
Total Regulated PFAS - Cumulative sum of PFOA, PFOS, PFHxS, PFHpA, and PFNA
ng/L - nanograms per liter (parts per trillion)
Bold results indicate detections of the analyte
Shaded results indicate an exceedance of the VGES
NE - screening level not established
Q - laboratory result qualifier
U - Analyte not detected; limit of quantitation listed
H - Analyzed past required holding time

Table C-2
Groundwater VOLATILE ORGANIC COMPOUNDS Sample Analytical Results

Sample ID		VGES	MW-1R		MW-2S		MW-3S		MW-3D		MW-4S	
Sample Date			6/7/2022	Q	5/18/2022	Q	5/11/2022	Q	6/9/2022	Q	6/7/2022	Q
	CAS#	(µg/l)										
1,1,1,2-Tetrachloroethane	630-20-6	70	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	71-55-6	200	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	79-34-5	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	5	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	75-34-3	70	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	75-35-4	7	1	U	1	U	1	U	1	U	1	U
1,1-Dichloropropene	563-58-6	NE	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	87-61-6	0.9	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	96-18-4	0.02	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	120-82-1	70	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	95-63-6	23	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-chloropropane	96-12-8	0.2	2	U	2	U	2	U	2	U	2	U
1,2-Dichlorobenzene	95-50-1	600	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	107-06-2	5	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	78-87-5	5	1	U	1	U	1	U	1	U	1	U
1,3,5-Trichlorobenzene	108-70-3	NE	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	108-67-8	23	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	541-73-1	600	1	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	142-28-9	NE	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	106-46-7	75	1	U	1	U	1	U	1	U	1	U
1,4-Dioxane	123-91-1	0.3	50	U	50	U	50	U	50	U	50	U
2,2-Dichloropropane	594-20-7	NE	1	U	1	U	1	U	1	U	1	U
2-Butanone	78-93-3	511	2	U	2	U	2	U	2	U	2	U
2-Chlorotoluene	CLBZME2	NE	1	U	1	U	1	U	1	U	1	U
2-Hexanone	591-78-6	NE	2	U	2	U	2	U	2	U	2	U
4-Chlorotoluene	106-43-4	100	1	U	1	U	1	U	1	U	1	U
4-Isopropyltoluene	CYMP	NE	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-pentanone	108-10-1	NE	2	U	2	U	2	U	2	U	2	U
Acetone	67-64-1	950	10	U	10	U	10	U	10	U	10	U
Acrylonitrile	107-13-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	71-43-2	5	1	U	1	U	1	U	**1.08**		**2.30**	
Bromobenzene	108-86-1	NE	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	75-27-4	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	NE	1	U	1	U	1	U	1	U	1	U
Carbon disulfide	75-15-0	NE	2	U	2	U	2	U	2	U	2	U
Carbon tetrachloride	56-23-5	5	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	108-90-7	100	1	U	1	U	1	U	1	U	**2.46**	
Chlorobromomethane	74-97-5	8	1	U	1	U	1	U	1	U	1	U
Chloroethane	75-00-3	NE	2	U	2	U	2	U	2	U	2	U
Chloroform	67-66-3	NE	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	156-59-2	70	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	10061-01-5	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cumene	98-82-8	NE	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	124-48-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	74-95-3	NE	1	U	1	U	1	U	1	U	1	U
Ethanol	64-17-5	NE	200	U	200	U	200	U	200	U	200	U
Ethyl ether	60-29-7	NE	1	U	1	U	**4.01**		**10**		**7.11**	
Ethylbenzene	100-41-4	700	1	U	1	U	1	U	1	U	1	U
Ethylene dibromide	106-93-4	0.05	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl-tert-butyl ether	637-92-3	NE	1	U	1	U	1	U	1	U	1	U
Freon 11	75-69-4	NE	1	U	1	U	1	U	1	U	1	U
Freon 113	76-13-1	NE	1	U	1	U	1	U	1	U	1	U
Freon 12	75-71-8	NE	2	U	2	U	2	U	2	U	2	U
Hexachlorobutadiene	87-68-3	NE	1	U	1	U	1	U	1	U	1	U
Isopropyl ether	108-20-3	NE	1	U	1	U	1	U	1	U	1	U
m,p Xylenes	179601-23-1	NE	1	U	1	U	1	U	1	U	1	U
Methyl bromide	74-83-9	5	2	U	2	U	2	U	2	U	2	U
Methyl chloride	74-87-3	NE	2	U	2	U	2	U	2	U	2	U
Methyl tert-butyl ether	1634-04-4	11	1	U	1	U	1	U	1	U	1	U
Methylene chloride	75-09-2	5	2	U	2	U	2	U	2	U	2	U
Naphthalene	91-20-3	0.5	2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	104-51-8	NE	1	U	1	U	1	U	1	U	1	U
n-Propylbenzene	103-65-1	NE	1	U	1	U	1	U	1	U	1	U
o-Xylene	95-47-6	10000	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	BTBZS	NE	1	U	1	U	1	U	1	U	1	U
Styrene	100-42-5	100	1	U	1	U	1	U	1	U	1	U
Tert-amyl methyl ether	994-05-8	NE	1	U	1	U	1	U	1	U	1	U
Tert-Butyl alcohol	75-65-0	NE	10	U	10	U	10	U	10	U	10	U
Tert-Butylbenzene	98-06-6	NE	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	5	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	109-99-9	NE	2	U	2	U	2	U	**19.8**		2	U
Toluene	108-88-3	1000	1	U	1	U	1	U	1	U	1	U
Total Trimethylbenzene	25551-13-7	NE	1	U	1	U	1	U	1	U	1	U
Total Xylene	1330-20-7	10000	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	156-60-5	100	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	10061-02-6	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,4-Dichlorobutene	110-57-6	NE	5	U	5	U	5	U	5	U	5	U
Trichloroethene	79-01-6	5	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	75-01-4	2	1	U	1	U	1	U	1	U	1	U

Sample ID		VGES	MW-4D		MW-4D-FD		Trip Blank		EB-060922		RPD (MW-4D)
Sample Date	CAS#		6/7/2022	Q	6/7/2022	Q	6/7/2022	Q	6/9/2022	Q	
		(µg/l)									
1,1,1,2-Tetrachloroethane	630-20-6	70	1	U	1	U	1	U	1	U	-
1,1,1-Trichloroethane	71-55-6	200	1	U	1	U	1	U	1	U	-
1,1,2,2-Tetrachloroethane	79-34-5	NE	0.5	U	0.5	U	0.5	U	0.5	U	-
1,1,2-Trichloroethane	79-00-5	5	1	U	1	U	1	U	1	U	-
1,1-Dichloroethane	75-34-3	70	1	U	1	U	1	U	1	U	-
1,1-Dichloroethene	75-35-4	7	1	U	1	U	1	U	1	U	-
1,1-Dichloropropene	563-58-6	NE	1	U	1	U	1	U	1	U	-
1,2,3-Trichlorobenzene	87-61-6	0.9	1	U	1	U	1	U	1	U	-
1,2,3-Trichloropropane	96-18-4	0.02	1	U	1	U	1	U	1	U	-
1,2,4-Trichlorobenzene	120-82-1	70	1	U	1	U	1	U	1	U	-
1,2,4-Trimethylbenzene	95-63-6	23	1	U	1	U	1	U	1	U	-
1,2-Dibromo-3-chloropropane	96-12-8	0.2	2	U	2	U	2	U	2	U	-
1,2-Dichlorobenzene	95-50-1	600	1	U	1	U	1	U	1	U	-
1,2-Dichloroethane	107-06-2	5	1	U	1	U	1	U	1	U	-
1,2-Dichloropropane	78-87-5	5	1	U	1	U	1	U	1	U	-
1,3,5-Trichlorobenzene	108-70-3	NE	1	U	1	U	1	U	1	U	-
1,3,5-Trimethylbenzene	108-67-8	23	1	U	1	U	1	U	1	U	-
1,3-Dichlorobenzene	541-73-1	600	1	U	1	U	1	U	1	U	-
1,3-Dichloropropane	142-28-9	NE	1	U	1	U	1	U	1	U	-
1,4-Dichlorobenzene	106-46-7	75	1	U	1	U	1	U	1	U	-
1,4-Dioxane	123-91-1	0.3	50	U	50	U	50	U	50	U	-
2,2-Dichloropropane	594-20-7	NE	1	U	1	U	1	U	1	U	-
2-Butanone	78-93-3	511	2	U	2	U	2	U	2	U	-
2-Chlorotoluene	CLBZME2	NE	1	U	1	U	1	U	1	U	-
2-Hexanone	591-78-6	NE	2	U	2	U	2	U	2	U	-
4-Chlorotoluene	106-43-4	100	1	U	1	U	1	U	1	U	-
4-Isopropyltoluene	CYMP	NE	1	U	1	U	1	U	1	U	-
4-Methyl-2-pentanone	108-10-1	NE	2	U	2	U	2	U	2	U	-
Acetone	67-64-1	950	10	U	10	U	10	U	10	U	-
Acrylonitrile	107-13-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	-
Benzene	71-43-2	5	1	U	1	U	1	U	1	U	-
Bromobenzene	108-86-1	NE	1	U	1	U	1	U	1	U	-
Bromodichloromethane	75-27-4	NE	0.5	U	0.5	U	0.5	U	0.5	U	-
Bromoform	75-25-2	NE	1	U	1	U	1	U	1	U	-
Carbon disulfide	75-15-0	NE	2	U	2	U	2	U	2	U	-
Carbon tetrachloride	56-23-5	5	1	U	1	U	1	U	1	U	-
Chlorobenzene	108-90-7	100	1	U	1	U	1	U	1	U	-
Chlorobromomethane	74-97-5	8	1	U	1	U	1	U	1	U	-
Chloroethane	75-00-3	NE	2	U	2	U	2	U	2	U	-
Chloroform	67-66-3	NE	1	U	1	U	1	U	1	U	-
cis-1,2-Dichloroethene	156-59-2	70	1	U	1	U	1	U	1	U	-
cis-1,3-Dichloropropene	10061-01-5	NE	0.5	U	0.5	U	0.5	U	0.5	U	-
Cumene	98-82-8	NE	1	U	1	U	1	U	1	U	-
Dibromochloromethane	124-48-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	-
Dibromomethane	74-95-3	NE	1	U	1	U	1	U	1	U	-
Ethanol	64-17-5	NE	200	U	200	U	200	U	200	U	-
Ethyl ether	60-29-7	NE	1	U	1	U	1	U	1	U	-
Ethylbenzene	100-41-4	700	1	U	1	U	1	U	1	U	-
Ethylene dibromide	106-93-4	0.05	0.5	U	0.5	U	0.5	U	0.5	U	-
Ethyl-tert-butyl ether	637-92-3	NE	1	U	1	U	1	U	1	U	-
Freon 11	75-69-4	NE	1	U	1	U	1	U	1	U	-
Freon 113	76-13-1	NE	1	U	1	U	1	U	1	U	-
Freon 12	75-71-8	NE	**3.11**		**3.05**		2	U	2	U	2%
Hexachlorobutadiene	87-68-3	NE	1	U	1	U	1	U	1	U	-
Isopropyl ether	108-20-3	NE	1	U	1	U	1	U	1	U	-
m,p Xylenes	179601-23-1	NE	1	U	1	U	1	U	1	U	-
Methyl bromide	74-83-9	5	2	U	2	U	2	U	2	U*+	-
Methyl chloride	74-87-3	NE	2	U	2	U	2	U	2	U	-
Methyl tert-butyl ether	1634-04-4	11	1	U	1	U	1	U	1	U	-
Methylene chloride	75-09-2	5	2	U	2	U	2	U	2	U	-
Naphthalene	91-20-3	0.5	2	U	2	U	2	U	2	U	-
n-Butylbenzene	104-51-8	NE	1	U	1	U	1	U	1	U	-
n-Propylbenzene	103-65-1	NE	1	U	1	U	1	U	1	U	-
o-Xylene	95-47-6	10000	1	U	1	U	1	U	1	U	-
sec-Butylbenzene	BTBZS	NE	1	U	1	U	1	U	1	U	-
Styrene	100-42-5	100	1	U	1	U	1	U	1	U	-
Tert-amyl methyl ether	994-05-8	NE	1	U	1	U	1	U	1	U	-
Tert-Butyl alcohol	75-65-0	NE	10	U	10	U	10	U	10	U	-
Tert-Butylbenzene	98-06-6	NE	1	U	1	U	1	U	1	U	-
Tetrachloroethene	127-18-4	5	1	U	1	U	1	U	1	U	-
Tetrahydrofuran	109-99-9	NE	2	U	2	U	2	U	2	U	-
Toluene	108-88-3	1000	1	U	1	U	1	U	1	U	-
Total Trimethylbenzene	25551-13-7	NE	1	U	1	U	1	U	1	U	-
Total Xylene	1330-20-7	10000	1	U	1	U	1	U	1	U	-
trans-1,2-Dichloroethene	156-60-5	100	1	U	1	U	1	U	1	U	-
trans-1,3-Dichloropropene	10061-02-6	NE	0.5	U	0.5	U	0.5	U	0.5	U	-
trans-1,4-Dichlorobutene	110-57-6	NE	5	U	5	U	5	U	5	U	-
Trichloroethene	79-01-6	5	1	U	1	U	1	U	1	U	-
Vinyl chloride	75-01-4	2	1	U	1	U	1	U	1	U	-

Key:
VGES - Vermont Groundwater Enforcement Standard, July 2019
µg/L - micrograms per liter (parts per billion)
Bold results indicate detections of the analyte
Shaded results indicate an exceedance of the VGES
NE - screening level not established
Q - laboratory result qualifier
U - Analyte not detected; limit of quantitation listed

Table C-3
Groundwater METALS Sample Analytical Results

Sample ID		VGES	MW-1R		MW-2S		MW-3S		MW-3D		MW-4S	
Sample Date			6/7/2022	Q	5/18/2022	Q	5/11/2022	Q	6/9/2022	Q	6/7/2022	Q
	CAS#	(µg/l)										
Arsenic	7440-38-2	10	**7.1**		**136**		**36**		**14**		**201**	
Cadmium	7440-43-9	5	2.5	U	*5*	U	*5*	U	2.5	U	2.5	U
Chromium	7440-47-3	100	**15.8**		10	U	10	U	5	U	5	U
Copper	7440-50-8	1300	**13.5**		10	U	**15.5**		5	U	5	U
Iron	7439-89-6	NE	**11800**		**15400**		**4020**		**4030**		**13000**	
Lead	7439-92-1	15	**10.4**		*15*	U	*15*	U	7.5	U	7.5	U
Manganese	7439-96-5T	300	**308**		**1010**		**2930**		**2340**		**201**	
Nickel	7440-02-0	100	**10.7**		**15.2**		10	U	**38**		**40.6**	
Sodium	7440-23-5	NE	**3640**		**2840**		**14400**		**75400**		**18500**	
Zinc	7440-66-6	NE	**36.9**		50	U	50	U	25	U	25	U
Mercury	7439-97-6	2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

Sample ID		VGES	MW-4D		MW-4D-FD		EB-060922		RPD (MW-4D)
Sample Date			6/7/2022	Q	6/7/2022	Q	6/9/2022	Q	
	CAS#	(µg/l)							
Arsenic	7440-38-2	10	4	U	**4**		4	U	-
Cadmium	7440-43-9	5	2.5	U	2.5	U	2.5	U	-
Chromium	7440-47-3	100	5	U	**7.75**		5	U	-
Copper	7440-50-8	1300	**5.6**		**8.2**		5	U	38%
Iron	7439-89-6	NE	**3800**		**7120**		50	U	61%
Lead	7439-92-1	15	7.5	U	7.5	U	7.5	U	-
Manganese	7439-96-5T	300	**187**		**227**		5	U	19%
Nickel	7440-02-0	100	5	U	**7.2**		5	U	-
Sodium	7440-23-5	NE	**9330**		NA		**3610**		-
Zinc	7440-66-6	NE	25	U	25	U	25	U	-
Mercury	7439-97-6	2	0.2	U	0.2	U	0.2	U	-

Key:
VGES - Vermont Groundwater Enforcement Standard, July 2019
µg/L - micrograms per liter (parts per billion)
Bold results indicate detections of the analyte
Shaded results indicate an exceedance of the VGES
NE - screening level not established
Q - laboratory result qualifier
U - Analyte not detected; limit of quantitation listed
NA- Not Analyzed

Table C-4
Groundwater WET CHEMISTRY Sample Analytical Results

Sample ID		VGES	MW-1R		MW-2S		MW-3S		MW-3D		MW-4S	
Sample Date	CAS#		6/7/2022	Q	5/18/2022	Q	5/11/2022	Q	6/9/2022	Q	6/7/2022	Q
		(µg/l)										
Chloride	16887-00-6	NE	2000	U	**2470**		NA		**35600**		**8700**	
		(mg/l)										
Chemical oxygen demand	COD	NE	75	U	75	U	75	U	75	U	75	U

Sample ID		VGES	MW-4D		MW-4D-FD		EB-060922	
Sample Date	CAS#		6/7/2022	Q	6/7/2022	Q	6/9/2022	Q
		(µg/l)						
Chloride	16887-00-6	NE	**2110**		NA		NA	
		(mg/l)						
Chemical oxygen demand	COD	NE	188	U	**241**		75	U

Key:
VGES - Vermont Groundwater Enforcement Standard, July 2019
µg/L - micrograms per liter (parts per billion)
Bold results indicate detections of the analyte
Shaded results indicate an exceedance of the VGES
NE - screening level not established
mg/L - milligrams per liter
Q - laboratory result qualifier
U - Analyte not detected; limit of quantitation listed
NA- Not Analyzed

Table C-5
Drinking Water PFAS Sample Analytical Results

Sample ID		DWHA/VGES	152 Forest Edge Rd - INF		152 Forest Edge Rd - MID		152 Forest Edge Rd - EFF		56 Forest Edge	
Sample Date	**CAS#**		**5/17/2022**	**Q**	**5/17/2022**	**Q**	**5/17/2022**	**Q**	**6/9/2022**	**Q**
		(ng/l)								
NEtFOSAA	2991-50-6	NE	1.88	U	1.78	U	1.88	U	1.68	U
NMeFOSAA	2355-31-9	NE	1.88	U	1.78	U	1.88	U	1.68	U
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	1.88	U	1.78	U	1.88	U	1.68	U
Perfluorodecanoic acid (PFDA)	335-76-2	NE	1.88	U	1.78	U	1.88	U	1.68	U
Perfluorododecanoic acid (PFDoA)	307-55-1	NE	1.88	U	1.78	U	1.88	U	1.68	U
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	**2.70**		1.78	U	1.88	U	1.68	U
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	1.88	U	1.78	U	1.88	U	1.68	U
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	**4.53**		1.78	U	1.88	U	1.68	U
Perfluorononanoic acid (PFNA)	375-95-1	20	1.88	U	1.78	U	1.88	U	1.68	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.88	U	1.78	U	1.88	U	**4.46**	
Perfluorooctanoic acid (PFOA)	335-67-1	20	**2.69**		1.78	U	1.88	U	**3.35**	
Perfluorotetradecanoic acid (PFTA)	376-06-7	NE	1.88	U	1.78	U	1.88	U	1.68	U
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	NE	1.88	U	1.78	U	1.88	U	1.68	U
Perfluoroundecanoic acid (PFUnA)	2058-94-8	NE	1.88	U	1.78	U	1.88	U	1.68	U
Total regulated PFAS		20	**5.39**		1.78	U	1.88	U	**7.81**	

Sample ID		DWHA/VGES	907 Beecher-INF		907 Beecher-FD		907 Beecher-MID		907 Beecher-EFF		907 Beecher-FB		RPD
Sample Date	**CAS#**		**6/7/2022**	**Q**	**6/7/2022**	**Q**	**6/7/2022**	**Q**	**6/7/2022**	**Q**	**6/7/2022**	**Q**	
		(ng/l)											
NEtFOSAA	2991-50-6	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
NMeFOSAA	2355-31-9	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	**2.40**		**2.45**		1.6	U	1.65	U	1.59	U	2%
Perfluorodecanoic acid (PFDA)	335-76-2	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluorododecanoic acid (PFDoA)	307-55-1	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	**9.89**		**9.65**		1.6	U	1.65	U	1.59	U	2%
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	**6.66**		**6.58**		1.6	U	1.65	U	1.59	U	1%
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	**16.1**		**15.3**		1.6	U	1.65	U	1.59	U	5%
Perfluorononanoic acid (PFNA)	375-95-1	20	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluorooctanoic acid (PFOA)	335-67-1	20	**29.2**		**28.5**		1.6	U	1.65	U	1.59	U	2%
Perfluorotetradecanoic acid (PFTA)	376-06-7	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Perfluoroundecanoic acid (PFUnA)	2058-94-8	NE	1.62	U	1.63	U	1.6	U	1.65	U	1.59	U	--
Total regulated PFAS		20	**45.8**		**44.7**		1.6	U	1.65	U	1.59	U	2%

Key:
VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018
Total Health Advisory PFAS - Cumulative sum of PFOA, PFOS, PFHxS, PFHpA, and PFNA
VGES - Vermont Groundwater Enforcement Standard, July 2019
ng/L - nanograms per liter (parts per trillion)
Bold results indicate detections of the analyte
Shaded results indicate an exceedance of the VGES
NE - screening level not established
Q - laboratory result qualifier
U - Analyte not detected; limit of quantitation listed

Table C-6
Drinking Water VOLATILE ORGANIC COMPOUNDS Sample Analytical Results

Sample ID		DWHA/ VGES	152 Forest Edge Rd - INF		152 Forest Edge Rd - MID		152 Forest Edge Rd - EFF		56 Forest Edge	
Sample Date			5/17/2022	Q	5/17/2022	Q	5/17/2022	Q	6/9/2022	Q
		(µg/l)								
1,1,1,2-Tetrachloroethane	630-20-6	70	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	200	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	NE	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	5	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	70	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	75-35-4	7	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	563-58-6	NE	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	0.9	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	96-18-4	0.02	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	70	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trimethylbenzene	95-63-6	23	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	96-12-8	0.2	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	95-50-1	600	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	5	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	5	0.5	U	0.5	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	108-67-8	23	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	600	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	142-28-9	NE	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	75	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	594-20-7	NE	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	511	5	U	5	U	5	U	5	U
2-Chlorotoluene	CLBZME2	NE	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	591-78-6	NE	5	U	5	U	5	U	5	U
4-Chlorotoluene	106-43-4	100	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	108-10-1	NE	5	U	5	U	5	U	5	U
Acetone	67-64-1	950	10	U	10	U	10	U	10	U
Acrylonitrile	107-13-1	NE	10	U	10	U	10	U	10	U
Benzene	71-43-2	5	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	108-86-1	NE	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	NE	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	NE	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	75-15-0	NE	2	U	2	U	2	U	2	U
Carbon tetrachloride	56-23-5	5	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	100	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	74-97-5	8	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	NE	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	NE	0.5	U	0.5	U	0.5	U	**0.662**	
cis-1,2-Dichloroethene	156-59-2	70	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	10061-01-5	NE	0.5	U	0.5	U	0.5	U	0.5	U
Cumene	98-82-8	NE	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	99-87-6	NE	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	NE	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	74-95-3	NE	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl ether	60-29-7	NE	**6.95**		0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	700	0.5	U	0.5	U	0.5	U	0.5	U
Ethylene dibromide	106-93-4	0.05	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl-tert-butyl ether	637-92-3	NE	0.5	U	0.5	U	0.5	U	0.5	U
Freon 11	75-69-4	NE	0.5	U	0.5	U	0.5	U	0.5	U
Freon 113	76-13-1	NE	0.5	U	0.5	U	0.5	U	0.5	U
Freon 12	75-71-8	NE	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	NE	0.5	U	0.5	U	0.5	U	0.5	U
Isopropyl ether	108-20-3	NE	0.5	U	0.5	U	0.5	U	0.5	U
m,p Xylenes	179601-23-1	NE	1	U	1	U	1	U	1	U
Methyl bromide	74-83-9	5	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	74-87-3	NE	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	1634-04-4	11	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	75-09-2	5	**11.8**		**4.33**		0.5	U	0.5	U
Naphthalene	91-20-3	0.5	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	104-51-8	NE	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	103-65-1	NE	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	95-47-6	10000	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	BTBZS	NE	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	100	0.5	U	0.5	U	0.5	U	0.5	U
Tert-amyl methyl ether	994-05-8	NE	0.5	U	0.5	U	0.5	U	0.5	U
Tert-Butyl alcohol	75-65-0	NE	25	U	25	U	25	U	25	U
Tert-Butylbenzene	98-06-6	NE	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethene	127-18-4	5	0.5	U	0.5	U	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	NE	**16.6**		7	U	7	U	7	U
Toluene	108-88-3	1000	0.5	U	0.5	U	0.5	U	0.5	U
Total Trimethylbenzene	25551-13-7	NE	0.5	U	0.5	U	0.5	U	0.5	U
Total Xylene	1330-20-7	10000	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	100	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	NE	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	5	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	75-01-4	2	0.5	U	0.5	U	0.5	U	0.5	U

Sample ID		DWHA/ VGES	907 Beecher-INF		907 Beecher-FD		907 Beecher-MID		907 Beecher-EFF		RPD
Sample Date	CAS#		6/7/2022	Q	6/7/2022	Q	6/7/2022	Q	6/7/2022	Q	
		(µg/l)									
1,1,1,2-Tetrachloroethane	630-20-6	70	0.5	U	0.5	U	0.5	U	0.5	U	--
1,1,1-Trichloroethane	71-55-6	200	0.5	U	0.5	U	0.5	U	0.5	U	--
1,1,2,2-Tetrachloroethane	79-34-5	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
1,1,2-Trichloroethane	79-00-5	5	0.5	U	0.5	U	0.5	U	0.5	U	--
1,1-Dichloroethane	75-34-3	70	0.5	U	0.5	U	0.5	U	0.5	U	--
1,1-Dichloroethene	75-35-4	7	0.5	U	0.5	U	0.5	U	0.5	U	--
1,1-Dichloropropene	563-58-6	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
1,2,3-Trichlorobenzene	87-61-6	0.9	0.5	U	0.5	U	0.5	U	0.5	U	--
1,2,3-Trichloropropane	96-18-4	0.02	0.5	U	0.5	U	0.5	U	*0.5*	U	--
1,2,4-Trichlorobenzene	120-82-1	70	0.5	U	0.5	U	0.5	U	0.5	U	--
1,2,4-Trimethylbenzene	95-63-6	23	0.5	U	0.5	U	0.5	U	0.5	U	--
1,2-Dibromo-3-chloropropane	96-12-8	0.2	1	U	1	U	1	U	*1*	U	--
1,2-Dichlorobenzene	95-50-1	600	0.5	U	0.5	U	0.5	U	0.5	U	--
1,2-Dichloroethane	107-06-2	5	0.5	U	0.5	U	0.5	U	0.5	U	--
1,2-Dichloropropane	78-87-5	5	0.5	U	0.5	U	0.5	U	0.5	U	--
1,3,5-Trimethylbenzene	108-67-8	23	0.5	U	0.5	U	0.5	U	0.5	U	--
1,3-Dichlorobenzene	541-73-1	600	0.5	U	0.5	U	0.5	U	0.5	U	--
1,3-Dichloropropane	142-28-9	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
1,4-Dichlorobenzene	106-46-7	75	0.5	U	0.5	U	0.5	U	0.5	U	--
2,2-Dichloropropane	594-20-7	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
2-Butanone	78-93-3	511	5	U	5	U	5	U	5	U	--
2-Chlorotoluene	CLBZME2	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
2-Hexanone	591-78-6	NE	5	U	5	U	5	U	5	U	--
4-Chlorotoluene	106-43-4	100	0.5	U	0.5	U	0.5	U	0.5	U	--
4-Methyl-2-pentanone	108-10-1	NE	5	U	5	U	5	U	5	U	--
Acetone	67-64-1	950	10	U	10	U	10	U	10	U	--
Acrylonitrile	107-13-1	NE	10	U	10	U	10	U	10	U	--
Benzene	71-43-2	5	0.5	U	0.5	U	0.5	U	0.5	U	--
Bromobenzene	108-86-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Bromodichloromethane	75-27-4	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Bromoform	75-25-2	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Carbon disulfide	75-15-0	NE	2	U	2	U	2	U	2	U	--
Carbon tetrachloride	56-23-5	5	0.5	U	0.5	U	0.5	U	0.5	U	--
Chlorobenzene	108-90-7	100	0.5	U	0.5	U	0.5	U	0.5	U	--
Chlorobromomethane	74-97-5	8	0.5	U	0.5	U	0.5	U	0.5	U	--
Chloroethane	75-00-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Chloroform	67-66-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
cis-1,2-Dichloroethene	156-59-2	70	0.5	U	0.5	U	0.5	U	0.5	U	--
cis-1,3-Dichloropropene	10061-01-5	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Cumene	98-82-8	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Cymene	99-87-6	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Dibromochloromethane	124-48-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Dibromomethane	74-95-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Ethyl ether	60-29-7	NE	**8.23**		**8.15**		0.5	U	0.5	U	1%
Ethylbenzene	100-41-4	700	0.5	U	0.5	U	0.5	U	0.5	U	--
Ethylene dibromide	106-93-4	0.05	0.5	U	*0.5*	U	0.5	U	*0.5*	U	--
Ethyl-tert-butyl ether	637-92-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Freon 11	75-69-4	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Freon 113	76-13-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Freon 12	75-71-8	NE	**2.84**		**2.82**		0.5	U	0.5	U	1%
Hexachlorobutadiene	87-68-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Isopropyl ether	108-20-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
m,p Xylenes	179601-23-1	NE	1	U	1	U	1	U	1	U	--
Methyl bromide	74-83-9	5	0.5	U	0.5	U	0.5	U	0.5	U	--
Methyl chloride	74-87-3	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Methyl tert-butyl ether	1634-04-4	11	**0.847**		**0.909**		0.5	U	0.5	U	7%
Methylene chloride	75-09-2	5	0.5	U	0.5	U	0.5	U	0.5	U	--
Naphthalene	91-20-3	0.5	0.5	U	0.5	U	0.5	U	*0.5*	U	--
n-Butylbenzene	104-51-8	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
n-Propylbenzene	103-65-1	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
o-Xylene	95-47-6	10000	0.5	U	0.5	U	0.5	U	0.5	U	--
sec-Butylbenzene	BTBZS	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Styrene	100-42-5	100	0.5	U	0.5	U	0.5	U	0.5	U	--
Tert-amyl methyl ether	994-05-8	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Tert-Butyl alcohol	75-65-0	NE	25	U	25	U	25	U	25	U	--
Tert-Butylbenzene	98-06-6	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Tetrachloroethene	127-18-4	5	0.5	U	0.5	U	0.5	U	0.5	U	--
Tetrahydrofuran	109-99-9	NE	**18.8**		**19.0**		7	U	7	U	1%
Toluene	108-88-3	1000	0.5	U	0.5	U	0.5	U	0.5	U	--
Total Trimethylbenzene	25551-13-7	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Total Xylene	1330-20-7	10000	0.5	U	0.5	U	0.5	U	0.5	U	--
trans-1,2-Dichloroethene	156-60-5	100	0.5	U	0.5	U	0.5	U	0.5	U	--
trans-1,3-Dichloropropene	10061-02-6	NE	0.5	U	0.5	U	0.5	U	0.5	U	--
Trichloroethene	79-01-6	5	0.5	U	0.5	U	0.5	U	0.5	U	--
Vinyl chloride	75-01-4	2	0.5	U	0.5	U	0.5	U	0.5	U	--

Key:
VGES - Vermont Groundwater Enforcement Standard, July 2019
µg/L - micrograms per liter (parts per billion)
Bold results indicate detections of the analyte
Shaded results indicate an exceedance of the VGES
NE - screening level not established
Q - laboratory result qualifier
U - Analyte not detected; limit of quantitation listed

Table and Time Series C-7

MW-2S

Sample ID		VGES	MW-2S		MW-2S	
Sample Date	**CAS#**		**12/23/2021**	**Q**	**5/18/2022**	**Q**
Analyte						
VOCs		**(µg/l)**				
PFAS		**(ng/L)**				
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	**2.77**		**5.5**	
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	1.76	U	1.85	U
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	1.76	U	1.85	U
Perfluorononanoic acid (PFNA)	375-95-1	20	1.76	U	1.85	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.76	U	1.85	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	**5.57**		**6.04**	
Total Regulated PFAS		20	**5.57**		**6.04**	
Total Metals		**(µg/l)**				
Arsenic	7440-38-2	10	**102**		**136**	
Iron	7439-89-6	NE	**15700**		**15400**	
Manganese	7439-96-5T	300	**1160**		**1010**	
Sodium	7440-23-5	NE	**3080**		**2840**	
COD		**(mg/L)**				
COD			**25**		75	U
Chloride		**(µg/l)**				
Chloride	16887-00-6		5000	U	**2470**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-8

MW-2D

Sample ID		VGES	MW-2 (MW-2D)		MW-2D	
Sample Date	**CAS#**		**6/14/2021**	**Q**	**12/23/2021**	**Q**
Analyte						
VOCs		**(µg/l)**				
PFAS		**(ng/L)**				
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	NA		1.92	U
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	NA		1.92	U
Perfluorononanoic acid (PFNA)	375-95-1	20	NA		1.92	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	NA		1.92	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	NA		**2.43**	
Total Regulated PFAS		20	NA		**2.43**	
Total Metals		**(µg/l)**	**(dissolved)**			
Arsenic	7440-38-2	10	10	U	**39.7**	
Iron	7439-89-6	NE	NA		**7740**	
Manganese	7439-96-5T	300	**35**		**319**	
Sodium	7440-23-5	NE	**8500**		**8150**	
COD		**(mg/L)**				
COD			10	U	**15**	
Chloride		**(µg/l)**				
Chloride	16887-00-6		2700	U	5000	U

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-9

MW-3S

Sample ID		VGES	MW-3S		MW-3S	
Sample Date	**CAS#**		**12/27/2021**	**Q**	**5/11/2022**	**Q**
Analyte						
VOCs		**(µg/l)**				
Chlorobenzene	108-90-7	100	**1.12**		1.00	U
Ethyl ether	60-29-7	NE	**1.95**		**4.01**	
Tetrahydrofuran	109-99-9	NE	**6.16**		2.00	U
PFAS		**(ng/L)**				
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	**1.86**		**2.42**	
Perfluorobutanoic acid (PFBA)	375-22-4	NE	**10.0**		**10.8**	
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	**7.47**		**8.07**	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	**6.83**		**4.08**	
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	**11.8**		**15.8**	
Perfluorononanoic acid (PFNA)	375-95-1	20	1.72	U	1.88	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.72	U	**1.97**	
Perfluorooctanoic acid (PFOA)	335-67-1	20	**39.7**		**31.7**	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	**7.40**		**7.77**	
Total Regulated PFAS		20	**54.0**		**45.8**	
Total Metals		**(µg/l)**	**(dissolved)**			
Arsenic	7440-38-2	10	**133**		**36**	
Iron	7439-89-6	NE	**15100**		**4020**	
Manganese	7439-96-5T	300	**2630**		**2930**	
Sodium	7440-23-5	NE	**37200**		**14400**	
COD		**(mg/L)**				
COD			**12**		75	U
Chloride		**(µg/l)**				
Chloride	16887-00-6		**10600**		NA	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-10

MW-3D

Sample ID		VGES	MW-5 (MW-3D)		MW-3D		MW-3D	
Sample Date	**CAS#**		**6/14/2021**	**Q**	**12/27/2021**	**Q**	**6/9/2022**	**Q**
Analyte								
VOCs		**(µg/l)**						
Benzene	71-43-2	5	**0.8**		1.0	U	**1.08**	
Ethyl ether	60-29-7	NE	**7.8**		**14.8**		**10**	
Tetrahydrofuran	109-99-9	NE	**21**		**42.6**		**19.8**	
Toluene	108-88-3	1000	**1.9**		1.0	U	1.0	U
Vinyl chloride	75-01-4	2	**4.7**		**1.33**		1.0	U
PFAS		**(ng/L)**						
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	NE	NA		**73.0**		**24.5**	
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	NA		**3.69**		**5.00**	
Perfluorobutanoic acid (PFBA)	375-22-4	NE	NA		**28.1**		**27.4**	
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	NA		**43.7**		**42.1**	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	NA		**23.8**		**25.8**	
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	NA		**59.4**		**58.6**	
Perfluorononanoic acid (PFNA)	375-95-1	20	NA		1.82	U	1.83	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	NA		**5.57**		**4.78**	
Perfluorooctanoic acid (PFOA)	335-67-1	20	NA		**91.3**		**119**	
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	NE	NA		**3.83**		**4.5**	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	NA		**26.0**		**28.5**	
Total Regulated PFAS		20	NA		**164.4**		**192**	
Total Metals		**(µg/l)**	**(dissolved)**					
Arsenic	7440-38-2	10	**5.6**		8.0	U	**14**	
Iron	7439-89-6	NE	NA		**3340**		**4030**	
Manganese	7439-96-5T	300	**850**		**2120**		**2340**	
Sodium	7440-23-5	NE	**52000**		**97300**		**75400**	
COD		**(mg/L)**						
COD			**28**		**38**		75	U
Chloride		**(µg/l)**						
Chloride	16887-00-6		**33000**		**45900**		**35600**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-11

MW-4S

Sample ID		VGES	MW-4S		MW-4S	
Sample Date	CAS#		12/23/2021	Q	6/7/2022	Q
Analyte						
VOCs		(µg/l)				
Benzene	71-43-2	5	**2.20**		**2.30**	
Chlorobenzene	108-90-7	100	1.0	U	**2.46**	
Ethyl ether	60-29-7	NE	**9.65**		**7.11**	
Tetrahydrofuran	109-99-9	NE	**7.43**		2.0	U
PFAS		(ng/L)				
Perfluorobutanoic acid (PFBA)	375-22-4	NE	**9.04**		**8.95**	
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	**7.52**		**8.75**	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	**2.72**		**3.31**	
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	**11.1**		**11.6**	
Perfluorononanoic acid (PFNA)	375-95-1	20	1.82	U	1.65	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.82	U	1.65	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	**19.4**		**24.2**	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	**3.97**		**5.81**	
Total Regulated PFAS		20	**29.6**		**36.3**	
Total Metals		(µg/l)				
Arsenic	7440-38-2	10	**169**		**201**	
Iron	7439-89-6	NE	**11100**		**13000**	
Manganese	7439-96-5T	300	**663**		**201**	
Sodium	7440-23-5	NE	**38100**		**18500**	
COD		(mg/L)				
COD			**27**		75	U
Chloride		(µg/l)				
Chloride	16887-00-6		**9700**		**8700**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-12

MW-4D

Sample ID		VGES	MW-4D		MW-4D	
Sample Date	**CAS#**		**12/23/2021**	**Q**	**6/7/2022**	**Q**
Analyte						
VOCs		**(µg/l)**				
Freon 12	75-71-8	NE	2.0	U	**3.11**	
PFAS		**(ng/L)**				
Perfluorobutanoic acid (PFBA)	375-22-4	NE	**12.0**		1.84	U
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	1.95	U	1.84	U
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	1.95	U	1.84	U
Perfluorononanoic acid (PFNA)	375-95-1	20	1.95	U	1.84	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	1.95	U	1.84	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	**2.52**		1.84	U
Total Regulated PFAS		20	**2.5**		1.84	U
Total Metals		**(µg/l)**				
Arsenic	7440-38-2	10	8.0	U	**4**	
Iron	7439-89-6	NE	**10100**		**7120**	
Manganese	7439-96-5T	300	**463**		**227**	
Sodium	7440-23-5	NE	**63800**		**9330**	
COD		**(mg/L)**				
COD			**23**		**241**	
Chloride		**(µg/l)**				
Chloride	16887-00-6		**19500**		**2110**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-13

152 Forest Edge Road

Sample ID		DWHA/ VGES	152 Forest Edge Rd		Turner (152 Forest Edge Rd)		152 Forest Edge Rd - Inf		152 Forest Edge Rd - INF	
Sample Date	**CAS#**		**6/21/2021**	**Q**	**7/20/2021**	**Q**	**11/4/2021**	**Q**	**5/17/2022**	**Q**
Analyte										
VOCs		**(µg/L)**								
Ethyl ether	60-29-7	NE	**5.3**		5.0	U	NA		**6.95**	
Methylene chloride	75-09-2	5	**10.8**		**8.6**		**11.1**		**11.8**	
Tetrahydrofuran (THF)	109-99-9	NE	**18.1**		**17.3**		NA		16.6	
PFAS		**(ng/L)**								
Perfluorobutanoic acid (PFBA)	375-22-4	NE	NA		**5.90**		4.4	U	NA	
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	NA		**2.93**		**2.79**		**2.70**	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	NA		2.04	U	1.76	U	1.88	U
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	NA		**5.84**		**5.60**		**4.53**	
Perfluorononanoic acid (PFNA)	375-95-1	20	NA		2.04	U	1.76	U	1.88	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	NA		2.04	U	1.76	U	1.88	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	NA		**3.01**		**2.30**		**2.69**	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	NA		**4.81**		**3.18**		NA	
Total Regulated PFAS		20	NA		**5.94**		**5.09**		**5.39**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-14

Hinesburg Highway Garage

Sample ID		DWHA/ VGES	Hinesburg Highway Garage		Hinesburg Garage		907 Beecher - INF		907 Beecher-INF	
Sample Date			**6/21/2021**	**Q**	**7/20/2021**	**Q**	**12/16/2021**	**Q**	**6/7/2022**	**Q**
Analyte										
VOCs		**(µg/l)**								
Ethyl ether	60-29-7	NE	**6.3**		**6.7**		**9.01**		**8.23**	
Freon 12	75-71-8	NE	5.0	U	5.0	U	**2.59**		**2.84**	
Methyl tert-butyl ether	1634-04-4	11	2.0	U	2.0	U	**1.01**		**0.847**	
Tetrahydrofuran	109-99-9	NE	**23.7**		**24.3**		**28.0**		**18.8**	
PFAS		**(ng/L)**								
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NE	NA		**2.94**		**2.33**		**2.4**	
Perfluorobutanoic acid (PFBA)	375-22-4	NE	NA		**7.56**		**6.18**		NA	
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	NA		**10.8**		**11.4**		**9.89**	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	NA		**7.37**		**6.43**		**6.66**	
Perfluorohexanoic acid (PFHxA)	307-24-4	NE	NA		**18.8**		**16.1**		**16.1**	
Perfluorononanoic acid (PFNA)	375-95-1	20	NA		1.80	U	1.84	U	1.62	U
Perfluorooctanesulfonamide (FOSA)	754-91-6	NE	NA		**2.10**		1.84	U	NA	
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	NA		1.80	U	1.84	U	1.62	U
Perfluorooctanoic acid (PFOA)	335-67-1	20	NA		**32.4**		**25.5**		**29.2**	
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	NE	NA		NA		**2.21**		NA	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	NA		**9.88**		**7.28**		NA	
Total Regulated PFAS		20	NA		**50.6**		**43.3**		**45.8**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Table and Time Series C-15

685 Beecher Hill Road/56 Forest Edge Road

Sample ID		DWHA/ VGES	685 Beecher Hill Rd		Hurd (685 Beecher Hill Rd)		56 Forest Edge	
Sample Date			**6/21/2021**	**Q**	**7/20/2021**	**Q**	**6/9/2022**	**Q**
Analyte								
VOCs		**(µg/l)**						
Chloroform	67-66-3	NE	1.0	U	1.0	U	**0.662**	
PFAS		**(ng/L)**						
Perfluoroheptanoic acid (PFHpA)	375-85-9	20	NA		2.21	U	1.68	U
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	20	NA		2.21	U	1.68	U
Perfluorononanoic acid (PFNA)	375-95-1	20	NA		2.21	U	1.68	U
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	20	NA		**3.71**		**4.46**	
Perfluorooctanoic acid (PFOA)	335-67-1	20	NA		**4.68**		**3.35**	
Perfluoropentanoic acid (PFPeA)	2706-90-3	NE	NA		**2.78**		NA	
Total Regulated PFAS		20	NA		**8.39**		**7.81**	

Key:

VTDOH DWHA- Vermont Department of Health Drinking Water Health Advisory, November 2018

VGES - Vermont Groundwater Enforcement Standard, July 2019

µg/L - micrograms per liter (parts per billion)

mg/L - milligrams per liter (parts per million)

ng/L - nanograms per liter (parts per trillion)

Bold results indicate detections of the analyte

Shaded results indicate an exceedance of the enforcement standard(s)

NE - screening level not established

NA- Not analyzed

Appendix D: Laboratory Analytical Reports

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-4608-1
Client Project/Site: Town of Hinesburg Landfill - Hinesburg,

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Ms. Katrina Mattice

Authorized for release by:
6/29/2022 10:04:45 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time
I	Value is EMPC (estimated maximum possible concentration).

Metals

Qualifier	Qualifier Description
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-4608-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-4608-1

Comments
No additional comments.

Receipt
The samples were received on 5/19/2022 8:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.6º C.

Receipt Exceptions
The samples were shipped in two coolers. The laboratory received one cooler on May 20, 20200 and the second cooler was received on May 23, 2022. The cooler received on May 23 was received at an elevated temperature. Per the client, only the samples received with an acceptable temperature will be logged in for analysis.

A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

GC/MS VOA
Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: Carbon disulfide.
(CCVIS 620-11144/3)

Methods 8260, 8260C: The continuing calibration verification (CCV) associated with batch 620-11144 exhibited % difference of > 20% for the following analytes: 2-Butanone (MEK) and 2-Methyl-2-propanol; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

Method 8260C: The laboratory control sample (LCS) for analytical batch 620-11144 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Toluene, tert-Butylbenzene, Tetrachloroethene, 1,1,2-Trichlorotrifluoroethane (Freon 113) and Hexachlorobutadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Methods 8260, 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 620-11144 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, 2-Methyl-2-propanol, 1,3,5-Trichlorobenzene, 1,2,3-Trichlorobenzene and Hexachlorobutadiene.

Method 8260C: The continuing calibration verification (CCV) associated with batch 620-11302 exhibited % difference of > 30% for the following analytes: n-Butylbenzene, 1,1,2-Trichloroethane, and Bromomethane; however, the results of the LCS were within the CCV acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 20% difference from the initial calibration. According to the laboratory standard operating procedure, the LCS is acceptable if it meets the CCV acceptance criteria.

Method 524.2: Volatile compounds have been detected above the RL for the following samples: 152 Forest Edge Rd - INF (620-4608-14) and 152 Forest Edge Rd - MID (620-4608-15). Since a field reagent blank/trip blank was not submitted, any potential contamination from the sampling/transport process cannot be assessed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Job ID: 620-4608-1 (Continued)

Laboratory: Eurofins New England (Continued)

LCMS

Method 537 (modified): The recovery for the labeled isotope(s) in the following sample: MW-3S (620-4608-2) is outside the QC acceptance limits. Since the recovery is high and the native analyte is not detected in the sample, the data is reported.

The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: MW-3S (620-4608-2).

Method 537 (modified): The recovery for labeled isotope: d5-NEtFOSAA is outside the QC acceptance limits in the opening continuing calibration verification standard, biased high. Since the recovery for the labeled isotope is within QC limits in the following sample: MW-3S (620-4608-2), the data is reported.

Method 537 (modified): The recovery for the labeled isotope(s) in the following sample: MW-2S (620-4608-12) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted outside of the required holding time and the recovery for labeled isotope(s) was again outside QC acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-3S — Lab Sample ID: 620-4608-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	4.01		1.00		ug/L	1		8260C	Total/NA
Perfluorobutanesulfonic acid	2.42	H	1.88		ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	10.8	H	4.70		ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	8.07	H	1.88		ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	4.08	H	1.88		ng/L	1		537 IDA	Total/NA
Perfluorohexanoic acid	15.8	H	1.88		ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	1.97	H I	1.88		ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	31.7	H	1.88		ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	7.77	H	1.88		ng/L	1		537 IDA	Total/NA
Arsenic	0.0360		0.00800		mg/L	1		6010D	Total/NA
Copper	0.0155		0.0100		mg/L	1		6010D	Total/NA
Iron	4.02		0.100		mg/L	1		6010D	Total/NA
Manganese	2.93		0.0100		mg/L	1		6010D	Total/NA
Sodium	14.4		1.50		mg/L	1		6010D	Total/NA

Client Sample ID: MW-2S — Lab Sample ID: 620-4608-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	2.47		2.00		mg/L	5		EPA 300.0 R2.1	Total/NA
Perfluorohexanoic acid	5.50		1.85		ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	6.04		1.85		ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	3.26		1.85		ng/L	1		537 IDA	Total/NA
Arsenic	0.136		0.00800		mg/L	1		6010D	Total/NA
Iron	15.4		0.100		mg/L	1		6010D	Total/NA
Manganese	1.01		0.0100		mg/L	1		6010D	Total/NA
Nickel	0.0152		0.0100		mg/L	1		6010D	Total/NA
Sodium	2.84		1.50		mg/L	1		6010D	Total/NA

Client Sample ID: 152 Forest Edge Rd - INF — Lab Sample ID: 620-4608-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	6.95		0.500		ug/L	1		524.2	Total/NA
Methylene Chloride	11.8		0.500		ug/L	1		524.2	Total/NA
Tetrahydrofuran	16.6		7.00		ug/L	1		524.2	Total/NA
Perfluorohexanoic acid	4.53		1.88		ng/L	1		EPA 537.1	Total/NA
Perfluoroheptanoic acid	2.70		1.88		ng/L	1		EPA 537.1	Total/NA
Perfluorooctanoic acid	2.69		1.88		ng/L	1		EPA 537.1	Total/NA

Client Sample ID: 152 Forest Edge Rd - MID — Lab Sample ID: 620-4608-15

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	4.33		0.500		ug/L	1		524.2	Total/NA

Client Sample ID: 152 Forest Edge Rd - EFF — Lab Sample ID: 620-4608-16

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-4608-1

Client Sample ID: MW-3S
Date Collected: 05/11/22 15:52
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	*+	1.00		ug/L			05/25/22 16:04	1
Acetone	ND		10.0		ug/L			05/25/22 16:04	1
Acrylonitrile	ND		0.500		ug/L			05/25/22 16:04	1
Benzene	ND		1.00		ug/L			05/25/22 16:04	1
Bromobenzene	ND		1.00		ug/L			05/25/22 16:04	1
Bromochloromethane	ND		1.00		ug/L			05/25/22 16:04	1
Bromodichloromethane	ND		0.500		ug/L			05/25/22 16:04	1
Bromoform	ND		1.00		ug/L			05/25/22 16:04	1
Bromomethane	ND		2.00		ug/L			05/25/22 16:04	1
2-Butanone (MEK)	ND		2.00		ug/L			05/25/22 16:04	1
n-Butylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
sec-Butylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
tert-Butylbenzene	ND	*+	1.00		ug/L			05/25/22 16:04	1
Carbon disulfide	ND		2.00		ug/L			05/25/22 16:04	1
Carbon tetrachloride	ND		1.00		ug/L			05/25/22 16:04	1
Chlorobenzene	ND		1.00		ug/L			05/25/22 16:04	1
Chloroethane	ND		2.00		ug/L			05/25/22 16:04	1
Chloroform	ND		1.00		ug/L			05/25/22 16:04	1
Chloromethane	ND		2.00		ug/L			05/25/22 16:04	1
2-Chlorotoluene	ND		1.00		ug/L			05/25/22 16:04	1
4-Chlorotoluene	ND		1.00		ug/L			05/25/22 16:04	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			05/25/22 16:04	1
Dibromochloromethane	ND		0.500		ug/L			05/25/22 16:04	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			05/25/22 16:04	1
Dibromomethane	ND		1.00		ug/L			05/25/22 16:04	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/25/22 16:04	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/25/22 16:04	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/25/22 16:04	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			05/25/22 16:04	1
1,1-Dichloroethane	ND		1.00		ug/L			05/25/22 16:04	1
1,2-Dichloroethane	ND		1.00		ug/L			05/25/22 16:04	1
1,1-Dichloroethene	ND		1.00		ug/L			05/25/22 16:04	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/25/22 16:04	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/25/22 16:04	1
1,2-Dichloropropane	ND		1.00		ug/L			05/25/22 16:04	1
1,3-Dichloropropane	ND		1.00		ug/L			05/25/22 16:04	1
2,2-Dichloropropane	ND		1.00		ug/L			05/25/22 16:04	1
1,1-Dichloropropene	ND		1.00		ug/L			05/25/22 16:04	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/25/22 16:04	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/25/22 16:04	1
Ethylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
Hexachlorobutadiene	ND	*1 *+	1.00		ug/L			05/25/22 16:04	1
2-Hexanone (MBK)	ND		2.00		ug/L			05/25/22 16:04	1
Isopropylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
4-Isopropyltoluene	ND		1.00		ug/L			05/25/22 16:04	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/25/22 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			05/25/22 16:04	1
Methylene Chloride	ND		2.00		ug/L			05/25/22 16:04	1
Naphthalene	ND		2.00		ug/L			05/25/22 16:04	1

Client Sample ID: MW-3S
Date Collected: 05/11/22 15:52
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
Styrene	ND		1.00		ug/L			05/25/22 16:04	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/25/22 16:04	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/25/22 16:04	1
Tetrachloroethene	ND	*+	1.00		ug/L			05/25/22 16:04	1
Toluene	ND	*+	1.00		ug/L			05/25/22 16:04	1
1,2,3-Trichlorobenzene	ND	*1	1.00		ug/L			05/25/22 16:04	1
1,2,4-Trichlorobenzene	ND	*1 *+	1.00		ug/L			05/25/22 16:04	1
1,3,5-Trichlorobenzene	ND	*1 *+	1.00		ug/L			05/25/22 16:04	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/25/22 16:04	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/25/22 16:04	1
Trichloroethene	ND		1.00		ug/L			05/25/22 16:04	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			05/25/22 16:04	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/25/22 16:04	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/25/22 16:04	1
Vinyl chloride	ND		1.00		ug/L			05/25/22 16:04	1
m-Xylene & p-Xylene	ND		1.00		ug/L			05/25/22 16:04	1
o-Xylene	ND		1.00		ug/L			05/25/22 16:04	1
Tetrahydrofuran	ND		2.00		ug/L			05/25/22 16:04	1
Ethyl ether	**4.01**		1.00		ug/L			05/25/22 16:04	1
Tert-amyl methyl ether	ND		1.00		ug/L			05/25/22 16:04	1
Ethyl tert-butyl ether	ND		1.00		ug/L			05/25/22 16:04	1
di-Isopropyl ether	ND		1.00		ug/L			05/25/22 16:04	1
tert-Butanol	ND	*1	10.0		ug/L			05/25/22 16:04	1
1,4-Dioxane	ND		50.0		ug/L			05/25/22 16:04	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			05/25/22 16:04	1
Ethanol	ND		200		ug/L			05/25/22 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/25/22 16:04*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*05/25/22 16:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*05/25/22 16:04*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/25/22 16:04*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND	H	2.82		ng/L		06/08/22 16:16	06/10/22 15:57	1
NMeFOSAA	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorobutanesulfonic acid	**2.42**	**H**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorobutanoic acid	**10.8**	**H**	4.70		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorodecanesulfonic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorodecanoic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorododecanoic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluoroheptanesulfonic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluoroheptanoic acid	**8.07**	**H**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorohexanesulfonic acid	**4.08**	**H**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorohexanoic acid	**15.8**	**H**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorononanesulfonic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorononanoic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-4608-1

Client Sample ID: MW-3S

Date Collected: 05/11/22 15:52
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-2

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorooctanesulfonic acid	**1.97**	**H I**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorooctanoic acid	**31.7**	**H**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluoropentanesulfonic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluoropentanoic acid	**7.77**	**H**	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorotetradecanoic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluorotridecanoic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
Perfluoroundecanoic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1
6:2 Fluorotelomer sulfonic acid	ND	H	4.70		ng/L		06/08/22 16:16	06/10/22 15:57	1
8:2 Fluorotelomer sulfonic acid	ND	H	2.82		ng/L		06/08/22 16:16	06/10/22 15:57	1
4:2 Fluorotelomer sulfonic acid	ND	H	1.88		ng/L		06/08/22 16:16	06/10/22 15:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*266*	*5+	*10 - 200*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
M2-6:2 FTS	*160*		*17 - 200*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
M2-8:2 FTS	*104*		*33 - 200*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C2 PFTeDA	*53*		*10 - 179*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C3 HFPO-DA	*59*		*17 - 185*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C3 PFBS	*128*		*16 - 200*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C4 PFBA	*79*		*42 - 165*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C4 PFHpA	*73*		*31 - 182*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C5 PFPeA	*106*		*38 - 187*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C8 PFOA	*73*		*48 - 162*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C8 PFOS	*78*		*51 - 159*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
d3-NMeFOSAA	*71*		*31 - 174*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
d5-NEtFOSAA	*75*		*29 - 195*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
d9-N-EtFOSE-M	*42*		*10 - 177*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C3 PFHxS	*80*		*28 - 188*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C5 PFHxA	*69*		*24 - 179*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C6 PFDA	*70*		*49 - 163*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C7 PFUnA	*63*		*34 - 174*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
d3-NMePFOSA	*23*		*10 - 155*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
d5-NEtPFOSA	*24*		*10 - 159*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C8 FOSA	*48*		*10 - 168*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C2-PFDoDA	*59*		*17 - 176*	*06/08/22 16:16*	*06/10/22 15:57*	*1*
13C9 PFNA	*88*		*51 - 167*	*06/08/22 16:16*	*06/10/22 15:57*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0360**		0.00800		mg/L		05/25/22 17:38	05/26/22 12:37	1
Cadmium	ND		0.00500		mg/L		05/25/22 17:38	05/26/22 12:37	1
Chromium	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 12:37	1
Copper	**0.0155**		0.0100		mg/L		05/25/22 17:38	05/26/22 12:37	1
Iron	**4.02**		0.100		mg/L		05/25/22 17:38	05/26/22 12:37	1
Lead	ND		0.0150		mg/L		05/25/22 17:38	05/26/22 12:37	1
Manganese	**2.93**		0.0100		mg/L		05/25/22 17:38	05/26/22 12:37	1
Nickel	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 12:37	1
Sodium	**14.4**		1.50		mg/L		05/25/22 17:38	05/26/22 12:37	1
Zinc	ND		0.0500		mg/L		05/25/22 17:38	05/26/22 12:37	1

Client Sample Results

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-3S
Lab Sample ID: 620-4608-2
Date Collected: 05/11/22 15:52
Matrix: Water
Date Received: 05/19/22 08:15

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		05/26/22 12:45	05/27/22 13:11	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/02/22 06:15	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-4608-1

Client Sample ID: MW-2S
Date Collected: 05/18/22 14:50
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			05/30/22 14:42	1
Acetone	ND		10.0		ug/L			05/30/22 14:42	1
Acrylonitrile	ND		0.500		ug/L			05/30/22 14:42	1
Benzene	ND		1.00		ug/L			05/30/22 14:42	1
Bromobenzene	ND		1.00		ug/L			05/30/22 14:42	1
Bromochloromethane	ND		1.00		ug/L			05/30/22 14:42	1
Bromodichloromethane	ND		0.500		ug/L			05/30/22 14:42	1
Bromoform	ND		1.00		ug/L			05/30/22 14:42	1
Bromomethane	ND		2.00		ug/L			05/30/22 14:42	1
2-Butanone (MEK)	ND		2.00		ug/L			05/30/22 14:42	1
n-Butylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
sec-Butylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
tert-Butylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
Carbon disulfide	ND		2.00		ug/L			05/30/22 14:42	1
Carbon tetrachloride	ND		1.00		ug/L			05/30/22 14:42	1
Chlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
Chloroethane	ND		2.00		ug/L			05/30/22 14:42	1
Chloroform	ND		1.00		ug/L			05/30/22 14:42	1
Chloromethane	ND		2.00		ug/L			05/30/22 14:42	1
2-Chlorotoluene	ND		1.00		ug/L			05/30/22 14:42	1
4-Chlorotoluene	ND		1.00		ug/L			05/30/22 14:42	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			05/30/22 14:42	1
Dibromochloromethane	ND		0.500		ug/L			05/30/22 14:42	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			05/30/22 14:42	1
Dibromomethane	ND		1.00		ug/L			05/30/22 14:42	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			05/30/22 14:42	1
1,1-Dichloroethane	ND		1.00		ug/L			05/30/22 14:42	1
1,2-Dichloroethane	ND		1.00		ug/L			05/30/22 14:42	1
1,1-Dichloroethene	ND		1.00		ug/L			05/30/22 14:42	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/30/22 14:42	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/30/22 14:42	1
1,2-Dichloropropane	ND		1.00		ug/L			05/30/22 14:42	1
1,3-Dichloropropane	ND		1.00		ug/L			05/30/22 14:42	1
2,2-Dichloropropane	ND		1.00		ug/L			05/30/22 14:42	1
1,1-Dichloropropene	ND		1.00		ug/L			05/30/22 14:42	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/30/22 14:42	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/30/22 14:42	1
Ethylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
Hexachlorobutadiene	ND		1.00		ug/L			05/30/22 14:42	1
2-Hexanone (MBK)	ND		2.00		ug/L			05/30/22 14:42	1
Isopropylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
4-Isopropyltoluene	ND		1.00		ug/L			05/30/22 14:42	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/30/22 14:42	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			05/30/22 14:42	1
Methylene Chloride	ND		2.00		ug/L			05/30/22 14:42	1
Naphthalene	ND		2.00		ug/L			05/30/22 14:42	1

Client Sample ID: MW-2S
Lab Sample ID: 620-4608-12
Date Collected: 05/18/22 14:50
Matrix: Water
Date Received: 05/19/22 08:15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
Styrene	ND		1.00		ug/L			05/30/22 14:42	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/30/22 14:42	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/30/22 14:42	1
Tetrachloroethene	ND		1.00		ug/L			05/30/22 14:42	1
Toluene	ND		1.00		ug/L			05/30/22 14:42	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			05/30/22 14:42	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/30/22 14:42	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/30/22 14:42	1
Trichloroethene	ND		1.00		ug/L			05/30/22 14:42	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			05/30/22 14:42	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/30/22 14:42	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/30/22 14:42	1
Vinyl chloride	ND		1.00		ug/L			05/30/22 14:42	1
m-Xylene & p-Xylene	ND		1.00		ug/L			05/30/22 14:42	1
o-Xylene	ND		1.00		ug/L			05/30/22 14:42	1
Tetrahydrofuran	ND		2.00		ug/L			05/30/22 14:42	1
Ethyl ether	ND		1.00		ug/L			05/30/22 14:42	1
Tert-amyl methyl ether	ND		1.00		ug/L			05/30/22 14:42	1
Ethyl tert-butyl ether	ND		1.00		ug/L			05/30/22 14:42	1
di-Isopropyl ether	ND		1.00		ug/L			05/30/22 14:42	1
tert-Butanol	ND		10.0		ug/L			05/30/22 14:42	1
1,4-Dioxane	ND		50.0		ug/L			05/30/22 14:42	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			05/30/22 14:42	1
Ethanol	ND		200		ug/L			05/30/22 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/30/22 14:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/30/22 14:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*05/30/22 14:42*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*05/30/22 14:42*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.47**		2.00		mg/L			06/03/22 20:07	5

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.78		ng/L		05/31/22 09:06	06/02/22 00:54	1
NMeFOSAA	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorobutanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorobutanoic acid	ND		4.63		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorodecanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorodecanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorododecanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluoroheptanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluoroheptanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1

Client Sample ID: MW-2S
Date Collected: 05/18/22 14:50
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-12
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorohexanoic acid	**5.50**		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorononanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorononanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorooctanesulfonamide	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorooctanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorooctanoic acid	**6.04**		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluoropentanesulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluoropentanoic acid	**3.26**		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorotetradecanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluorotridecanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
Perfluoroundecanoic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1
6:2 Fluorotelomer sulfonic acid	ND		4.63		ng/L		05/31/22 09:06	06/02/22 00:54	1
8:2 Fluorotelomer sulfonic acid	ND		2.78		ng/L		05/31/22 09:06	06/02/22 00:54	1
4:2 Fluorotelomer sulfonic acid	ND		1.85		ng/L		05/31/22 09:06	06/02/22 00:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*261*	*5+	*10 - 200*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
M2-6:2 FTS	*252*	*5+	*17 - 200*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
M2-8:2 FTS	*100*		*33 - 200*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C2 PFTeDA	*5*	*5-	*10 - 179*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C3 HFPO-DA	*69*		*17 - 185*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C3 PFBS	*106*		*16 - 200*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C4 PFBA	*91*		*42 - 165*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C4 PFHpA	*117*		*31 - 182*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C5 PFPeA	*73*		*38 - 187*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C8 PFOA	*96*		*48 - 162*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C8 PFOS	*86*		*51 - 159*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
d3-NMeFOSAA	*56*		*31 - 174*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
d5-NEtFOSAA	*52*		*29 - 195*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
d9-N-EtFOSE-M	*0.5*	*5-	*10 - 177*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C3 PFHxS	*104*		*28 - 188*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C5 PFHxA	*73*		*24 - 179*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C6 PFDA	*67*		*49 - 163*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C7 PFUnA	*30*	*5-	*34 - 174*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
d3-NMePFOSA	*0*	*5-	*10 - 155*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
d5-NEtPFOSA	*0*	*5-	*10 - 159*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C8 FOSA	*35*		*10 - 168*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C2-PFDoDA	*8*	*5-	*17 - 176*	*05/31/22 09:06*	*06/02/22 00:54*	*1*
13C9 PFNA	*126*		*51 - 167*	*05/31/22 09:06*	*06/02/22 00:54*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.136**		0.00800		mg/L		05/25/22 17:38	05/26/22 12:44	1
Cadmium	ND		0.00500		mg/L		05/25/22 17:38	05/26/22 12:44	1
Chromium	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 12:44	1
Copper	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 12:44	1
Iron	**15.4**		0.100		mg/L		05/25/22 17:38	05/26/22 12:44	1
Lead	ND		0.0150		mg/L		05/25/22 17:38	05/26/22 12:44	1
Manganese	**1.01**		0.0100		mg/L		05/25/22 17:38	05/26/22 12:44	1

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-2S
Date Collected: 05/18/22 14:50
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-12
Matrix: Water

Method: 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0152**		0.0100		mg/L		05/25/22 17:38	05/26/22 12:44	1
Sodium	**2.84**		1.50		mg/L		05/25/22 17:38	05/26/22 12:44	1
Zinc	ND		0.0500		mg/L		05/25/22 17:38	05/26/22 12:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		05/26/22 12:46	05/27/22 13:13	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/02/22 06:15	1

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - INF
Lab Sample ID: 620-4608-14
Date Collected: 05/17/22 10:20
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 15:35	1
1,1,1-Trichloroethane	ND		0.500		ug/L			05/27/22 15:35	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 15:35	1
1,1,2-Trichloroethane	ND		0.500		ug/L			05/27/22 15:35	1
1,1-Dichloroethane	ND		0.500		ug/L			05/27/22 15:35	1
1,1-Dichloroethene	ND		0.500		ug/L			05/27/22 15:35	1
1,1-Dichloropropene	ND		0.500		ug/L			05/27/22 15:35	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			05/27/22 15:35	1
1,2,3-Trichloropropane	ND		0.500		ug/L			05/27/22 15:35	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			05/27/22 15:35	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			05/27/22 15:35	1
1,2-Dibromoethane	ND		0.500		ug/L			05/27/22 15:35	1
1,2-Dichlorobenzene	ND		0.500		ug/L			05/27/22 15:35	1
1,2-Dichloroethane	ND		0.500		ug/L			05/27/22 15:35	1
1,2-Dichloropropane	ND		0.500		ug/L			05/27/22 15:35	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
1,3-Dichlorobenzene	ND		0.500		ug/L			05/27/22 15:35	1
1,3-Dichloropropane	ND		0.500		ug/L			05/27/22 15:35	1
1,4-Dichlorobenzene	ND		0.500		ug/L			05/27/22 15:35	1
2,2-Dichloropropane	ND		0.500		ug/L			05/27/22 15:35	1
2-Butanone	ND		5.00		ug/L			05/27/22 15:35	1
2-Chlorotoluene	ND		0.500		ug/L			05/27/22 15:35	1
2-Hexanone	ND		5.00		ug/L			05/27/22 15:35	1
4-Chlorotoluene	ND		0.500		ug/L			05/27/22 15:35	1
4-Methyl-2-pentanone	ND		5.00		ug/L			05/27/22 15:35	1
Acetone	ND		10.0		ug/L			05/27/22 15:35	1
Acrylonitrile	ND		10.0		ug/L			05/27/22 15:35	1
Benzene	ND		0.500		ug/L			05/27/22 15:35	1
Bromobenzene	ND		0.500		ug/L			05/27/22 15:35	1
Bromochloromethane	ND		0.500		ug/L			05/27/22 15:35	1
Bromodichloromethane	ND		0.500		ug/L			05/27/22 15:35	1
Bromoform	ND		0.500		ug/L			05/27/22 15:35	1
Bromomethane	ND		0.500		ug/L			05/27/22 15:35	1
Carbon disulfide	ND		2.00		ug/L			05/27/22 15:35	1
Carbon tetrachloride	ND		0.500		ug/L			05/27/22 15:35	1
Chlorobenzene	ND		0.500		ug/L			05/27/22 15:35	1
Chloroethane	ND		0.500		ug/L			05/27/22 15:35	1
Chloroform	ND		0.500		ug/L			05/27/22 15:35	1
Chloromethane	ND		0.500		ug/L			05/27/22 15:35	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 15:35	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 15:35	1
Dibromochloromethane	ND		0.500		ug/L			05/27/22 15:35	1
Dibromomethane	ND		0.500		ug/L			05/27/22 15:35	1
Dichlorodifluoromethane	ND		0.500		ug/L			05/27/22 15:35	1
di-Isopropyl ether	ND		0.500		ug/L			05/27/22 15:35	1
Ethyl ether	**6.95**		0.500		ug/L			05/27/22 15:35	1
Ethyl t-butyl ether	ND		0.500		ug/L			05/27/22 15:35	1
Ethylbenzene	ND		0.500		ug/L			05/27/22 15:35	1

Client Sample ID: 152 Forest Edge Rd - INF
Lab Sample ID: 620-4608-14
Date Collected: 05/17/22 10:20
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			05/27/22 15:35	1
Hexachlorobutadiene	ND		0.500		ug/L			05/27/22 15:35	1
Isopropylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
m&p-Xylene	ND		1.00		ug/L			05/27/22 15:35	1
Methyl tertiary butyl ether	ND		0.500		ug/L			05/27/22 15:35	1
Methylene Chloride	**11.8**		0.500		ug/L			05/27/22 15:35	1
Naphthalene	ND		0.500		ug/L			05/27/22 15:35	1
n-Butylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
N-Propylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
o-Xylene	ND		0.500		ug/L			05/27/22 15:35	1
p-Isopropyltoluene	ND		0.500		ug/L			05/27/22 15:35	1
sec-Butylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
Styrene	ND		0.500		ug/L			05/27/22 15:35	1
t-Amyl methyl ether	ND		0.500		ug/L			05/27/22 15:35	1
t-Butyl alcohol	ND		25.0		ug/L			05/27/22 15:35	1
tert-Butylbenzene	ND		0.500		ug/L			05/27/22 15:35	1
Tetrachloroethene	ND		0.500		ug/L			05/27/22 15:35	1
Tetrahydrofuran	**16.6**		7.00		ug/L			05/27/22 15:35	1
Toluene	ND		0.500		ug/L			05/27/22 15:35	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 15:35	1
Trichloroethene	ND		0.500		ug/L			05/27/22 15:35	1
Trichlorofluoromethane	ND		0.500		ug/L			05/27/22 15:35	1
Vinyl chloride	ND		0.500		ug/L			05/27/22 15:35	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*106*		*80 - 120*		*05/27/22 15:35*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*05/27/22 15:35*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**4.53**		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluoroheptanoic acid	**2.70**		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorooctanoic acid	**2.69**		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorononanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorodecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorotridecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorotetradecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorobutanesulfonic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorohexanesulfonic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorooctanesulfonic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
NEtFOSAA	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
NMeFOSAA	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluoroundecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1
Perfluorododecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*87*		*70 - 130*	*05/27/22 15:05*	*06/01/22 22:53*	*1*
13C2 PFHxA	*96*		*70 - 130*	*05/27/22 15:05*	*06/01/22 22:53*	*1*
13C3 HFPO-DA	*85*		*70 - 130*	*05/27/22 15:05*	*06/01/22 22:53*	*1*

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - INF
Lab Sample ID: 620-4608-14
Date Collected: 05/17/22 10:20
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	79		70 - 130	05/27/22 15:05	06/01/22 22:53	1

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - MID
Lab Sample ID: 620-4608-15
Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 15:57	1
1,1,1-Trichloroethane	ND		0.500		ug/L			05/27/22 15:57	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 15:57	1
1,1,2-Trichloroethane	ND		0.500		ug/L			05/27/22 15:57	1
1,1-Dichloroethane	ND		0.500		ug/L			05/27/22 15:57	1
1,1-Dichloroethene	ND		0.500		ug/L			05/27/22 15:57	1
1,1-Dichloropropene	ND		0.500		ug/L			05/27/22 15:57	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			05/27/22 15:57	1
1,2,3-Trichloropropane	ND		0.500		ug/L			05/27/22 15:57	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			05/27/22 15:57	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			05/27/22 15:57	1
1,2-Dibromoethane	ND		0.500		ug/L			05/27/22 15:57	1
1,2-Dichlorobenzene	ND		0.500		ug/L			05/27/22 15:57	1
1,2-Dichloroethane	ND		0.500		ug/L			05/27/22 15:57	1
1,2-Dichloropropane	ND		0.500		ug/L			05/27/22 15:57	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
1,3-Dichlorobenzene	ND		0.500		ug/L			05/27/22 15:57	1
1,3-Dichloropropane	ND		0.500		ug/L			05/27/22 15:57	1
1,4-Dichlorobenzene	ND		0.500		ug/L			05/27/22 15:57	1
2,2-Dichloropropane	ND		0.500		ug/L			05/27/22 15:57	1
2-Butanone	ND		5.00		ug/L			05/27/22 15:57	1
2-Chlorotoluene	ND		0.500		ug/L			05/27/22 15:57	1
2-Hexanone	ND		5.00		ug/L			05/27/22 15:57	1
4-Chlorotoluene	ND		0.500		ug/L			05/27/22 15:57	1
4-Methyl-2-pentanone	ND		5.00		ug/L			05/27/22 15:57	1
Acetone	ND		10.0		ug/L			05/27/22 15:57	1
Acrylonitrile	ND		10.0		ug/L			05/27/22 15:57	1
Benzene	ND		0.500		ug/L			05/27/22 15:57	1
Bromobenzene	ND		0.500		ug/L			05/27/22 15:57	1
Bromochloromethane	ND		0.500		ug/L			05/27/22 15:57	1
Bromodichloromethane	ND		0.500		ug/L			05/27/22 15:57	1
Bromoform	ND		0.500		ug/L			05/27/22 15:57	1
Bromomethane	ND		0.500		ug/L			05/27/22 15:57	1
Carbon disulfide	ND		2.00		ug/L			05/27/22 15:57	1
Carbon tetrachloride	ND		0.500		ug/L			05/27/22 15:57	1
Chlorobenzene	ND		0.500		ug/L			05/27/22 15:57	1
Chloroethane	ND		0.500		ug/L			05/27/22 15:57	1
Chloroform	ND		0.500		ug/L			05/27/22 15:57	1
Chloromethane	ND		0.500		ug/L			05/27/22 15:57	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 15:57	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 15:57	1
Dibromochloromethane	ND		0.500		ug/L			05/27/22 15:57	1
Dibromomethane	ND		0.500		ug/L			05/27/22 15:57	1
Dichlorodifluoromethane	ND		0.500		ug/L			05/27/22 15:57	1
di-Isopropyl ether	ND		0.500		ug/L			05/27/22 15:57	1
Ethyl ether	ND		0.500		ug/L			05/27/22 15:57	1
Ethyl t-butyl ether	ND		0.500		ug/L			05/27/22 15:57	1
Ethylbenzene	ND		0.500		ug/L			05/27/22 15:57	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-4608-1

Client Sample ID: 152 Forest Edge Rd - MID
Date Collected: 05/17/22 10:18
Date Received: 05/19/22 08:15

Lab Sample ID: 620-4608-15
Matrix: Drinking Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			05/27/22 15:57	1
Hexachlorobutadiene	ND		0.500		ug/L			05/27/22 15:57	1
Isopropylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
m&p-Xylene	ND		1.00		ug/L			05/27/22 15:57	1
Methyl tertiary butyl ether	ND		0.500		ug/L			05/27/22 15:57	1
Methylene Chloride	**4.33**		0.500		ug/L			05/27/22 15:57	1
Naphthalene	ND		0.500		ug/L			05/27/22 15:57	1
n-Butylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
N-Propylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
o-Xylene	ND		0.500		ug/L			05/27/22 15:57	1
p-Isopropyltoluene	ND		0.500		ug/L			05/27/22 15:57	1
sec-Butylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
Styrene	ND		0.500		ug/L			05/27/22 15:57	1
t-Amyl methyl ether	ND		0.500		ug/L			05/27/22 15:57	1
t-Butyl alcohol	ND		25.0		ug/L			05/27/22 15:57	1
tert-Butylbenzene	ND		0.500		ug/L			05/27/22 15:57	1
Tetrachloroethene	ND		0.500		ug/L			05/27/22 15:57	1
Tetrahydrofuran	ND		7.00		ug/L			05/27/22 15:57	1
Toluene	ND		0.500		ug/L			05/27/22 15:57	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 15:57	1
Trichloroethene	ND		0.500		ug/L			05/27/22 15:57	1
Trichlorofluoromethane	ND		0.500		ug/L			05/27/22 15:57	1
Vinyl chloride	ND		0.500		ug/L			05/27/22 15:57	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*105*		*80 - 120*		*05/27/22 15:57*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*05/27/22 15:57*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluoroheptanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorooctanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorononanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorodecanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorotridecanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorotetradecanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorobutanesulfonic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorohexanesulfonic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorooctanesulfonic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
NEtFOSAA	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
NMeFOSAA	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluoroundecanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1
Perfluorododecanoic acid	ND		1.78		ng/L		05/27/22 15:05	06/01/22 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*98*		*70 - 130*	*05/27/22 15:05*	*06/01/22 23:05*	*1*
13C2 PFHxA	*97*		*70 - 130*	*05/27/22 15:05*	*06/01/22 23:05*	*1*
13C3 HFPO-DA	*99*		*70 - 130*	*05/27/22 15:05*	*06/01/22 23:05*	*1*

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - MID
Lab Sample ID: 620-4608-15
Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	90		70 - 130	05/27/22 15:05	06/01/22 23:05	1

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - EFF
Lab Sample ID: 620-4608-16
Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 16:20	1
1,1,1-Trichloroethane	ND		0.500		ug/L			05/27/22 16:20	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 16:20	1
1,1,2-Trichloroethane	ND		0.500		ug/L			05/27/22 16:20	1
1,1-Dichloroethane	ND		0.500		ug/L			05/27/22 16:20	1
1,1-Dichloroethene	ND		0.500		ug/L			05/27/22 16:20	1
1,1-Dichloropropene	ND		0.500		ug/L			05/27/22 16:20	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			05/27/22 16:20	1
1,2,3-Trichloropropane	ND		0.500		ug/L			05/27/22 16:20	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			05/27/22 16:20	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			05/27/22 16:20	1
1,2-Dibromoethane	ND		0.500		ug/L			05/27/22 16:20	1
1,2-Dichlorobenzene	ND		0.500		ug/L			05/27/22 16:20	1
1,2-Dichloroethane	ND		0.500		ug/L			05/27/22 16:20	1
1,2-Dichloropropane	ND		0.500		ug/L			05/27/22 16:20	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
1,3-Dichlorobenzene	ND		0.500		ug/L			05/27/22 16:20	1
1,3-Dichloropropane	ND		0.500		ug/L			05/27/22 16:20	1
1,4-Dichlorobenzene	ND		0.500		ug/L			05/27/22 16:20	1
2,2-Dichloropropane	ND		0.500		ug/L			05/27/22 16:20	1
2-Butanone	ND		5.00		ug/L			05/27/22 16:20	1
2-Chlorotoluene	ND		0.500		ug/L			05/27/22 16:20	1
2-Hexanone	ND		5.00		ug/L			05/27/22 16:20	1
4-Chlorotoluene	ND		0.500		ug/L			05/27/22 16:20	1
4-Methyl-2-pentanone	ND		5.00		ug/L			05/27/22 16:20	1
Acetone	ND		10.0		ug/L			05/27/22 16:20	1
Acrylonitrile	ND		10.0		ug/L			05/27/22 16:20	1
Benzene	ND		0.500		ug/L			05/27/22 16:20	1
Bromobenzene	ND		0.500		ug/L			05/27/22 16:20	1
Bromochloromethane	ND		0.500		ug/L			05/27/22 16:20	1
Bromodichloromethane	ND		0.500		ug/L			05/27/22 16:20	1
Bromoform	ND		0.500		ug/L			05/27/22 16:20	1
Bromomethane	ND		0.500		ug/L			05/27/22 16:20	1
Carbon disulfide	ND		2.00		ug/L			05/27/22 16:20	1
Carbon tetrachloride	ND		0.500		ug/L			05/27/22 16:20	1
Chlorobenzene	ND		0.500		ug/L			05/27/22 16:20	1
Chloroethane	ND		0.500		ug/L			05/27/22 16:20	1
Chloroform	ND		0.500		ug/L			05/27/22 16:20	1
Chloromethane	ND		0.500		ug/L			05/27/22 16:20	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 16:20	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 16:20	1
Dibromochloromethane	ND		0.500		ug/L			05/27/22 16:20	1
Dibromomethane	ND		0.500		ug/L			05/27/22 16:20	1
Dichlorodifluoromethane	ND		0.500		ug/L			05/27/22 16:20	1
di-Isopropyl ether	ND		0.500		ug/L			05/27/22 16:20	1
Ethyl ether	ND		0.500		ug/L			05/27/22 16:20	1
Ethyl t-butyl ether	ND		0.500		ug/L			05/27/22 16:20	1
Ethylbenzene	ND		0.500		ug/L			05/27/22 16:20	1

Client Sample ID: 152 Forest Edge Rd - EFF
Lab Sample ID: 620-4608-16
Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			05/27/22 16:20	1
Hexachlorobutadiene	ND		0.500		ug/L			05/27/22 16:20	1
Isopropylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
m&p-Xylene	ND		1.00		ug/L			05/27/22 16:20	1
Methyl tertiary butyl ether	ND		0.500		ug/L			05/27/22 16:20	1
Methylene Chloride	ND		0.500		ug/L			05/27/22 16:20	1
Naphthalene	ND		0.500		ug/L			05/27/22 16:20	1
n-Butylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
N-Propylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
o-Xylene	ND		0.500		ug/L			05/27/22 16:20	1
p-Isopropyltoluene	ND		0.500		ug/L			05/27/22 16:20	1
sec-Butylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
Styrene	ND		0.500		ug/L			05/27/22 16:20	1
t-Amyl methyl ether	ND		0.500		ug/L			05/27/22 16:20	1
t-Butyl alcohol	ND		25.0		ug/L			05/27/22 16:20	1
tert-Butylbenzene	ND		0.500		ug/L			05/27/22 16:20	1
Tetrachloroethene	ND		0.500		ug/L			05/27/22 16:20	1
Tetrahydrofuran	ND		7.00		ug/L			05/27/22 16:20	1
Toluene	ND		0.500		ug/L			05/27/22 16:20	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 16:20	1
Trichloroethene	ND		0.500		ug/L			05/27/22 16:20	1
Trichlorofluoromethane	ND		0.500		ug/L			05/27/22 16:20	1
Vinyl chloride	ND		0.500		ug/L			05/27/22 16:20	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*104*		*80 - 120*		*05/27/22 16:20*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*05/27/22 16:20*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluoroheptanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorooctanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorononanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorodecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorotridecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorotetradecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorobutanesulfonic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorohexanesulfonic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorooctanesulfonic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
NEtFOSAA	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
NMeFOSAA	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluoroundecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1
Perfluorododecanoic acid	ND		1.88		ng/L		05/27/22 15:05	06/01/22 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*98*		*70 - 130*	*05/27/22 15:05*	*06/01/22 23:16*	*1*
13C2 PFHxA	*102*		*70 - 130*	*05/27/22 15:05*	*06/01/22 23:16*	*1*
13C3 HFPO-DA	*94*		*70 - 130*	*05/27/22 15:05*	*06/01/22 23:16*	*1*

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - EFF
Lab Sample ID: 620-4608-16
Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	104		70 - 130	05/27/22 15:05	06/01/22 23:16	1

Surrogate Summary

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-4608-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Drinking Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCZ	BFB
Lab Sample ID	Client Sample ID	(80-120)	(80-120)
620-4608-14	152 Forest Edge Rd - INF	106	91
620-4608-15	152 Forest Edge Rd - MID	105	91
620-4608-16	152 Forest Edge Rd - EFF	104	90
LCS 410-259754/4	Lab Control Sample	103	103
MB 410-259754/6	Method Blank	99	89

Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4608-2	MW-3S	99	102	103	101
620-4608-12	MW-2S	94	98	92	94
LCS 620-11144/4	Lab Control Sample	104	105	102	104
LCS 620-11302/4	Lab Control Sample	96	99	94	96
LCSD 620-11144/5	Lab Control Sample Dup	101	105	105	104
LCSD 620-11302/5	Lab Control Sample Dup	96	99	93	96
MB 620-11144/7	Method Blank	99	129	103	102
MB 620-11302/7	Method Blank	96	98	98	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Matrix: Drinking Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		PFDA	PFHxA	HFPODA	d5NEFOS
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-4608-14	152 Forest Edge Rd - INF	87	96	85	79
620-4608-15	152 Forest Edge Rd - MID	98	97	99	90
620-4608-16	152 Forest Edge Rd - EFF	98	102	94	104
LCS 410-259867/2-A	Lab Control Sample	96	93	82	94
LCSD 410-259867/3-A	Lab Control Sample Dup	92	93	88	92
MB 410-259867/1-A	Method Blank	87	88	85	86

Surrogate Legend

PFDA = 13C2 PFDA
PFHxA = 13C2 PFHxA
HFPODA = 13C3 HFPO-DA
d5NEFOS = d5-NEtFOSAA

Isotope Dilution Summary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	PFTDA	HFPODA	C3PFBS	PFBA	C4PFHA
Lab Sample ID	Client Sample ID	(10-200)	(17-200)	(33-200)	(10-179)	(17-185)	(16-200)	(42-165)	(31-182)
620-4608-2	MW-3S	266 *5+	160	104	53	59	128	79	73
620-4608-12	MW-2S	261 *5+	252 *5+	100	5 *5-	69	106	91	117
LCS 410-260317/2-A	Lab Control Sample	108	96	103	98	88	101	101	97
LCS 410-263523/2-A	Lab Control Sample	164	150	133	124	129	134	132	128
LCSD 410-263523/3-A	Lab Control Sample Dup	155	135	138	99	118	128	121	117
MB 410-260317/1-A	Method Blank	94	91	88	81	61	90	66	75
MB 410-263523/1-A	Method Blank	124	109	99	79	93	102	96	102

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFPeA	C8PFOA	C8PFOS	d3NMFOS	d5NEFOS	NEFM	C3PFHS	13C5PHA
Lab Sample ID	Client Sample ID	(38-187)	(48-162)	(51-159)	(31-174)	(29-195)	(10-177)	(28-188)	(24-179)
620-4608-2	MW-3S	106	73	78	71	75	42	80	69
620-4608-12	MW-2S	73	96	86	56	52	0.5 *5-	104	73
LCS 410-260317/2-A	Lab Control Sample	107	96	97	132	152	105	95	91
LCS 410-263523/2-A	Lab Control Sample	134	126	128	147	149	108	127	122
LCSD 410-263523/3-A	Lab Control Sample Dup	116	112	120	140	132	76	119	113
MB 410-260317/1-A	Method Blank	66	83	89	110	112	70	85	65
MB 410-263523/1-A	Method Blank	95	91	96	105	109	73	99	95

		Percent Isotope Dilution Recovery (Acceptance Limits)						
		C6PFDA	13C7PUA	d3NMFSA	d5NPFSA	PFOSA	PFDoDA	C9PFNA
Lab Sample ID	Client Sample ID	(49-163)	(34-174)	(10-155)	(10-159)	(10-168)	(17-176)	(51-167)
620-4608-2	MW-3S	70	63	23	24	48	59	88
620-4608-12	MW-2S	67	30 *5-	0 *5-	0 *5-	35	8 *5-	126
LCS 410-260317/2-A	Lab Control Sample	106	115	79	81	98	111	105
LCS 410-263523/2-A	Lab Control Sample	128	132	67	72	117	128	130
LCSD 410-263523/3-A	Lab Control Sample Dup	121	121	48	47	100	114	122
MB 410-260317/1-A	Method Blank	87	85	59	57	76	88	92
MB 410-263523/1-A	Method Blank	95	99	50	50	77	94	93

Surrogate Legend

M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
PFTDA = 13C2 PFTeDA
HFPODA = 13C3 HFPO-DA
C3PFBS = 13C3 PFBS
PFBA = 13C4 PFBA
C4PFHA = 13C4 PFHpA
PFPeA = 13C5 PFPeA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
NEFM = d9-N-EtFOSE-M
C3PFHS = 13C3 PFHxS
13C5PHA = 13C5 PFHxA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
d3NMFSA = d3-NMePFOSA
d5NPFSA = d5-NEtPFOSA

Isotope Dilution Summary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

PFOSA = 13C8 FOSA
PFDoDA = 13C2-PFDoDA
C9PFNA = 13C9 PFNA

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-259754/6
Matrix: Drinking Water
Analysis Batch: 259754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 13:40	1
1,1,1-Trichloroethane	ND		0.500		ug/L			05/27/22 13:40	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/27/22 13:40	1
1,1,2-Trichloroethane	ND		0.500		ug/L			05/27/22 13:40	1
1,1-Dichloroethane	ND		0.500		ug/L			05/27/22 13:40	1
1,1-Dichloroethene	ND		0.500		ug/L			05/27/22 13:40	1
1,1-Dichloropropene	ND		0.500		ug/L			05/27/22 13:40	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			05/27/22 13:40	1
1,2,3-Trichloropropane	ND		0.500		ug/L			05/27/22 13:40	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			05/27/22 13:40	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			05/27/22 13:40	1
1,2-Dibromoethane	ND		0.500		ug/L			05/27/22 13:40	1
1,2-Dichlorobenzene	ND		0.500		ug/L			05/27/22 13:40	1
1,2-Dichloroethane	ND		0.500		ug/L			05/27/22 13:40	1
1,2-Dichloropropane	ND		0.500		ug/L			05/27/22 13:40	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
1,3-Dichlorobenzene	ND		0.500		ug/L			05/27/22 13:40	1
1,3-Dichloropropane	ND		0.500		ug/L			05/27/22 13:40	1
1,4-Dichlorobenzene	ND		0.500		ug/L			05/27/22 13:40	1
2,2-Dichloropropane	ND		0.500		ug/L			05/27/22 13:40	1
2-Butanone	ND		5.00		ug/L			05/27/22 13:40	1
2-Chlorotoluene	ND		0.500		ug/L			05/27/22 13:40	1
2-Hexanone	ND		5.00		ug/L			05/27/22 13:40	1
4-Chlorotoluene	ND		0.500		ug/L			05/27/22 13:40	1
4-Methyl-2-pentanone	ND		5.00		ug/L			05/27/22 13:40	1
Acetone	ND		10.0		ug/L			05/27/22 13:40	1
Acrylonitrile	ND		10.0		ug/L			05/27/22 13:40	1
Benzene	ND		0.500		ug/L			05/27/22 13:40	1
Bromobenzene	ND		0.500		ug/L			05/27/22 13:40	1
Bromochloromethane	ND		0.500		ug/L			05/27/22 13:40	1
Bromodichloromethane	ND		0.500		ug/L			05/27/22 13:40	1
Bromoform	ND		0.500		ug/L			05/27/22 13:40	1
Bromomethane	ND		0.500		ug/L			05/27/22 13:40	1
Carbon disulfide	ND		2.00		ug/L			05/27/22 13:40	1
Carbon tetrachloride	ND		0.500		ug/L			05/27/22 13:40	1
Chlorobenzene	ND		0.500		ug/L			05/27/22 13:40	1
Chloroethane	ND		0.500		ug/L			05/27/22 13:40	1
Chloroform	ND		0.500		ug/L			05/27/22 13:40	1
Chloromethane	ND		0.500		ug/L			05/27/22 13:40	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 13:40	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 13:40	1
Dibromochloromethane	ND		0.500		ug/L			05/27/22 13:40	1
Dibromomethane	ND		0.500		ug/L			05/27/22 13:40	1
Dichlorodifluoromethane	ND		0.500		ug/L			05/27/22 13:40	1
di-Isopropyl ether	ND		0.500		ug/L			05/27/22 13:40	1
Ethyl ether	ND		0.500		ug/L			05/27/22 13:40	1
Ethyl t-butyl ether	ND		0.500		ug/L			05/27/22 13:40	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-259754/6
Matrix: Drinking Water
Analysis Batch: 259754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
Freon 113	ND		0.500		ug/L			05/27/22 13:40	1
Hexachlorobutadiene	ND		0.500		ug/L			05/27/22 13:40	1
Isopropylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
m&p-Xylene	ND		1.00		ug/L			05/27/22 13:40	1
Methyl tertiary butyl ether	ND		0.500		ug/L			05/27/22 13:40	1
Methylene Chloride	ND		0.500		ug/L			05/27/22 13:40	1
Naphthalene	ND		0.500		ug/L			05/27/22 13:40	1
n-Butylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
N-Propylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
o-Xylene	ND		0.500		ug/L			05/27/22 13:40	1
p-Isopropyltoluene	ND		0.500		ug/L			05/27/22 13:40	1
sec-Butylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
Styrene	ND		0.500		ug/L			05/27/22 13:40	1
t-Amyl methyl ether	ND		0.500		ug/L			05/27/22 13:40	1
t-Butyl alcohol	ND		25.0		ug/L			05/27/22 13:40	1
tert-Butylbenzene	ND		0.500		ug/L			05/27/22 13:40	1
Tetrachloroethene	ND		0.500		ug/L			05/27/22 13:40	1
Tetrahydrofuran	ND		7.00		ug/L			05/27/22 13:40	1
Toluene	ND		0.500		ug/L			05/27/22 13:40	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			05/27/22 13:40	1
Trichloroethene	ND		0.500		ug/L			05/27/22 13:40	1
Trichlorofluoromethane	ND		0.500		ug/L			05/27/22 13:40	1
Vinyl chloride	ND		0.500		ug/L			05/27/22 13:40	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/27/22 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*99*		*80 - 120*		*05/27/22 13:40*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*05/27/22 13:40*	*1*

Lab Sample ID: LCS 410-259754/4
Matrix: Drinking Water
Analysis Batch: 259754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane			5.00	5.292		ug/L		106	70 - 130		
1,1,1-Trichloroethane			5.00	4.836		ug/L		97	70 - 130		
1,1,2,2-Tetrachloroethane			5.00	4.987		ug/L		100	70 - 130		
1,1,2-Trichloroethane			5.00	5.136		ug/L		103	70 - 130		
1,1-Dichloroethane			5.00	5.104		ug/L		102	70 - 130		
1,1-Dichloroethene			5.00	5.426		ug/L		109	70 - 130		
1,1-Dichloropropene			5.00	4.746		ug/L		95	70 - 130		
1,2,3-Trichlorobenzene			5.00	3.895		ug/L		78	70 - 130		
1,2,3-Trichloropropane			5.00	5.429		ug/L		109	70 - 130		
1,2,4-Trichlorobenzene			5.00	4.261		ug/L		85	70 - 130		
1,2,4-Trimethylbenzene			5.00	4.951		ug/L		99	70 - 130		
1,2-Dibromo-3-Chloropropane			5.00	4.813		ug/L		96	70 - 130		
1,2-Dibromoethane			5.00	5.260		ug/L		105	70 - 130		

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-259754/4
Matrix: Drinking Water
Analysis Batch: 259754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	5.00	5.156		ug/L		103	70 - 130
1,2-Dichloroethane	5.00	5.254		ug/L		105	70 - 130
1,2-Dichloropropane	5.00	4.964		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	5.00	4.884		ug/L		98	70 - 130
1,3-Dichlorobenzene	5.00	5.128		ug/L		103	70 - 130
1,3-Dichloropropane	5.00	5.001		ug/L		100	70 - 130
1,4-Dichlorobenzene	5.00	5.246		ug/L		105	70 - 130
2,2-Dichloropropane	5.00	5.242		ug/L		105	70 - 130
2-Butanone	62.5	63.90		ug/L		102	70 - 130
2-Chlorotoluene	5.00	5.064		ug/L		101	70 - 130
2-Hexanone	62.5	58.11		ug/L		93	70 - 130
4-Chlorotoluene	5.00	5.196		ug/L		104	70 - 130
4-Methyl-2-pentanone	62.5	59.91		ug/L		96	70 - 130
Acetone	62.5	59.62		ug/L		95	70 - 130
Acrylonitrile	113	113.6		ug/L		101	70 - 130
Benzene	5.00	4.840		ug/L		97	70 - 130
Bromobenzene	5.00	5.469		ug/L		109	70 - 130
Bromochloromethane	5.00	5.560		ug/L		111	70 - 130
Bromodichloromethane	5.00	5.250		ug/L		105	70 - 130
Bromoform	5.00	5.701		ug/L		114	70 - 130
Bromomethane	2.00	2.147		ug/L		107	70 - 130
Carbon disulfide	5.00	5.725		ug/L		114	70 - 130
Carbon tetrachloride	5.00	5.106		ug/L		102	70 - 130
Chlorobenzene	5.00	5.210		ug/L		104	70 - 130
Chloroethane	2.00	2.054		ug/L		103	70 - 130
Chloroform	5.00	4.880		ug/L		98	70 - 130
Chloromethane	2.00	2.021		ug/L		101	70 - 130
cis-1,2-Dichloroethene	5.00	5.519		ug/L		110	70 - 130
cis-1,3-Dichloropropene	5.00	4.934		ug/L		99	70 - 130
Dibromochloromethane	5.00	5.546		ug/L		111	70 - 130
Dibromomethane	5.00	5.442		ug/L		109	70 - 130
Dichlorodifluoromethane	2.00	2.147		ug/L		107	70 - 130
di-Isopropyl ether	5.00	5.319		ug/L		106	70 - 130
Ethyl ether	5.00	5.130		ug/L		103	70 - 130
Ethyl t-butyl ether	5.00	4.952		ug/L		99	70 - 130
Ethylbenzene	5.00	4.927		ug/L		99	70 - 130
Freon 113	5.00	5.985		ug/L		120	70 - 130
Hexachlorobutadiene	5.00	5.410		ug/L		108	70 - 130
Isopropylbenzene	5.00	4.852		ug/L		97	70 - 130
m&p-Xylene	10.0	10.09		ug/L		101	70 - 130
Methyl tertiary butyl ether	5.00	5.210		ug/L		104	70 - 130
Methylene Chloride	5.00	6.210		ug/L		124	70 - 130
Naphthalene	5.00	3.501		ug/L		70	70 - 130
n-Butylbenzene	5.00	4.731		ug/L		95	70 - 130
N-Propylbenzene	5.00	4.926		ug/L		99	70 - 130
o-Xylene	5.00	4.800		ug/L		96	70 - 130
p-Isopropyltoluene	5.00	4.977		ug/L		100	70 - 130
sec-Butylbenzene	5.00	5.024		ug/L		100	70 - 130
Styrene	5.00	5.146		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-259754/4
Matrix: Drinking Water
Analysis Batch: 259754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
t-Amyl methyl ether	5.00	4.328		ug/L		87	70 - 130
t-Butyl alcohol	50.0	46.36		ug/L		93	70 - 130
tert-Butylbenzene	5.00	4.714		ug/L		94	70 - 130
Tetrachloroethene	5.00	5.158		ug/L		103	70 - 130
Tetrahydrofuran	46.9	41.97		ug/L		90	70 - 130
Toluene	5.00	4.836		ug/L		97	70 - 130
trans-1,2-Dichloroethene	5.00	5.304		ug/L		106	70 - 130
Trichloroethene	5.00	4.858		ug/L		97	70 - 130
Trichlorofluoromethane	2.00	2.386		ug/L		119	70 - 130
Vinyl chloride	2.00	2.058		ug/L		103	70 - 130
trans-1,3-Dichloropropene	5.00	4.923		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichlorobenzene-d4 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11144/7
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			05/25/22 11:53	1
Acetone	ND		10.0		ug/L			05/25/22 11:53	1
Acrylonitrile	ND		0.500		ug/L			05/25/22 11:53	1
Benzene	ND		1.00		ug/L			05/25/22 11:53	1
Bromobenzene	ND		1.00		ug/L			05/25/22 11:53	1
Bromochloromethane	ND		1.00		ug/L			05/25/22 11:53	1
Bromodichloromethane	ND		0.500		ug/L			05/25/22 11:53	1
Bromoform	ND		1.00		ug/L			05/25/22 11:53	1
Bromomethane	ND		2.00		ug/L			05/25/22 11:53	1
2-Butanone (MEK)	ND		2.00		ug/L			05/25/22 11:53	1
n-Butylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
sec-Butylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
tert-Butylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
Carbon disulfide	ND		2.00		ug/L			05/25/22 11:53	1
Carbon tetrachloride	ND		1.00		ug/L			05/25/22 11:53	1
Chlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
Chloroethane	ND		2.00		ug/L			05/25/22 11:53	1
Chloroform	ND		1.00		ug/L			05/25/22 11:53	1
Chloromethane	ND		2.00		ug/L			05/25/22 11:53	1
2-Chlorotoluene	ND		1.00		ug/L			05/25/22 11:53	1
4-Chlorotoluene	ND		1.00		ug/L			05/25/22 11:53	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			05/25/22 11:53	1
Dibromochloromethane	ND		0.500		ug/L			05/25/22 11:53	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			05/25/22 11:53	1
Dibromomethane	ND		1.00		ug/L			05/25/22 11:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11144/7
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			05/25/22 11:53	1
1,1-Dichloroethane	ND		1.00		ug/L			05/25/22 11:53	1
1,2-Dichloroethane	ND		1.00		ug/L			05/25/22 11:53	1
1,1-Dichloroethene	ND		1.00		ug/L			05/25/22 11:53	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/25/22 11:53	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/25/22 11:53	1
1,2-Dichloropropane	ND		1.00		ug/L			05/25/22 11:53	1
1,3-Dichloropropane	ND		1.00		ug/L			05/25/22 11:53	1
2,2-Dichloropropane	ND		1.00		ug/L			05/25/22 11:53	1
1,1-Dichloropropene	ND		1.00		ug/L			05/25/22 11:53	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/25/22 11:53	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/25/22 11:53	1
Ethylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
Hexachlorobutadiene	ND		1.00		ug/L			05/25/22 11:53	1
2-Hexanone (MBK)	ND		2.00		ug/L			05/25/22 11:53	1
Isopropylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
4-Isopropyltoluene	ND		1.00		ug/L			05/25/22 11:53	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/25/22 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			05/25/22 11:53	1
Methylene Chloride	ND		2.00		ug/L			05/25/22 11:53	1
Naphthalene	ND		2.00		ug/L			05/25/22 11:53	1
N-Propylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
Styrene	ND		1.00		ug/L			05/25/22 11:53	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/25/22 11:53	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/25/22 11:53	1
Tetrachloroethene	ND		1.00		ug/L			05/25/22 11:53	1
Toluene	ND		1.00		ug/L			05/25/22 11:53	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			05/25/22 11:53	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/25/22 11:53	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/25/22 11:53	1
Trichloroethene	ND		1.00		ug/L			05/25/22 11:53	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			05/25/22 11:53	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/25/22 11:53	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/25/22 11:53	1
Vinyl chloride	ND		1.00		ug/L			05/25/22 11:53	1
m-Xylene & p-Xylene	ND		1.00		ug/L			05/25/22 11:53	1
o-Xylene	ND		1.00		ug/L			05/25/22 11:53	1
Tetrahydrofuran	ND		2.00		ug/L			05/25/22 11:53	1
Ethyl ether	ND		1.00		ug/L			05/25/22 11:53	1
Tert-amyl methyl ether	ND		1.00		ug/L			05/25/22 11:53	1
Ethyl tert-butyl ether	ND		1.00		ug/L			05/25/22 11:53	1
di-Isopropyl ether	ND		1.00		ug/L			05/25/22 11:53	1
tert-Butanol	ND		10.0		ug/L			05/25/22 11:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11144/7
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		50.0		ug/L			05/25/22 11:53	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			05/25/22 11:53	1
Ethanol	ND		200		ug/L			05/25/22 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/25/22 11:53*	*1*
Toluene-d8 (Surr)	*129*		*70 - 130*		*05/25/22 11:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*05/25/22 11:53*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*05/25/22 11:53*	*1*

Lab Sample ID: LCS 620-11144/4
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	25.00	*+	ug/L		125	85 - 124
Acetone	20.0	11.80		ug/L		59	14 - 133
Acrylonitrile	20.0	21.20		ug/L		106	62 - 134
Benzene	20.0	21.71		ug/L		109	86 - 111
Bromobenzene	20.0	21.45		ug/L		107	82 - 120
Bromochloromethane	20.0	24.21		ug/L		121	83 - 123
Bromodichloromethane	20.0	24.94		ug/L		125	83 - 137
Bromoform	20.0	22.42		ug/L		112	91 - 137
Bromomethane	20.0	16.02		ug/L		80	29 - 148
2-Butanone (MEK)	20.0	11.90		ug/L		60	10 - 200
n-Butylbenzene	20.0	24.74		ug/L		124	85 - 138
sec-Butylbenzene	20.0	21.42		ug/L		107	75 - 118
tert-Butylbenzene	20.0	25.41	*+	ug/L		127	85 - 122
Carbon disulfide	20.0	26.26		ug/L		131	69 - 150
Carbon tetrachloride	20.0	23.84		ug/L		119	84 - 123
Chlorobenzene	20.0	22.63		ug/L		113	93 - 115
Chloroethane	20.0	19.25		ug/L		96	56 - 155
Chloroform	20.0	22.60		ug/L		113	84 - 116
Chloromethane	20.0	21.07		ug/L		105	45 - 138
2-Chlorotoluene	20.0	23.13		ug/L		116	88 - 116
4-Chlorotoluene	20.0	23.08		ug/L		115	81 - 128
1,2-Dibromo-3-Chloropropane	20.0	19.66		ug/L		98	70 - 139
Dibromochloromethane	20.0	24.27		ug/L		121	83 - 132
1,2-Dibromoethane (EDB)	20.0	23.93		ug/L		120	82 - 125
Dibromomethane	20.0	23.48		ug/L		117	80 - 125
1,2-Dichlorobenzene	20.0	22.31		ug/L		112	84 - 128
1,3-Dichlorobenzene	20.0	22.67		ug/L		113	85 - 120
1,4-Dichlorobenzene	20.0	21.88		ug/L		109	86 - 116
Dichlorodifluoromethane (Freon 12)	20.0	19.39		ug/L		97	36 - 131
1,1-Dichloroethane	20.0	22.57		ug/L		113	81 - 120
1,2-Dichloroethane	20.0	22.13		ug/L		111	82 - 116
1,1-Dichloroethene	20.0	23.01		ug/L		115	83 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11144/4
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	20.0	24.75		ug/L		124	81 - 124
trans-1,2-Dichloroethene	20.0	24.55		ug/L		123	81 - 127
1,2-Dichloropropane	20.0	23.50		ug/L		118	76 - 132
1,3-Dichloropropane	20.0	21.82		ug/L		109	74 - 122
2,2-Dichloropropane	20.0	23.57		ug/L		118	77 - 130
1,1-Dichloropropene	20.0	22.73		ug/L		114	81 - 115
cis-1,3-Dichloropropene	20.0	22.89		ug/L		114	74 - 129
trans-1,3-Dichloropropene	20.0	23.64		ug/L		118	78 - 126
Ethylbenzene	20.0	22.30		ug/L		112	89 - 117
Hexachlorobutadiene	20.0	27.01	*+	ug/L		135	77 - 118
2-Hexanone (MBK)	20.0	14.39		ug/L		72	37 - 123
Isopropylbenzene	20.0	22.05		ug/L		110	83 - 117
4-Isopropyltoluene	20.0	22.85		ug/L		114	83 - 124
Methyl tert-butyl ether	20.0	22.30		ug/L		111	70 - 126
4-Methyl-2-pentanone (MIBK)	20.0	20.66		ug/L		103	59 - 118
Methylene Chloride	20.0	20.20		ug/L		101	75 - 121
Naphthalene	20.0	22.07		ug/L		110	67 - 123
N-Propylbenzene	20.0	23.79		ug/L		119	84 - 128
Styrene	20.0	22.67		ug/L		113	78 - 127
1,1,1,2-Tetrachloroethane	20.0	21.59		ug/L		108	91 - 118
1,1,2,2-Tetrachloroethane	20.0	20.32		ug/L		102	77 - 129
Tetrachloroethene	20.0	24.12	*+	ug/L		121	85 - 116
Toluene	20.0	22.47	*+	ug/L		112	88 - 109
1,2,3-Trichlorobenzene	20.0	25.10		ug/L		126	67 - 134
1,2,4-Trichlorobenzene	20.0	28.50	*+	ug/L		143	78 - 133
1,3,5-Trichlorobenzene	20.0	28.12	*+	ug/L		141	77 - 127
1,1,1-Trichloroethane	20.0	23.15		ug/L		116	83 - 124
1,1,2-Trichloroethane	20.0	23.78		ug/L		119	84 - 132
Trichloroethene	20.0	21.91		ug/L		110	74 - 118
Trichlorofluoromethane (Freon 11)	20.0	24.43		ug/L		122	82 - 126
1,2,3-Trichloropropane	20.0	20.47		ug/L		102	77 - 124
1,2,4-Trimethylbenzene	20.0	23.78		ug/L		119	89 - 126
1,3,5-Trimethylbenzene	20.0	23.98		ug/L		120	89 - 125
Vinyl chloride	20.0	21.48		ug/L		107	62 - 130
m-Xylene & p-Xylene	40.0	47.42		ug/L		119	85 - 123
o-Xylene	20.0	22.62		ug/L		113	85 - 119
Tetrahydrofuran	20.0	21.80		ug/L		109	60 - 133
Ethyl ether	20.0	20.22		ug/L		101	69 - 122
Tert-amyl methyl ether	20.0	21.65		ug/L		108	50 - 140
Ethyl tert-butyl ether	20.0	21.97		ug/L		110	60 - 131
di-Isopropyl ether	20.0	21.77		ug/L		109	67 - 125
tert-Butanol	200	197.2		ug/L		99	50 - 169
1,4-Dioxane	200	148.7		ug/L		74	28 - 150
trans-1,4-Dichloro-2-butene	20.0	22.00		ug/L		110	48 - 153
Ethanol	400	378.6		ug/L		95	47 - 170

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11144/4
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
Toluene-d8 (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

Lab Sample ID: LCSD 620-11144/5
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	21.52		ug/L		108	85 - 124	15	20
Acetone			20.0	10.23		ug/L		51	14 - 133	14	20
Acrylonitrile			20.0	21.53		ug/L		108	62 - 134	2	20
Benzene			20.0	21.71		ug/L		109	86 - 111	0	20
Bromobenzene			20.0	20.47		ug/L		102	82 - 120	5	20
Bromochloromethane			20.0	22.83		ug/L		114	83 - 123	6	20
Bromodichloromethane			20.0	23.96		ug/L		120	83 - 137	4	20
Bromoform			20.0	21.83		ug/L		109	91 - 137	3	20
Bromomethane			20.0	16.68		ug/L		83	29 - 148	4	20
2-Butanone (MEK)			20.0	10.55		ug/L		53	10 - 200	12	20
n-Butylbenzene			20.0	22.35		ug/L		112	85 - 138	10	20
sec-Butylbenzene			20.0	19.37		ug/L		97	75 - 118	10	20
tert-Butylbenzene			20.0	23.91		ug/L		120	85 - 122	6	20
Carbon disulfide			20.0	26.49		ug/L		132	69 - 150	1	20
Carbon tetrachloride			20.0	22.30		ug/L		112	84 - 123	7	20
Chlorobenzene			20.0	21.43		ug/L		107	93 - 115	5	20
Chloroethane			20.0	18.59		ug/L		93	56 - 155	3	20
Chloroform			20.0	22.02		ug/L		110	84 - 116	3	20
Chloromethane			20.0	20.34		ug/L		102	45 - 138	4	20
2-Chlorotoluene			20.0	21.34		ug/L		107	88 - 116	8	20
4-Chlorotoluene			20.0	21.08		ug/L		105	81 - 128	9	20
1,2-Dibromo-3-Chloropropane			20.0	20.02		ug/L		100	70 - 139	2	20
Dibromochloromethane			20.0	24.15		ug/L		121	83 - 132	1	20
1,2-Dibromoethane (EDB)			20.0	23.82		ug/L		119	82 - 125	0	20
Dibromomethane			20.0	22.99		ug/L		115	80 - 125	2	20
1,2-Dichlorobenzene			20.0	21.05		ug/L		105	84 - 128	6	20
1,3-Dichlorobenzene			20.0	21.12		ug/L		106	85 - 120	7	20
1,4-Dichlorobenzene			20.0	20.55		ug/L		103	86 - 116	6	20
Dichlorodifluoromethane (Freon 12)			20.0	18.40		ug/L		92	36 - 131	5	20
1,1-Dichloroethane			20.0	21.36		ug/L		107	81 - 120	6	20
1,2-Dichloroethane			20.0	21.01		ug/L		105	82 - 116	5	20
1,1-Dichloroethene			20.0	22.09		ug/L		110	83 - 120	4	20
cis-1,2-Dichloroethene			20.0	24.08		ug/L		120	81 - 124	3	20
trans-1,2-Dichloroethene			20.0	23.70		ug/L		118	81 - 127	4	20
1,2-Dichloropropane			20.0	23.81		ug/L		119	76 - 132	1	20
1,3-Dichloropropane			20.0	22.05		ug/L		110	74 - 122	1	20
2,2-Dichloropropane			20.0	22.75		ug/L		114	77 - 130	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11144/5
Matrix: Water
Analysis Batch: 11144

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene	20.0	22.09		ug/L		110	81 - 115	3	20
cis-1,3-Dichloropropene	20.0	22.64		ug/L		113	74 - 129	1	20
trans-1,3-Dichloropropene	20.0	22.91		ug/L		115	78 - 126	3	20
Ethylbenzene	20.0	20.94		ug/L		105	89 - 117	6	20
Hexachlorobutadiene	20.0	19.83	*1	ug/L		99	77 - 118	31	20
2-Hexanone (MBK)	20.0	15.14		ug/L		76	37 - 123	5	20
Isopropylbenzene	20.0	20.19		ug/L		101	83 - 117	9	20
4-Isopropyltoluene	20.0	21.09		ug/L		105	83 - 124	8	20
Methyl tert-butyl ether	20.0	22.42		ug/L		112	70 - 126	1	20
4-Methyl-2-pentanone (MIBK)	20.0	20.63		ug/L		103	59 - 118	0	20
Methylene Chloride	20.0	20.41		ug/L		102	75 - 121	1	20
Naphthalene	20.0	18.35		ug/L		92	67 - 123	18	20
N-Propylbenzene	20.0	23.94		ug/L		120	84 - 128	1	20
Styrene	20.0	21.55		ug/L		108	78 - 127	5	20
1,1,1,2-Tetrachloroethane	20.0	20.53		ug/L		103	91 - 118	5	20
1,1,2,2-Tetrachloroethane	20.0	20.83		ug/L		104	77 - 129	2	20
Tetrachloroethene	20.0	22.68		ug/L		113	85 - 116	6	20
Toluene	20.0	21.67		ug/L		108	88 - 109	4	20
1,2,3-Trichlorobenzene	20.0	19.17	*1	ug/L		96	67 - 134	27	20
1,2,4-Trichlorobenzene	20.0	22.39	*1	ug/L		112	78 - 133	24	20
1,3,5-Trichlorobenzene	20.0	21.91	*1	ug/L		110	77 - 127	25	20
1,1,1-Trichloroethane	20.0	22.78		ug/L		114	83 - 124	2	20
1,1,2-Trichloroethane	20.0	23.39		ug/L		117	84 - 132	2	20
Trichloroethene	20.0	21.41		ug/L		107	74 - 118	2	20
Trichlorofluoromethane (Freon 11)	20.0	22.50		ug/L		112	82 - 126	8	20
1,2,3-Trichloropropane	20.0	20.60		ug/L		103	77 - 124	1	20
1,2,4-Trimethylbenzene	20.0	21.93		ug/L		110	89 - 126	8	20
1,3,5-Trimethylbenzene	20.0	22.19		ug/L		111	89 - 125	8	20
Vinyl chloride	20.0	20.90		ug/L		105	62 - 130	3	20
m-Xylene & p-Xylene	40.0	44.86		ug/L		112	85 - 123	6	20
o-Xylene	20.0	21.48		ug/L		107	85 - 119	5	20
Tetrahydrofuran	20.0	21.35		ug/L		107	60 - 133	2	20
Ethyl ether	20.0	19.88		ug/L		99	69 - 122	2	20
Tert-amyl methyl ether	20.0	21.57		ug/L		108	50 - 140	0	20
Ethyl tert-butyl ether	20.0	21.70		ug/L		109	60 - 131	1	20
di-Isopropyl ether	20.0	21.64		ug/L		108	67 - 125	1	20
tert-Butanol	200	156.3	*1	ug/L		78	50 - 169	23	20
1,4-Dioxane	200	166.3		ug/L		83	28 - 150	11	20
trans-1,4-Dichloro-2-butene	20.0	22.43		ug/L		112	48 - 153	2	20
Ethanol	400	365.8		ug/L		91	47 - 170	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11302/7
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			05/30/22 13:25	1
Acetone	ND		10.0		ug/L			05/30/22 13:25	1
Acrylonitrile	ND		0.500		ug/L			05/30/22 13:25	1
Benzene	ND		1.00		ug/L			05/30/22 13:25	1
Bromobenzene	ND		1.00		ug/L			05/30/22 13:25	1
Bromochloromethane	ND		1.00		ug/L			05/30/22 13:25	1
Bromodichloromethane	ND		0.500		ug/L			05/30/22 13:25	1
Bromoform	ND		1.00		ug/L			05/30/22 13:25	1
Bromomethane	ND		2.00		ug/L			05/30/22 13:25	1
2-Butanone (MEK)	ND		2.00		ug/L			05/30/22 13:25	1
n-Butylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
sec-Butylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
tert-Butylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
Carbon disulfide	ND		2.00		ug/L			05/30/22 13:25	1
Carbon tetrachloride	ND		1.00		ug/L			05/30/22 13:25	1
Chlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
Chloroethane	ND		2.00		ug/L			05/30/22 13:25	1
Chloroform	ND		1.00		ug/L			05/30/22 13:25	1
Chloromethane	ND		2.00		ug/L			05/30/22 13:25	1
2-Chlorotoluene	ND		1.00		ug/L			05/30/22 13:25	1
4-Chlorotoluene	ND		1.00		ug/L			05/30/22 13:25	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			05/30/22 13:25	1
Dibromochloromethane	ND		0.500		ug/L			05/30/22 13:25	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			05/30/22 13:25	1
Dibromomethane	ND		1.00		ug/L			05/30/22 13:25	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			05/30/22 13:25	1
1,1-Dichloroethane	ND		1.00		ug/L			05/30/22 13:25	1
1,2-Dichloroethane	ND		1.00		ug/L			05/30/22 13:25	1
1,1-Dichloroethene	ND		1.00		ug/L			05/30/22 13:25	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/30/22 13:25	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/30/22 13:25	1
1,2-Dichloropropane	ND		1.00		ug/L			05/30/22 13:25	1
1,3-Dichloropropane	ND		1.00		ug/L			05/30/22 13:25	1
2,2-Dichloropropane	ND		1.00		ug/L			05/30/22 13:25	1
1,1-Dichloropropene	ND		1.00		ug/L			05/30/22 13:25	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			05/30/22 13:25	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			05/30/22 13:25	1
Ethylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
Hexachlorobutadiene	ND		1.00		ug/L			05/30/22 13:25	1
2-Hexanone (MBK)	ND		2.00		ug/L			05/30/22 13:25	1
Isopropylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
4-Isopropyltoluene	ND		1.00		ug/L			05/30/22 13:25	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/30/22 13:25	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			05/30/22 13:25	1
Methylene Chloride	ND		2.00		ug/L			05/30/22 13:25	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11302/7
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			05/30/22 13:25	1
N-Propylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
Styrene	ND		1.00		ug/L			05/30/22 13:25	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/30/22 13:25	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			05/30/22 13:25	1
Tetrachloroethene	ND		1.00		ug/L			05/30/22 13:25	1
Toluene	ND		1.00		ug/L			05/30/22 13:25	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			05/30/22 13:25	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/30/22 13:25	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/30/22 13:25	1
Trichloroethene	ND		1.00		ug/L			05/30/22 13:25	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			05/30/22 13:25	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/30/22 13:25	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/30/22 13:25	1
Vinyl chloride	ND		1.00		ug/L			05/30/22 13:25	1
m-Xylene & p-Xylene	ND		1.00		ug/L			05/30/22 13:25	1
o-Xylene	ND		1.00		ug/L			05/30/22 13:25	1
Tetrahydrofuran	ND		2.00		ug/L			05/30/22 13:25	1
Ethyl ether	ND		1.00		ug/L			05/30/22 13:25	1
Tert-amyl methyl ether	ND		1.00		ug/L			05/30/22 13:25	1
Ethyl tert-butyl ether	ND		1.00		ug/L			05/30/22 13:25	1
di-Isopropyl ether	ND		1.00		ug/L			05/30/22 13:25	1
tert-Butanol	ND		10.0		ug/L			05/30/22 13:25	1
1,4-Dioxane	ND		50.0		ug/L			05/30/22 13:25	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			05/30/22 13:25	1
Ethanol	ND		200		ug/L			05/30/22 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/30/22 13:25*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/30/22 13:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*05/30/22 13:25*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/30/22 13:25*	*1*

Lab Sample ID: LCS 620-11302/4
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.88		ug/L		109	85 - 124
Acetone	20.0	10.15		ug/L		51	14 - 133
Acrylonitrile	20.0	20.33		ug/L		102	62 - 134
Benzene	20.0	19.90		ug/L		99	86 - 111
Bromobenzene	20.0	18.91		ug/L		95	82 - 120
Bromochloromethane	20.0	21.00		ug/L		105	83 - 123
Bromodichloromethane	20.0	21.09		ug/L		105	83 - 137

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11302/4
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	19.54		ug/L		98	91 - 137
Bromomethane	20.0	10.06		ug/L		50	29 - 148
2-Butanone (MEK)	20.0	11.03		ug/L		55	10 - 200
n-Butylbenzene	20.0	23.76		ug/L		119	85 - 138
sec-Butylbenzene	20.0	19.30		ug/L		96	75 - 118
tert-Butylbenzene	20.0	18.93		ug/L		95	85 - 122
Carbon disulfide	20.0	20.54		ug/L		103	69 - 150
Carbon tetrachloride	20.0	18.83		ug/L		94	84 - 123
Chlorobenzene	20.0	22.70		ug/L		114	93 - 115
Chloroethane	20.0	19.38		ug/L		97	56 - 155
Chloroform	20.0	19.69		ug/L		98	84 - 116
Chloromethane	20.0	18.72		ug/L		94	45 - 138
2-Chlorotoluene	20.0	21.01		ug/L		105	88 - 116
4-Chlorotoluene	20.0	21.54		ug/L		108	81 - 128
1,2-Dibromo-3-Chloropropane	20.0	18.00		ug/L		90	70 - 139
Dibromochloromethane	20.0	18.96		ug/L		95	83 - 132
1,2-Dibromoethane (EDB)	20.0	18.77		ug/L		94	82 - 125
Dibromomethane	20.0	19.56		ug/L		98	80 - 125
1,2-Dichlorobenzene	20.0	21.36		ug/L		107	84 - 128
1,3-Dichlorobenzene	20.0	20.81		ug/L		104	85 - 120
1,4-Dichlorobenzene	20.0	21.02		ug/L		105	86 - 116
Dichlorodifluoromethane (Freon 12)	20.0	17.31		ug/L		87	36 - 131
1,1-Dichloroethane	20.0	20.15		ug/L		101	81 - 120
1,2-Dichloroethane	20.0	18.95		ug/L		95	82 - 116
1,1-Dichloroethene	20.0	20.60		ug/L		103	83 - 120
cis-1,2-Dichloroethene	20.0	20.96		ug/L		105	81 - 124
trans-1,2-Dichloroethene	20.0	22.52		ug/L		113	81 - 127
1,2-Dichloropropane	20.0	21.36		ug/L		107	76 - 132
1,3-Dichloropropane	20.0	19.54		ug/L		98	74 - 122
2,2-Dichloropropane	20.0	18.80		ug/L		94	77 - 130
1,1-Dichloropropene	20.0	19.88		ug/L		99	81 - 115
cis-1,3-Dichloropropene	20.0	19.34		ug/L		97	74 - 129
trans-1,3-Dichloropropene	20.0	20.31		ug/L		102	78 - 126
Ethylbenzene	20.0	21.70		ug/L		109	89 - 117
Hexachlorobutadiene	20.0	18.37		ug/L		92	77 - 118
2-Hexanone (MBK)	20.0	12.17		ug/L		61	37 - 123
Isopropylbenzene	20.0	20.82		ug/L		104	83 - 117
4-Isopropyltoluene	20.0	21.65		ug/L		108	83 - 124
Methyl tert-butyl ether	20.0	18.80		ug/L		94	70 - 126
4-Methyl-2-pentanone (MIBK)	20.0	15.39		ug/L		77	59 - 118
Methylene Chloride	20.0	20.55		ug/L		103	75 - 121
Naphthalene	20.0	18.12		ug/L		91	67 - 123
N-Propylbenzene	20.0	21.48		ug/L		107	84 - 128
Styrene	20.0	19.94		ug/L		100	78 - 127
1,1,1,2-Tetrachloroethane	20.0	20.32		ug/L		102	91 - 118
1,1,2,2-Tetrachloroethane	20.0	20.91		ug/L		105	77 - 129
Tetrachloroethene	20.0	18.04		ug/L		90	85 - 116
Toluene	20.0	19.70		ug/L		99	88 - 109

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11302/4
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichlorobenzene			20.0	19.33		ug/L		97	67 - 134		
1,2,4-Trichlorobenzene			20.0	18.50		ug/L		93	78 - 133		
1,3,5-Trichlorobenzene			20.0	20.56		ug/L		103	77 - 127		
1,1,1-Trichloroethane			20.0	19.45		ug/L		97	83 - 124		
1,1,2-Trichloroethane			20.0	22.86		ug/L		114	84 - 132		
Trichloroethene			20.0	19.47		ug/L		97	74 - 118		
Trichlorofluoromethane (Freon 11)			20.0	21.89		ug/L		109	82 - 126		
1,2,3-Trichloropropane			20.0	20.02		ug/L		100	77 - 124		
1,2,4-Trimethylbenzene			20.0	20.93		ug/L		105	89 - 126		
1,3,5-Trimethylbenzene			20.0	20.94		ug/L		105	89 - 125		
Vinyl chloride			20.0	18.70		ug/L		93	62 - 130		
m-Xylene & p-Xylene			40.0	41.93		ug/L		105	85 - 123		
o-Xylene			20.0	20.08		ug/L		100	85 - 119		
Tetrahydrofuran			20.0	18.09		ug/L		90	60 - 133		
Ethyl ether			20.0	18.57		ug/L		93	69 - 122		
Tert-amyl methyl ether			20.0	19.06		ug/L		95	50 - 140		
Ethyl tert-butyl ether			20.0	18.60		ug/L		93	60 - 131		
di-Isopropyl ether			20.0	18.05		ug/L		90	67 - 125		
tert-Butanol			200	184.7		ug/L		92	50 - 169		
1,4-Dioxane			200	184.7		ug/L		92	28 - 150		
trans-1,4-Dichloro-2-butene			20.0	17.33		ug/L		87	48 - 153		
Ethanol			400	409.8		ug/L		102	47 - 170		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 620-11302/5
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	20.82		ug/L		104	85 - 124	5	20
Acetone			20.0	10.05		ug/L		50	14 - 133	1	20
Acrylonitrile			20.0	19.46		ug/L		97	62 - 134	4	20
Benzene			20.0	18.84		ug/L		94	86 - 111	5	20
Bromobenzene			20.0	18.34		ug/L		92	82 - 120	3	20
Bromochloromethane			20.0	19.84		ug/L		99	83 - 123	6	20
Bromodichloromethane			20.0	20.53		ug/L		103	83 - 137	3	20
Bromoform			20.0	19.10		ug/L		95	91 - 137	2	20
Bromomethane			20.0	10.81		ug/L		54	29 - 148	7	20
2-Butanone (MEK)			20.0	10.89		ug/L		54	10 - 200	1	20
n-Butylbenzene			20.0	22.69		ug/L		113	85 - 138	5	20
sec-Butylbenzene			20.0	18.64		ug/L		93	75 - 118	3	20
tert-Butylbenzene			20.0	18.18		ug/L		91	85 - 122	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11302/5
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide			20.0	19.37		ug/L		97	69 - 150	6	20
Carbon tetrachloride			20.0	17.58		ug/L		88	84 - 123	7	20
Chlorobenzene			20.0	21.85		ug/L		109	93 - 115	4	20
Chloroethane			20.0	18.82		ug/L		94	56 - 155	3	20
Chloroform			20.0	18.87		ug/L		94	84 - 116	4	20
Chloromethane			20.0	17.89		ug/L		89	45 - 138	5	20
2-Chlorotoluene			20.0	20.79		ug/L		104	88 - 116	1	20
4-Chlorotoluene			20.0	20.97		ug/L		105	81 - 128	3	20
1,2-Dibromo-3-Chloropropane			20.0	16.47		ug/L		82	70 - 139	9	20
Dibromochloromethane			20.0	18.14		ug/L		91	83 - 132	4	20
1,2-Dibromoethane (EDB)			20.0	18.18		ug/L		91	82 - 125	3	20
Dibromomethane			20.0	18.70		ug/L		93	80 - 125	5	20
1,2-Dichlorobenzene			20.0	20.38		ug/L		102	84 - 128	5	20
1,3-Dichlorobenzene			20.0	20.21		ug/L		101	85 - 120	3	20
1,4-Dichlorobenzene			20.0	20.41		ug/L		102	86 - 116	3	20
Dichlorodifluoromethane (Freon 12)			20.0	16.66		ug/L		83	36 - 131	4	20
1,1-Dichloroethane			20.0	19.38		ug/L		97	81 - 120	4	20
1,2-Dichloroethane			20.0	17.82		ug/L		89	82 - 116	6	20
1,1-Dichloroethene			20.0	19.65		ug/L		98	83 - 120	5	20
cis-1,2-Dichloroethene			20.0	20.46		ug/L		102	81 - 124	2	20
trans-1,2-Dichloroethene			20.0	21.71		ug/L		109	81 - 127	4	20
1,2-Dichloropropane			20.0	20.61		ug/L		103	76 - 132	4	20
1,3-Dichloropropane			20.0	18.81		ug/L		94	74 - 122	4	20
2,2-Dichloropropane			20.0	18.00		ug/L		90	77 - 130	4	20
1,1-Dichloropropene			20.0	19.00		ug/L		95	81 - 115	5	20
cis-1,3-Dichloropropene			20.0	18.41		ug/L		92	74 - 129	5	20
trans-1,3-Dichloropropene			20.0	19.41		ug/L		97	78 - 126	5	20
Ethylbenzene			20.0	21.10		ug/L		105	89 - 117	3	20
Hexachlorobutadiene			20.0	17.11		ug/L		86	77 - 118	7	20
2-Hexanone (MBK)			20.0	11.51		ug/L		58	37 - 123	6	20
Isopropylbenzene			20.0	20.02		ug/L		100	83 - 117	4	20
4-Isopropyltoluene			20.0	20.45		ug/L		102	83 - 124	6	20
Methyl tert-butyl ether			20.0	17.98		ug/L		90	70 - 126	4	20
4-Methyl-2-pentanone (MIBK)			20.0	14.72		ug/L		74	59 - 118	4	20
Methylene Chloride			20.0	19.97		ug/L		100	75 - 121	3	20
Naphthalene			20.0	17.19		ug/L		86	67 - 123	5	20
N-Propylbenzene			20.0	20.71		ug/L		104	84 - 128	4	20
Styrene			20.0	19.41		ug/L		97	78 - 127	3	20
1,1,1,2-Tetrachloroethane			20.0	19.77		ug/L		99	91 - 118	3	20
1,1,2,2-Tetrachloroethane			20.0	20.09		ug/L		100	77 - 129	4	20
Tetrachloroethene			20.0	17.41		ug/L		87	85 - 116	4	20
Toluene			20.0	19.10		ug/L		95	88 - 109	3	20
1,2,3-Trichlorobenzene			20.0	18.05		ug/L		90	67 - 134	7	20
1,2,4-Trichlorobenzene			20.0	17.93		ug/L		90	78 - 133	3	20
1,3,5-Trichlorobenzene			20.0	19.92		ug/L		100	77 - 127	3	20
1,1,1-Trichloroethane			20.0	18.69		ug/L		93	83 - 124	4	20
1,1,2-Trichloroethane			20.0	22.43		ug/L		112	84 - 132	2	20
Trichloroethene			20.0	18.52		ug/L		93	74 - 118	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11302/5
Matrix: Water
Analysis Batch: 11302

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	20.87		ug/L		104	82 - 126	5	20
1,2,3-Trichloropropane			20.0	19.34		ug/L		97	77 - 124	3	20
1,2,4-Trimethylbenzene			20.0	20.23		ug/L		101	89 - 126	3	20
1,3,5-Trimethylbenzene			20.0	20.41		ug/L		102	89 - 125	3	20
Vinyl chloride			20.0	17.91		ug/L		90	62 - 130	4	20
m-Xylene & p-Xylene			40.0	40.58		ug/L		101	85 - 123	3	20
o-Xylene			20.0	19.66		ug/L		98	85 - 119	2	20
Tetrahydrofuran			20.0	16.98		ug/L		85	60 - 133	6	20
Ethyl ether			20.0	18.01		ug/L		90	69 - 122	3	20
Tert-amyl methyl ether			20.0	18.52		ug/L		93	50 - 140	3	20
Ethyl tert-butyl ether			20.0	17.86		ug/L		89	60 - 131	4	20
di-Isopropyl ether			20.0	17.35		ug/L		87	67 - 125	4	20
tert-Butanol			200	179.2		ug/L		90	50 - 169	3	20
1,4-Dioxane			200	181.5		ug/L		91	28 - 150	2	20
trans-1,4-Dichloro-2-butene			20.0	16.43		ug/L		82	48 - 153	5	20
Ethanol			400	414.7		ug/L		104	47 - 170	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-262025/5
Matrix: Water
Analysis Batch: 262025

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.400		mg/L			06/03/22 17:41	1

Lab Sample ID: LCS 410-262025/3
Matrix: Water
Analysis Batch: 262025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			3.00	2.882		mg/L		96	90 - 110		

Lab Sample ID: LCSD 410-262025/4
Matrix: Water
Analysis Batch: 262025

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			3.00	2.880		mg/L		96	90 - 110	0	20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 620-4608-12 MS
Matrix: Water
Analysis Batch: 262025

Client Sample ID: MW-2S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2.47		10.0	11.57		mg/L		91	90 - 110		

Lab Sample ID: 620-4608-12 DU
Matrix: Water
Analysis Batch: 262025

Client Sample ID: MW-2S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	2.47			2.446		mg/L				0.9	15

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-260317/1-A
Matrix: Water
Analysis Batch: 261295

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260317

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		3.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
NMeFOSAA	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorobutanoic acid	ND		5.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorodecanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorodecanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorododecanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluoroheptanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluoroheptanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorohexanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorononanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorononanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorooctanesulfonamide	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorooctanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluoropentanesulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluoropentanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluorotridecanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
Perfluoroundecanoic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
6:2 Fluorotelomer sulfonic acid	ND		5.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
8:2 Fluorotelomer sulfonic acid	ND		3.00		ng/L		05/31/22 09:06	06/03/22 02:22	1
4:2 Fluorotelomer sulfonic acid	ND		2.00		ng/L		05/31/22 09:06	06/03/22 02:22	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*94*		*10 - 200*	*05/31/22 09:06*	*06/03/22 02:22*	*1*
M2-6:2 FTS	*91*		*17 - 200*	*05/31/22 09:06*	*06/03/22 02:22*	*1*
M2-8:2 FTS	*88*		*33 - 200*	*05/31/22 09:06*	*06/03/22 02:22*	*1*
13C2 PFTeDA	*81*		*10 - 179*	*05/31/22 09:06*	*06/03/22 02:22*	*1*
13C3 HFPO-DA	*61*		*17 - 185*	*05/31/22 09:06*	*06/03/22 02:22*	*1*
13C3 PFBS	*90*		*16 - 200*	*05/31/22 09:06*	*06/03/22 02:22*	*1*
13C4 PFBA	*66*		*42 - 165*	*05/31/22 09:06*	*06/03/22 02:22*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-260317/1-A
Matrix: Water
Analysis Batch: 261295

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260317

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	75		31 - 182	05/31/22 09:06	06/03/22 02:22	1
13C5 PFPeA	66		38 - 187	05/31/22 09:06	06/03/22 02:22	1
13C8 PFOA	83		48 - 162	05/31/22 09:06	06/03/22 02:22	1
13C8 PFOS	89		51 - 159	05/31/22 09:06	06/03/22 02:22	1
d3-NMeFOSAA	110		31 - 174	05/31/22 09:06	06/03/22 02:22	1
d5-NEtFOSAA	112		29 - 195	05/31/22 09:06	06/03/22 02:22	1
d9-N-EtFOSE-M	70		10 - 177	05/31/22 09:06	06/03/22 02:22	1
13C3 PFHxS	85		28 - 188	05/31/22 09:06	06/03/22 02:22	1
13C5 PFHxA	65		24 - 179	05/31/22 09:06	06/03/22 02:22	1
13C6 PFDA	87		49 - 163	05/31/22 09:06	06/03/22 02:22	1
13C7 PFUnA	85		34 - 174	05/31/22 09:06	06/03/22 02:22	1
d3-NMePFOSA	59		10 - 155	05/31/22 09:06	06/03/22 02:22	1
d5-NEtPFOSA	57		10 - 159	05/31/22 09:06	06/03/22 02:22	1
13C8 FOSA	76		10 - 168	05/31/22 09:06	06/03/22 02:22	1
13C2-PFDoDA	88		17 - 176	05/31/22 09:06	06/03/22 02:22	1
13C9 PFNA	92		51 - 167	05/31/22 09:06	06/03/22 02:22	1

Lab Sample ID: LCS 410-260317/2-A
Matrix: Water
Analysis Batch: 261295

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
NEtFOSAA	25.6	19.16		ng/L		75	55 - 134
NMeFOSAA	25.6	23.52		ng/L		92	59 - 140
Perfluorobutanesulfonic acid	22.7	21.38		ng/L		94	53 - 138
Perfluorobutanoic acid	25.6	26.30		ng/L		103	59 - 136
Perfluorodecanesulfonic acid	24.7	23.10		ng/L		94	55 - 137
Perfluorodecanoic acid	25.6	24.48		ng/L		96	56 - 138
Perfluorododecanoic acid	25.6	23.16		ng/L		90	59 - 143
Perfluoroheptanesulfonic acid	24.4	20.30		ng/L		83	56 - 140
Perfluoroheptanoic acid	25.6	24.65		ng/L		96	59 - 145
Perfluorohexanesulfonic acid	23.3	20.60		ng/L		88	58 - 134
Perfluorohexanoic acid	25.6	23.73		ng/L		93	58 - 139
Perfluorononanesulfonic acid	24.6	23.17		ng/L		94	59 - 136
Perfluorononanoic acid	25.6	23.68		ng/L		93	61 - 139
Perfluorooctanesulfonamide	25.6	22.96		ng/L		90	43 - 167
Perfluorooctanesulfonic acid	23.7	24.12		ng/L		102	45 - 150
Perfluorooctanoic acid	25.6	23.61		ng/L		92	51 - 145
Perfluoropentanesulfonic acid	24.0	23.02		ng/L		96	55 - 140
Perfluoropentanoic acid	25.6	25.33		ng/L		99	57 - 141
Perfluorotetradecanoic acid	25.6	24.85		ng/L		97	62 - 139
Perfluorotridecanoic acid	25.6	24.00		ng/L		94	58 - 146
Perfluoroundecanoic acid	25.6	24.24		ng/L		95	60 - 141
6:2 Fluorotelomer sulfonic acid	24.3	20.99		ng/L		86	28 - 173
8:2 Fluorotelomer sulfonic acid	24.5	21.73		ng/L		89	55 - 138
4:2 Fluorotelomer sulfonic acid	23.9	18.00		ng/L		75	55 - 139

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-4:2 FTS	108		10 - 200

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-260317/2-A
Matrix: Water
Analysis Batch: 261295

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260317

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	96		17 - 200
M2-8:2 FTS	103		33 - 200
13C2 PFTeDA	98		10 - 179
13C3 HFPO-DA	88		17 - 185
13C3 PFBS	101		16 - 200
13C4 PFBA	101		42 - 165
13C4 PFHpA	97		31 - 182
13C5 PFPeA	107		38 - 187
13C8 PFOA	96		48 - 162
13C8 PFOS	97		51 - 159
d3-NMeFOSAA	132		31 - 174
d5-NEtFOSAA	152		29 - 195
d9-N-EtFOSE-M	105		10 - 177
13C3 PFHxS	95		28 - 188
13C5 PFHxA	91		24 - 179
13C6 PFDA	106		49 - 163
13C7 PFUnA	115		34 - 174
d3-NMePFOSA	79		10 - 155
d5-NEtPFOSA	81		10 - 159
13C8 FOSA	98		10 - 168
13C2-PFDoDA	111		17 - 176
13C9 PFNA	105		51 - 167

Lab Sample ID: MB 410-263523/1-A
Matrix: Water
Analysis Batch: 263771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 263523

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		3.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
NMeFOSAA	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorobutanoic acid	ND		5.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorodecanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorodecanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorododecanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluoroheptanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluoroheptanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorohexanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorononanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorononanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorooctanesulfonamide	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorooctanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluoropentanesulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluoropentanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluorotridecanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
Perfluoroundecanoic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-263523/1-A
Matrix: Water
Analysis Batch: 263771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 263523

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
6:2 Fluorotelomer sulfonic acid	ND		5.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
8:2 Fluorotelomer sulfonic acid	ND		3.00		ng/L		06/08/22 16:16	06/09/22 20:43	1
4:2 Fluorotelomer sulfonic acid	ND		2.00		ng/L		06/08/22 16:16	06/09/22 20:43	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*124*		*10 - 200*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
M2-6:2 FTS	*109*		*17 - 200*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
M2-8:2 FTS	*99*		*33 - 200*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C2 PFTeDA	*79*		*10 - 179*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C3 HFPO-DA	*93*		*17 - 185*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C3 PFBS	*102*		*16 - 200*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C4 PFBA	*96*		*42 - 165*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C4 PFHpA	*102*		*31 - 182*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C5 PFPeA	*95*		*38 - 187*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C8 PFOA	*91*		*48 - 162*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C8 PFOS	*96*		*51 - 159*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
d3-NMeFOSAA	*105*		*31 - 174*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
d5-NEtFOSAA	*109*		*29 - 195*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
d9-N-EtFOSE-M	*73*		*10 - 177*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C3 PFHxS	*99*		*28 - 188*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C5 PFHxA	*95*		*24 - 179*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C6 PFDA	*95*		*49 - 163*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C7 PFUnA	*99*		*34 - 174*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
d3-NMePFOSA	*50*		*10 - 155*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
d5-NEtPFOSA	*50*		*10 - 159*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C8 FOSA	*77*		*10 - 168*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C2-PFDoDA	*94*		*17 - 176*	*06/08/22 16:16*	*06/09/22 20:43*	*1*
13C9 PFNA	*93*		*51 - 167*	*06/08/22 16:16*	*06/09/22 20:43*	*1*

Lab Sample ID: LCS 410-263523/2-A
Matrix: Water
Analysis Batch: 263771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 263523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
NEtFOSAA	25.6	19.01		ng/L		74	55 - 134
NMeFOSAA	25.6	19.93		ng/L		78	59 - 140
Perfluorobutanesulfonic acid	22.7	17.87		ng/L		79	53 - 138
Perfluorobutanoic acid	25.6	19.92		ng/L		78	59 - 136
Perfluorodecanesulfonic acid	24.7	17.05		ng/L		69	55 - 137
Perfluorodecanoic acid	25.6	22.67		ng/L		89	56 - 138
Perfluorododecanoic acid	25.6	20.86		ng/L		81	59 - 143
Perfluoroheptanesulfonic acid	24.4	18.73		ng/L		77	56 - 140
Perfluoroheptanoic acid	25.6	21.64		ng/L		85	59 - 145
Perfluorohexanesulfonic acid	23.3	19.57		ng/L		84	58 - 134
Perfluorohexanoic acid	25.6	22.10		ng/L		86	58 - 139
Perfluorononanesulfonic acid	24.6	17.82		ng/L		73	59 - 136
Perfluorononanoic acid	25.6	20.87		ng/L		82	61 - 139
Perfluorooctanesulfonamide	25.6	17.82		ng/L		70	43 - 167
Perfluorooctanesulfonic acid	23.7	19.77		ng/L		83	45 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-263523/2-A
Matrix: Water
Analysis Batch: 263771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 263523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanoic acid	25.6	21.22		ng/L		83	51 - 145
Perfluoropentanesulfonic acid	24.0	19.16		ng/L		80	55 - 140
Perfluoropentanoic acid	25.6	20.01		ng/L		78	57 - 141
Perfluorotetradecanoic acid	25.6	20.42		ng/L		80	62 - 139
Perfluorotridecanoic acid	25.6	21.60		ng/L		84	58 - 146
Perfluoroundecanoic acid	25.6	19.93		ng/L		78	60 - 141
6:2 Fluorotelomer sulfonic acid	24.3	20.43		ng/L		84	28 - 173
8:2 Fluorotelomer sulfonic acid	24.5	18.45		ng/L		75	55 - 138
4:2 Fluorotelomer sulfonic acid	23.9	16.15		ng/L		68	55 - 139

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*164*		*10 - 200*
M2-6:2 FTS	*150*		*17 - 200*
M2-8:2 FTS	*133*		*33 - 200*
13C2 PFTeDA	*124*		*10 - 179*
13C3 HFPO-DA	*129*		*17 - 185*
13C3 PFBS	*134*		*16 - 200*
13C4 PFBA	*132*		*42 - 165*
13C4 PFHpA	*128*		*31 - 182*
13C5 PFPeA	*134*		*38 - 187*
13C8 PFOA	*126*		*48 - 162*
13C8 PFOS	*128*		*51 - 159*
d3-NMeFOSAA	*147*		*31 - 174*
d5-NEtFOSAA	*149*		*29 - 195*
d9-N-EtFOSE-M	*108*		*10 - 177*
13C3 PFHxS	*127*		*28 - 188*
13C5 PFHxA	*122*		*24 - 179*
13C6 PFDA	*128*		*49 - 163*
13C7 PFUnA	*132*		*34 - 174*
d3-NMePFOSA	*67*		*10 - 155*
d5-NEtPFOSA	*72*		*10 - 159*
13C8 FOSA	*117*		*10 - 168*
13C2-PFDoDA	*128*		*17 - 176*
13C9 PFNA	*130*		*51 - 167*

Lab Sample ID: LCSD 410-263523/3-A
Matrix: Water
Analysis Batch: 263771

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 263523

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSAA	25.6	20.62		ng/L		81	55 - 134	8	30
NMeFOSAA	25.6	19.88		ng/L		78	59 - 140	0	30
Perfluorobutanesulfonic acid	22.7	18.50		ng/L		82	53 - 138	3	30
Perfluorobutanoic acid	25.6	20.92		ng/L		82	59 - 136	5	30
Perfluorodecanesulfonic acid	24.7	18.91		ng/L		77	55 - 137	10	30
Perfluorodecanoic acid	25.6	21.94		ng/L		86	56 - 138	3	30
Perfluorododecanoic acid	25.6	19.86		ng/L		78	59 - 143	5	30
Perfluoroheptanesulfonic acid	24.4	19.31		ng/L		79	56 - 140	3	30
Perfluoroheptanoic acid	25.6	21.75		ng/L		85	59 - 145	1	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-263523/3-A
Matrix: Water
Analysis Batch: 263771

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 263523

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid			23.3	19.41		ng/L		83	58 - 134	1	30
Perfluorohexanoic acid			25.6	21.48		ng/L		84	58 - 139	3	30
Perfluorononanesulfonic acid			24.6	19.67		ng/L		80	59 - 136	10	30
Perfluorononanoic acid			25.6	23.42		ng/L		91	61 - 139	11	30
Perfluorooctanesulfonamide			25.6	19.97		ng/L		78	43 - 167	11	30
Perfluorooctanesulfonic acid			23.7	21.09		ng/L		89	45 - 150	6	30
Perfluorooctanoic acid			25.6	23.04		ng/L		90	51 - 145	8	30
Perfluoropentanesulfonic acid			24.0	19.04		ng/L		79	55 - 140	1	30
Perfluoropentanoic acid			25.6	21.15		ng/L		83	57 - 141	6	30
Perfluorotetradecanoic acid			25.6	21.10		ng/L		82	62 - 139	3	30
Perfluorotridecanoic acid			25.6	21.00		ng/L		82	58 - 146	3	30
Perfluoroundecanoic acid			25.6	21.99		ng/L		86	60 - 141	10	30
6:2 Fluorotelomer sulfonic acid			24.3	22.24		ng/L		92	28 - 173	8	30
8:2 Fluorotelomer sulfonic acid			24.5	17.27		ng/L		70	55 - 138	7	30
4:2 Fluorotelomer sulfonic acid			23.9	15.87		ng/L		66	55 - 139	2	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
M2-4:2 FTS	*155*		*10 - 200*
M2-6:2 FTS	*135*		*17 - 200*
M2-8:2 FTS	*138*		*33 - 200*
13C2 PFTeDA	*99*		*10 - 179*
13C3 HFPO-DA	*118*		*17 - 185*
13C3 PFBS	*128*		*16 - 200*
13C4 PFBA	*121*		*42 - 165*
13C4 PFHpA	*117*		*31 - 182*
13C5 PFPeA	*116*		*38 - 187*
13C8 PFOA	*112*		*48 - 162*
13C8 PFOS	*120*		*51 - 159*
d3-NMeFOSAA	*140*		*31 - 174*
d5-NEtFOSAA	*132*		*29 - 195*
d9-N-EtFOSE-M	*76*		*10 - 177*
13C3 PFHxS	*119*		*28 - 188*
13C5 PFHxA	*113*		*24 - 179*
13C6 PFDA	*121*		*49 - 163*
13C7 PFUnA	*121*		*34 - 174*
d3-NMePFOSA	*48*		*10 - 155*
d5-NEtPFOSA	*47*		*10 - 159*
13C8 FOSA	*100*		*10 - 168*
13C2-PFDoDA	*114*		*17 - 176*
13C9 PFNA	*122*		*51 - 167*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Lab Sample ID: MB 410-259867/1-A
Matrix: Drinking Water
Analysis Batch: 260842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259867

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Lab Sample ID: MB 410-259867/1-A
Matrix: Drinking Water
Analysis Batch: 260842

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259867

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorooctanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorononanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorodecanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorotridecanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
NEtFOSAA	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
NMeFOSAA	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluoroundecanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1
Perfluorododecanoic acid	ND		2.00		ng/L		05/27/22 15:05	06/01/22 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*87*		*70 - 130*	*05/27/22 15:05*	*06/01/22 18:50*	*1*
13C2 PFHxA	*88*		*70 - 130*	*05/27/22 15:05*	*06/01/22 18:50*	*1*
13C3 HFPO-DA	*85*		*70 - 130*	*05/27/22 15:05*	*06/01/22 18:50*	*1*
d5-NEtFOSAA	*86*		*70 - 130*	*05/27/22 15:05*	*06/01/22 18:50*	*1*

Lab Sample ID: LCS 410-259867/2-A
Matrix: Drinking Water
Analysis Batch: 260842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259867

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorohexanoic acid			20.5	21.05		ng/L		103	70 - 130		
Perfluoroheptanoic acid			20.5	19.79		ng/L		97	70 - 130		
Perfluorooctanoic acid			20.5	21.04		ng/L		103	70 - 130		
Perfluorononanoic acid			20.5	21.20		ng/L		104	70 - 130		
Perfluorodecanoic acid			20.5	21.57		ng/L		105	70 - 130		
Perfluorotridecanoic acid			20.5	21.56		ng/L		105	70 - 130		
Perfluorotetradecanoic acid			20.5	21.76		ng/L		106	70 - 130		
Perfluorobutanesulfonic acid			18.1	19.95		ng/L		110	70 - 130		
Perfluorohexanesulfonic acid			18.7	18.96		ng/L		102	70 - 130		
Perfluorooctanesulfonic acid			19.0	19.53		ng/L		103	70 - 130		
NEtFOSAA			20.5	19.51		ng/L		95	70 - 130		
NMeFOSAA			20.5	20.21		ng/L		99	70 - 130		
Perfluoroundecanoic acid			20.5	22.28		ng/L		109	70 - 130		
Perfluorododecanoic acid			20.5	21.75		ng/L		106	70 - 130		
HFPODA			20.5	18.55		ng/L		91	70 - 130		
9Cl-PF3ONS			19.0	20.18		ng/L		106	70 - 130		
11Cl-PF3OUdS			19.0	20.22		ng/L		106	70 - 130		
DONA			19.4	18.21		ng/L		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 PFDA	*96*		*70 - 130*
13C2 PFHxA	*93*		*70 - 130*
13C3 HFPO-DA	*82*		*70 - 130*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Lab Sample ID: LCS 410-259867/2-A
Matrix: Drinking Water
Analysis Batch: 260842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259867

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	94		70 - 130

Lab Sample ID: LCSD 410-259867/3-A
Matrix: Drinking Water
Analysis Batch: 260842

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 259867

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanoic acid			20.5	21.64		ng/L		106	70 - 130	3	30
Perfluoroheptanoic acid			20.5	22.46		ng/L		110	70 - 130	13	30
Perfluorooctanoic acid			20.5	22.09		ng/L		108	70 - 130	5	30
Perfluorononanoic acid			20.5	22.14		ng/L		108	70 - 130	4	30
Perfluorodecanoic acid			20.5	21.16		ng/L		103	70 - 130	2	30
Perfluorotridecanoic acid			20.5	20.81		ng/L		102	70 - 130	4	30
Perfluorotetradecanoic acid			20.5	21.05		ng/L		103	70 - 130	3	30
Perfluorobutanesulfonic acid			18.1	20.64		ng/L		114	70 - 130	3	30
Perfluorohexanesulfonic acid			18.7	21.59		ng/L		116	70 - 130	13	30
Perfluorooctanesulfonic acid			19.0	20.39		ng/L		108	70 - 130	4	30
NEtFOSAA			20.5	20.93		ng/L		102	70 - 130	7	30
NMeFOSAA			20.5	20.99		ng/L		102	70 - 130	4	30
Perfluoroundecanoic acid			20.5	21.36		ng/L		104	70 - 130	4	30
Perfluorododecanoic acid			20.5	21.61		ng/L		106	70 - 130	1	30
HFPODA			20.5	19.42		ng/L		95	70 - 130	5	30
9Cl-PF3ONS			19.0	20.72		ng/L		109	70 - 130	3	30
11Cl-PF3OUdS			19.0	19.98		ng/L		105	70 - 130	1	30
DONA			19.4	20.73		ng/L		107	70 - 130	13	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
13C2 PFDA	92		70 - 130
13C2 PFHxA	93		70 - 130
13C3 HFPO-DA	88		70 - 130
d5-NEtFOSAA	92		70 - 130

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-11194/1-A
Matrix: Water
Analysis Batch: 11203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11194

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00800		mg/L		05/25/22 17:38	05/26/22 11:12	1
Cadmium	ND		0.00500		mg/L		05/25/22 17:38	05/26/22 11:12	1
Chromium	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 11:12	1
Copper	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 11:12	1
Iron	ND		0.100		mg/L		05/25/22 17:38	05/26/22 11:12	1
Lead	ND		0.0150		mg/L		05/25/22 17:38	05/26/22 11:12	1
Manganese	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 11:12	1
Nickel	ND		0.0100		mg/L		05/25/22 17:38	05/26/22 11:12	1
Sodium	ND		1.50		mg/L		05/25/22 17:38	05/26/22 11:12	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 620-11194/1-A
Matrix: Water
Analysis Batch: 11203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11194

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.0500		mg/L		05/25/22 17:38	05/26/22 11:12	1

Lab Sample ID: LCS 620-11194/2-A
Matrix: Water
Analysis Batch: 11203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11194

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			2.50	2.708		mg/L		108	85 - 115		
Cadmium			2.50	2.579		mg/L		103	85 - 115		
Chromium			2.50	2.398		mg/L		96	85 - 115		
Copper			2.50	2.659		mg/L		106	85 - 115		
Iron			2.50	2.513		mg/L		101	85 - 115		
Lead			2.50	2.737		mg/L		109	85 - 115		
Manganese			2.50	2.614		mg/L		105	85 - 115		
Nickel			2.50	2.589		mg/L		104	85 - 115		
Sodium			12.5	12.92		mg/L		103	85 - 115		
Zinc			2.50	2.664		mg/L		107	85 - 115		

Lab Sample ID: LCSD 620-11194/3-A
Matrix: Water
Analysis Batch: 11203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11194

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			2.50	2.654		mg/L		106	85 - 115	2	20
Cadmium			2.50	2.582		mg/L		103	85 - 115	0	20
Chromium			2.50	2.401		mg/L		96	85 - 115	0	20
Copper			2.50	2.649		mg/L		106	85 - 115	0	20
Iron			2.50	2.525		mg/L		101	85 - 115	0	20
Lead			2.50	2.702		mg/L		108	85 - 115	1	20
Manganese			2.50	2.613		mg/L		105	85 - 115	0	20
Nickel			2.50	2.565		mg/L		103	85 - 115	1	20
Sodium			12.5	12.86		mg/L		103	85 - 115	0	20
Zinc			2.50	2.684		mg/L		107	85 - 115	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 620-11192/1-C
Matrix: Water
Analysis Batch: 11286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11227

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	L	0.000200		mg/L		05/26/22 12:43	05/27/22 12:48	1

Lab Sample ID: MB 620-11227/1-A
Matrix: Water
Analysis Batch: 11286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11227

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		05/26/22 12:43	05/27/22 12:43	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 620-11227/2-A
Matrix: Water
Analysis Batch: 11286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11227

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.005445		mg/L		109	85 - 115		

Lab Sample ID: LCSD 620-11227/3-A
Matrix: Water
Analysis Batch: 11286

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11227

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.005257		mg/L		105	85 - 115	4	20

Method: 410.4 - COD

Lab Sample ID: MB 410-261259/4
Matrix: Water
Analysis Batch: 261259

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/02/22 06:15	1

Lab Sample ID: LCS 410-261259/5
Matrix: Water
Analysis Batch: 261259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand			500	503.5		mg/L		101	94 - 110		

Lab Sample ID: 620-4608-2 MS
Matrix: Water
Analysis Batch: 261259

Client Sample ID: MW-3S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand	ND		400	391.7		mg/L		98	94 - 110		

Lab Sample ID: 620-4608-2 MSD
Matrix: Water
Analysis Batch: 261259

Client Sample ID: MW-3S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		400	396.1		mg/L		99	94 - 110	1	5

Lab Sample ID: 620-4608-2 DU
Matrix: Water
Analysis Batch: 261259

Client Sample ID: MW-3S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	ND			ND		mg/L				NC	9

GC/MS VOA

Analysis Batch: 11144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	8260C	
MB 620-11144/7	Method Blank	Total/NA	Water	8260C	
LCS 620-11144/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 620-11144/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 11302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-12	MW-2S	Total/NA	Water	8260C	
MB 620-11302/7	Method Blank	Total/NA	Water	8260C	
LCS 620-11302/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 620-11302/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 259754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-14	152 Forest Edge Rd - INF	Total/NA	Drinking Water	524.2	
620-4608-15	152 Forest Edge Rd - MID	Total/NA	Drinking Water	524.2	
620-4608-16	152 Forest Edge Rd - EFF	Total/NA	Drinking Water	524.2	
MB 410-259754/6	Method Blank	Total/NA	Drinking Water	524.2	
LCS 410-259754/4	Lab Control Sample	Total/NA	Drinking Water	524.2	

HPLC/IC

Analysis Batch: 262025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-12	MW-2S	Total/NA	Water	EPA 300.0 R2.1	
MB 410-262025/5	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-262025/3	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-262025/4	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	
620-4608-12 MS	MW-2S	Total/NA	Water	EPA 300.0 R2.1	
620-4608-12 DU	MW-2S	Total/NA	Water	EPA 300.0 R2.1	

LCMS

Prep Batch: 259867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-14	152 Forest Edge Rd - INF	Total/NA	Drinking Water	537.1 DW Prep	
620-4608-15	152 Forest Edge Rd - MID	Total/NA	Drinking Water	537.1 DW Prep	
620-4608-16	152 Forest Edge Rd - EFF	Total/NA	Drinking Water	537.1 DW Prep	
MB 410-259867/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW Prep	
LCS 410-259867/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW Prep	
LCSD 410-259867/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	537.1 DW Prep	

Prep Batch: 260317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-12	MW-2S	Total/NA	Water	537 IDA	
MB 410-260317/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-260317/2-A	Lab Control Sample	Total/NA	Water	537 IDA	

Analysis Batch: 260842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-14	152 Forest Edge Rd - INF	Total/NA	Drinking Water	EPA 537.1	259867
620-4608-15	152 Forest Edge Rd - MID	Total/NA	Drinking Water	EPA 537.1	259867

LCMS (Continued)

Analysis Batch: 260842 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-16	152 Forest Edge Rd - EFF	Total/NA	Drinking Water	EPA 537.1	259867
MB 410-259867/1-A	Method Blank	Total/NA	Drinking Water	EPA 537.1	259867
LCS 410-259867/2-A	Lab Control Sample	Total/NA	Drinking Water	EPA 537.1	259867
LCSD 410-259867/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	EPA 537.1	259867

Analysis Batch: 260867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-12	MW-2S	Total/NA	Water	537 IDA	260317

Analysis Batch: 261295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-260317/1-A	Method Blank	Total/NA	Water	537 IDA	260317
LCS 410-260317/2-A	Lab Control Sample	Total/NA	Water	537 IDA	260317

Prep Batch: 263523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	537 IDA	
620-4608-12 - RE	MW-2S	Total/NA	Water	537 IDA	
MB 410-263523/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-263523/2-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-263523/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Analysis Batch: 263771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-12 - RE	MW-2S	Total/NA	Water	537 IDA	263523
MB 410-263523/1-A	Method Blank	Total/NA	Water	537 IDA	263523
LCS 410-263523/2-A	Lab Control Sample	Total/NA	Water	537 IDA	263523
LCSD 410-263523/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	263523

Analysis Batch: 264220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	537 IDA	263523

Metals

Leach Batch: 11192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11192/1-C	Method Blank	Total/NA	Water	1311	

Prep Batch: 11194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	3005A	
620-4608-12	MW-2S	Total/NA	Water	3005A	
MB 620-11194/1-A	Method Blank	Total/NA	Water	3005A	
LCS 620-11194/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 620-11194/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Analysis Batch: 11203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	6010D	11194
620-4608-12	MW-2S	Total/NA	Water	6010D	11194

Metals (Continued)

Analysis Batch: 11203 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11194/1-A	Method Blank	Total/NA	Water	6010D	11194
LCS 620-11194/2-A	Lab Control Sample	Total/NA	Water	6010D	11194
LCSD 620-11194/3-A	Lab Control Sample Dup	Total/NA	Water	6010D	11194

Prep Batch: 11227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	7470A	
620-4608-12	MW-2S	Total/NA	Water	7470A	
MB 620-11192/1-C	Method Blank	Total/NA	Water	7470A	11192
MB 620-11227/1-A	Method Blank	Total/NA	Water	7470A	
LCS 620-11227/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 620-11227/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 11286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	7470A	11227
620-4608-12	MW-2S	Total/NA	Water	7470A	11227
MB 620-11192/1-C	Method Blank	Total/NA	Water	7470A	11227
MB 620-11227/1-A	Method Blank	Total/NA	Water	7470A	11227
LCS 620-11227/2-A	Lab Control Sample	Total/NA	Water	7470A	11227
LCSD 620-11227/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	11227

General Chemistry

Analysis Batch: 261259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-4608-2	MW-3S	Total/NA	Water	410.4	
620-4608-12	MW-2S	Total/NA	Water	410.4	
MB 410-261259/4	Method Blank	Total/NA	Water	410.4	
LCS 410-261259/5	Lab Control Sample	Total/NA	Water	410.4	
620-4608-2 MS	MW-3S	Total/NA	Water	410.4	
620-4608-2 MSD	MW-3S	Total/NA	Water	410.4	
620-4608-2 DU	MW-3S	Total/NA	Water	410.4	

Client Sample ID: MW-3S
Lab Sample ID: 620-4608-2

Date Collected: 05/11/22 15:52
Matrix: Water
Date Received: 05/19/22 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	11144	05/25/22 16:04	CLR	ENE
Total/NA	Prep	537 IDA			263523	06/08/22 16:16	QLP7	ELLE
Total/NA	Analysis	537 IDA		1	264220	06/10/22 15:57	I5JH	ELLE
Total/NA	Prep	3005A			11194	05/25/22 17:38	CAJ	ENE
Total/NA	Analysis	6010D		1	11203	05/26/22 12:37	CEV	ENE
Total/NA	Prep	7470A			11227	05/26/22 12:45	CEV	ENE
Total/NA	Analysis	7470A		1	11286	05/27/22 13:11	CEV	ENE
Total/NA	Analysis	410.4		1	261259	06/02/22 06:15	USAE	ELLE

Client Sample ID: MW-2S
Lab Sample ID: 620-4608-12

Date Collected: 05/18/22 14:50
Matrix: Water
Date Received: 05/19/22 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	11302	05/30/22 14:42	CLR	ENE
Total/NA	Analysis	EPA 300.0 R2.1		5	262025	06/03/22 20:07	W5UX	ELLE
Total/NA	Prep	537 IDA			260317	05/31/22 09:06	PMS9	ELLE
Total/NA	Analysis	537 IDA		1	260867	06/02/22 00:54	MT26	ELLE
Total/NA	Prep	537 IDA	RE		263523	06/08/22 16:16	QLP7	ELLE
Total/NA	Analysis	537 IDA	RE	1	263771	06/10/22 01:43	I5JH	ELLE
Total/NA	Prep	3005A			11194	05/25/22 17:38	CAJ	ENE
Total/NA	Analysis	6010D		1	11203	05/26/22 12:44	CEV	ENE
Total/NA	Prep	7470A			11227	05/26/22 12:46	CEV	ENE
Total/NA	Analysis	7470A		1	11286	05/27/22 13:13	CEV	ENE
Total/NA	Analysis	410.4		1	261259	06/02/22 06:15	USAE	ELLE

Client Sample ID: 152 Forest Edge Rd - INF
Lab Sample ID: 620-4608-14

Date Collected: 05/17/22 10:20
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	259754	05/27/22 15:35	USEJ	ELLE
Total/NA	Prep	537.1 DW Prep			259867	05/27/22 15:05	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	260842	06/01/22 22:53	VK3G	ELLE

Client Sample ID: 152 Forest Edge Rd - MID
Lab Sample ID: 620-4608-15

Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	259754	05/27/22 15:57	USEJ	ELLE
Total/NA	Prep	537.1 DW Prep			259867	05/27/22 15:05	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	260842	06/01/22 23:05	VK3G	ELLE

Lab Chronicle

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 152 Forest Edge Rd - EFF
Lab Sample ID: 620-4608-16

Date Collected: 05/17/22 10:18
Matrix: Drinking Water
Date Received: 05/19/22 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	259754	05/27/22 16:20	USEJ	ELLE
Total/NA	Prep	537.1 DW Prep			259867	05/27/22 15:05	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	260842	06/01/22 23:16	VK3G	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Laboratory: Eurofins New England

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	<cert No.>	02-28-23
Connecticut	State	PH-0722	06-30-22
Maine	State	RI00100	04-17-23
Massachusetts	State	M-RI907	06-30-22
New Hampshire	NELAP	2240	08-03-22
New Jersey	NELAP	RI008	06-30-22
New York	NELAP	11393	06-01-22
Rhode Island	State	LAI00368	12-30-22
USDA	US Federal Programs	P330-20-00109	04-15-23

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Vermont	State	VT - 36037	10-28-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
410.4		Water	Chemical Oxygen Demand
524.2		Drinking Water	1,2-Dibromo-3-Chloropropane
524.2		Drinking Water	1,2-Dibromoethane
524.2		Drinking Water	2-Butanone
524.2		Drinking Water	2-Hexanone
524.2		Drinking Water	4-Methyl-2-pentanone
524.2		Drinking Water	Acetone
524.2		Drinking Water	Acrylonitrile
524.2		Drinking Water	Carbon disulfide
524.2		Drinking Water	di-Isopropyl ether
524.2		Drinking Water	Ethyl ether
524.2		Drinking Water	Ethyl t-butyl ether
524.2		Drinking Water	Freon 113
524.2		Drinking Water	m&p-Xylene
524.2		Drinking Water	o-Xylene
524.2		Drinking Water	t-Amyl methyl ether
524.2		Drinking Water	t-Butyl alcohol
524.2		Drinking Water	Tetrahydrofuran
537 IDA	537 IDA	Water	4:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	6:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	8:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	NEtFOSAA
537 IDA	537 IDA	Water	NMeFOSAA
537 IDA	537 IDA	Water	Perfluorobutanesulfonic acid
537 IDA	537 IDA	Water	Perfluorobutanoic acid
537 IDA	537 IDA	Water	Perfluorodecanesulfonic acid
537 IDA	537 IDA	Water	Perfluorodecanoic acid
537 IDA	537 IDA	Water	Perfluorododecanoic acid
537 IDA	537 IDA	Water	Perfluoroheptanesulfonic acid
537 IDA	537 IDA	Water	Perfluoroheptanoic acid
537 IDA	537 IDA	Water	Perfluorohexanesulfonic acid
537 IDA	537 IDA	Water	Perfluorohexanoic acid

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 IDA	537 IDA	Water	Perfluorononanesulfonic acid
537 IDA	537 IDA	Water	Perfluorononanoic acid
537 IDA	537 IDA	Water	Perfluorooctanesulfonamide
537 IDA	537 IDA	Water	Perfluorooctanesulfonic acid
537 IDA	537 IDA	Water	Perfluorooctanoic acid
537 IDA	537 IDA	Water	Perfluoropentanesulfonic acid
537 IDA	537 IDA	Water	Perfluoropentanoic acid
537 IDA	537 IDA	Water	Perfluorotetradecanoic acid
537 IDA	537 IDA	Water	Perfluorotridecanoic acid
537 IDA	537 IDA	Water	Perfluoroundecanoic acid

Method Summary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	ELLE
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
EPA 537.1	EPA 537.1, Ver 1.0 Nov 2018	EPA	ELLE
6010D	Metals (ICP)	SW846	ENE
7470A	Mercury (CVAA)	SW846	ENE
410.4	COD	MCAWW	ELLE
3005A	Preparation, Total Metals	SW846	ENE
5030C	Purge and Trap	SW846	ENE
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
537.1 DW Prep	Extraction of Perfluorinated Alkyl Acids	EPA	ELLE
7470A	Preparation, Mercury	SW846	ENE

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: Stone Environmental
Job ID: 620-4608-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-4608-2	MW-3S	Water	05/11/22 15:52	05/19/22 08:15
620-4608-12	MW-2S	Water	05/18/22 14:50	05/19/22 08:15
620-4608-14	152 Forest Edge Rd - INF	Drinking Water	05/17/22 10:20	05/19/22 08:15
620-4608-15	152 Forest Edge Rd - MID	Drinking Water	05/17/22 10:18	05/19/22 08:15
620-4608-16	152 Forest Edge Rd - EFF	Drinking Water	05/17/22 10:18	05/19/22 08:15

620-4608 Chain of Custody

Chain of Custody Record

eurofins | Environment Testing America

Client Contact: Ms Katrina Mattice	Sampler: KRM/APR	Lab PM: Huntley Agnes R	Carrier Tracking No(s):	COC No.: 620-3584-418 2
Company: Stone Environmental	Phone: 518-306-5034	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: VT	Page: Page 2 of 3
Address: 535 Stone Cutters Way	PWSID:			Job #:
City: Montpelier	Due Date Requested			
State, Zip: VT 05602	TAT Requested (days):			
Phone: 802-229-6434(Tel)	Compliance Project: Δ Yes Δ No			
Email: kmattice@stone-env com	PO #: 20211205			
Project Name: Town of Hinesburg Landfill - Hinesburg,	WO #: 20211205			
Site: Hinesburg, VT	Project #: 62000809			
	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - 8260 Standard List	SUBCONTRACT - COD	SUBCONTRACT - Chloride by 300	6010D, 7470A	PFC_IDA - PFAS list of 24	524.2_Preserved - (MOD) Regulated + THM's	524.2_Preserved - Regulated + THM's	537 1_DW - DW EPA 537 1 List of 18	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	N	D	N	A	A	N		
MW-1	5/18/22	0920	G	~~Drinking~~ Wate			X	X	X	X	X				8	
MW-2D		1305		~~Drinking~~ Wate			X	X	X	X	X				6	
MW-2S		1430		~~Drinking~~ Wate			X	X	X	X	X				8	
~~EB-S1722~~		—		~~Drinking~~ Wate			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~					
FRB-S1822	5/18/22	1530	G	~~Drinking~~ Wate			~~X~~	~~X~~	~~X~~	~~X~~	X				1	
182 Forest Edge Rd. -INF	~~5/17~~/22	1020	G	Drinking Wate	X									X	5	
182 Forest Edge Rd. -MID	5/17/22	1018	G	Drinking Wate	X									X	5	
182 Forest Edge Rd. - EFF	5/17/22	1018	G	Drinking Wate	X									X	5	
~~182 Forest E~~				Drinking Wate												
EB-S1722	5/17/22	~~1014~~ 1032	G	~~Drinking~~ Wate							X				1	
FRB-051722	5/17/22	1014	G	Drinking Wate										X		

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by: Karen Bree	Date: 5/18/22	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/19/22 0810	Company: Stone	Received by: Caroline Cunn	Date/Time: 5/19/22 0815	Company: ETA-Burl
Relinquished by: Caroline Cunn	Date/Time: 5/19/22 1025	Company: ETA-Burl	Received by:	Date/Time:	Company
Relinquished by:	Date/Time.	Company	Received by:	Date/Time: 5/20/22 12:26	Company: ENG

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 5.4 +0.2 5.6 #C

Ver: 06/08/2021

135 6/29/2022

Page 61 of 68

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone. 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: KRM/SLW	Lab PM: Huntley, Agnes R	Carrier Tracking No(s)	COC No: 620-3584-418 1
Client Contact: Ms Katrina Mattice	Phone: 518-366-5034	E-Mail: Agnes Huntley@et.eurofinsus.com	State of Origin: VT	Page: Page 1 of 3
Company: Stone Environmental	PWSID:			Job #:
Address: 535 Stone Cutters Way	Due Date Requested:			
City: Montpelier	TAT Requested (days):			
State, Zip: VT, 05602	Compliance Project: Δ Yes Δ No			
Phone: 802-229-6434(Tel)	PO #: 20211205			
Email: kmattice@stone-env com	WO #: 20211205			
Project Name: Town of Hinesburg Landfill - Hinesburg,	Project #: 62000809			
Site: Hinesburg, VT	SSOW#:			

Analysis Requested

Preservation Codes.

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - 8260 Standard List	SUBCONTRACT - COD	SUBCONTRACT - Chloride by 300	6010D, 7470A	PFC_IDA - PFAS list of 24	524.2_Preserved - (MOD) Regulated + THM's	524.2_Preserved - Regulated + THM's	537 1_DW - DW EPA 537 1 List of 18	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	N	D	N	A	A	N		
MW-3D	5/11/22	1708	G	Water			X	X	X	X	X				8	
MW-3S	↓	1552	↓	Water			X	X	X	X	X				8	
MW-4D		1244		Water			X	X	X	X	X				8	
MW-4S	5/11/22	1051	G	Water			X	X	X	X	X				8	
MW-3S-FD	↓	1552	↓	Water			X	X	X	X	X				8	
907 Beecher Hill - INF		1115		Drinking Water			X							X	25	
907 Beecher Hill - FD		1115		Drinking Water			X							X	25	
907 Beecher Hill -MID	↓	1113	↓	Drinking Water			X							X	5	
907 Beecher Hill - EFF	5/11/22	1111	G	Drinking Water			X							X	5	
				Water												
				Water												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II III IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by: Aaron Rice	Date: 5/18/22	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	5/19/22 0810	Stone	Cassie Cummi	5/19/22 0815	ETA-Burl
Cassie Cummi	5/19/22 1025	ETA-Burl			
				5/20/22 12:26	ENE

Custody Seals Intact: Δ Yes Δ No — Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 5.4 +0.2 5.6 ~~IR~~

none

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: APR/KRM	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-3584-418 3
Client Contact: Ms Katrina Mattice	Phone: 518-366-5034	E-Mail: Agnes Huntley@et.eurofinsus.com	State of Origin: VT	Page: Page 3 of 3
Company: Stone Environmental	PWSID:	Analysis Requested		Job #:
Address: 535 Stone Cutters Way	Due Date Requested			
City: Montpelier	TAT Requested (days):			
State, Zip: VT, 05602	Compliance Project: Δ Yes Δ No			
Phone: 802-229-6434(Tel)	PO #: 20211205			
Email: kmattice@stone-env com	WO #: 20211205			
Project Name: Town of Hinesburg Landfill - Hinesburg	Project #: 62000809			
Site: Hinesburg, VT	SSOW#:			

Preservation Codes.

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - 8260 Standard List	SUBCONTRACT - COD	SUBCONTRACT - Chloride by 300	6010D, 7470A	PFC_IDA - PFAS list of 24	524.2_Preserved - (MOD) Regulated + THM's	524.2_Preserved - Regulated + THM's	537 1_DW - DW EPA 537 1 List of 18	PCBs 8082 w/ manual extract					Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	S	N	D	N	A	A	N							
Purge Water	5/18/22	1400	G	Drinking Wate			A								X					7	
				Drinking Wate																	
				Drinking Wate																	
				Drinking Wate																	
				Drinking Wate																	
				Drinking Wate																	
				Drinking Wate																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by: Karen Rice	Date: 5/18/22	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	5/19/22 0810	Stone	Received by: Caleb Cummi	5/19/22 0815	ETA-Burl
Relinquished by: Caleb Cummi	5/19/22 1025	ETA-Burl	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	5/20/22 12:26	ENE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 5.4 +0.2 5.6 #6

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4244.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Vermont	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Vermont		Job #: 620-4608-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/8/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Town of Hinesburg Landfill - Hinesburg,	Project #: 62000809			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_PFC PFAS list of 24	410.4	300_ORGFM_28D/ (MOD) Copy Analytes	537.1_DW/537.1_DW_Prep DW EPA 537.1 List of 18	524.2_Preserved/ (MOD) Regulated + THM's	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
MW-2S (620-4608-12)	5/18/22	14:50 Eastern		Water			X	X	X			2	
152 Forest Edge Rd - INF (620-4608-14)	5/17/22	10:20 Eastern		Drinking Wate						X	X	2	VT VGES/MCL
152 Forest Edge Rd - MID (620-4608-15)	5/17/22	10:18 Eastern		Drinking Wate						X	X	2	VT VGES/MCL
152 Forest Edge Rd - EFF (620-4608-16)	5/17/22	10:18 Eastern		Drinking Wate						X	X	2	VT VGES/MCL

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	5/25/22 18:5	ENC			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 5/26/22 1000	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.3

Ver: 06/08/2021

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4245.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Vermont	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Vermont		Job #: 620-4608-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/8/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Town of Hinesburg Landfill - Hinesburg,	Project #: 62000809			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_PFC PFAS list of 24	410.4	300_ORGFM_28D/ (MOD) Copy Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-3S (620-4608-2)	5/11/22	15:52 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/11/22 18:15	EUS			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	5/11/22 1011	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.3

Ver: 06/08/2021

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4278.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Vermont	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Vermont		Job #: 620-4608-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/8/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Town of Hinesburg Landfill - Hinesburg,	Project #: 62000809			
Site:	SSOW#:			

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_PFC PFAS list of 24	410.4	300_ORGFM_28D/ (MOD) Copy Analytes	537.1_DW/537.1_DW_Prep DW EPA 537.1 List of 18	524.2_Preserved/ (MOD) Regulated + THM's	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X							
MW-3S (620-4608-2)	5/11/22	15:52 Eastern		Water			X	X	X			1	
MW-2S (620-4608-12)	5/18/22	14:50 Eastern		Water			X	X	X			2	
152 Forest Edge Rd - INF (620-4608-14)	5/17/22	10:20 Eastern		Drinking Wate						X	X	3	VT VGES/MCL
152 Forest Edge Rd - MID (620-4608-15)	5/17/22	10:18 Eastern		Drinking Wate						X	X	3	VT VGES/MCL
152 Forest Edge Rd - EFF (620-4608-16)	5/17/22	10:18 Eastern		Drinking Wate						X	X	3	VT VGES/MCL

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/16/22 8:08	ENG			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	5/17/22 1020	ENV

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		1.0

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 620-4608-1

Login Number: 4608
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 620-4608-1

Login Number: 4608
List Number: 2
Creator: Phillips, Ann-Marie E

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/26/22 06:49 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

eurofins | Environment Testing New England

ANALYTICAL REPORT

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Tel: (413)789-9018

Laboratory Job ID: 620-5103-1
Client Project/Site: Town of Hinesburg Landfill - Hinesburg,

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Ms. Katrina Mattice

Authorized for release by:
7/6/2022 9:01:06 PM

Agnes Huntley, Project Manager
(401)372-3482
Agnes.Huntley@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Laboratory: Eurofins New England

Narrative

Job Narrative
620-5103-1

Comments
No additional comments.

Receipt
The samples were received on 6/14/2022 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0º C.

Receipt Exceptions

One container for the following sample was received empty: EB-060922 (620-5103-10). (1) 250-mL unpreserved plastic bottle

A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

GC/MS VOA
Method 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 620-11999 recovered outside control limits for the following analytes: Chlorobenzene, Benzene, Toluene, Methylene Chloride, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,4-Dichlorobenzene, and Ethylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: Tetrahydrofuran, 2-Methyl-2-propanol, trans-1,4-Dichloro-2-butene, Isopropyl ether.
(CCVIS 620-11999/3)

Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: 1,2-Dibromo-3-Chloropropane, Bromomethane, and Vinyl Chloride.
(CCVIS 620-12053/3)

Methods 8260, 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 620-12053 recovered outside control limits for the following analytes: Vinyl Chloride and Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for analytical batch 620-12053 recovered outside control limits for the following analyte: Bromoform, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) for analytical batch 620-12053 recovered outside control limits for the following analytes: 1,1,1,2-Tetrachloroethane. Since the affected target compound was not detected in the samples and was within the method limit of 30%, the data have been reported and qualified.

Methods 8260, 8260C: The large number of analytes included in the continuing calibration verification (CCV) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. Affected analytes: 2-Methyl-2-propanol, Tetrahydrofuran, and trans-1,4-Dichloro-2-butene.
(CCVIS 620-12054/3)

Method 524.2: Volatile compounds have been detected above the RL for the following samples: 907 Bleecher-INF (620-5103-5) and 907 Bleecher-FD (620-5103-14). Since a field reagent blank/trip blank was not submitted, any potential contamination from the sampling/transport process cannot be assessed.

Job ID: 620-5103-1 (Continued)

Laboratory: Eurofins New England (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Methods 8270, 8270D: The large number of analytes included in the continuing calibration verification (CCV) (CCVIS 620-11959/3) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 10% of the analytes of interest are outside the method-defined %D criteria. 2,4-Dinitrophenol, 4-Chloroaniline, Aniline and Pentachlorophenol

Method 8270D: The large number of analytes included in the continuing calibration verification (CCV) (CCVIS 620-12100/3) gives a high probability that one or more analytes will be outside acceptance criteria. As indicated in the reference method, analysis may proceed as long as no more than 20% of the analytes of interest are outside the method-defined %D criteria. 2,4-Dinitrophenol, 4-Chloroaniline, Aniline, Benzidine and Pentachlorophenol.

Method 8270D: The laboratory control sample (LCS) for preparation batch 620-11992 and analytical batch 620-11959 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine, Benzidine, Benzoic acid and Phenol. The affected target analytes recovered within acceptance limits, >10%; therefore, demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 620-11992 and analytical batch 620-11959 recovered outside control limits for the following analytes: Benzidine, Hexachlorocyclopentadiene and Nitrobenzene.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010D: Due to the high concentration of sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 620-11872 and analytical batch 620-11914 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method 537 (modified): The recovery for the labeled isotope(s) M2-4:2 FTS and M2-6:2 FTS in the following samples: MW-1R (620-5103-1), MW-4D (620-5103-7) and MW-4D-FD (620-5103-8) is outside the QC acceptance limits. Since the recovery is high and the native analyte is not detected in the sample, the data is reported.

Method 537 (modified): Reporting limits were raised for the following sample: EB-060922 (620-5103-10) due to limited sample volume.

Method 537 (modified): The recovery for the labeled isotope(s): M2-4:2 FTS, M2-6:2 FTS, M2-8:2 FTS, d3-NMePFOSA and d5-NEtPFOSA were outside the QC limits for the following sample: MW-4S (620-5103-6). The following action was taken: This sample was re-extracted outside of the required holding time and the recovery for labeled isotope(s) were again outside QC acceptance limits.

The recovery for the injection standard peak areas in the following sample: MW-4S (620-5103-6) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted outside the required holding time and the recovery for the injection standard peak areas is again outside the QC acceptance limits.

Method 537 (modified): The recovery for the labeled isotope(s): M2-4:2 FTS, M2-6:2 FTS, Perfluorobutanesulfonic acid, d9-N-EtFOSE-M, d3-NMePFOSA and d5-NEtPFOSA (s) in the following sample: MW-3D (620-5103-9) were outside the QC acceptance limits. The following

Job ID: 620-5103-1 (Continued)

Laboratory: Eurofins New England (Continued)

action was taken: This sample was re-extracted outside of the required holding time and the recovery for labeled isotope(s):M2-4:2 FTS, M2-6:2 FTS, Perfluorobutanesulfonic acid, d9-N-EtFOSE-M, d3-NMePFOSA and d5-NEtPFOSA were again outside QC acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-1R — Lab Sample ID: 620-5103-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00710		0.00400		mg/L	1		6010D	Total/NA
Chromium	0.0158		0.00500		mg/L	1		6010D	Total/NA
Copper	0.0135		0.00500		mg/L	1		6010D	Total/NA
Iron	11.8		0.0500		mg/L	1		6010D	Total/NA
Lead	0.0104		0.00750		mg/L	1		6010D	Total/NA
Manganese	0.308		0.00500		mg/L	1		6010D	Total/NA
Nickel	0.0107		0.00500		mg/L	1		6010D	Total/NA
Sodium	3.64		0.750		mg/L	1		6010D	Total/NA
Zinc	0.0369		0.0250		mg/L	1		6010D	Total/NA

Client Sample ID: 907 Bleecher-FB — Lab Sample ID: 620-5103-2

No Detections.

Client Sample ID: 907 Bleecher-EFF — Lab Sample ID: 620-5103-3

No Detections.

Client Sample ID: 907 Bleecher-MID — Lab Sample ID: 620-5103-4

No Detections.

Client Sample ID: 907 Bleecher-INF — Lab Sample ID: 620-5103-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.84		0.500		ug/L	1		524.2	Total/NA
Ethyl ether	8.23		0.500		ug/L	1		524.2	Total/NA
Methyl tertiary butyl ether	0.847		0.500		ug/L	1		524.2	Total/NA
Tetrahydrofuran	18.8		7.00		ug/L	1		524.2	Total/NA
Perfluorohexanoic acid	16.1		1.62		ng/L	1		EPA 537.1	Total/NA
Perfluoroheptanoic acid	9.89		1.62		ng/L	1		EPA 537.1	Total/NA
Perfluorooctanoic acid	29.2		1.62		ng/L	1		EPA 537.1	Total/NA
Perfluorobutanesulfonic acid	2.40		1.62		ng/L	1		EPA 537.1	Total/NA
Perfluorohexanesulfonic acid	6.66		1.62		ng/L	1		EPA 537.1	Total/NA

Client Sample ID: MW-4S — Lab Sample ID: 620-5103-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	2.30		1.00		ug/L	1		8260C	Total/NA
Chlorobenzene	2.46		1.00		ug/L	1		8260C	Total/NA
Ethyl ether	7.11		1.00		ug/L	1		8260C	Total/NA
Chloride	8.70		2.00		mg/L	5		EPA 300.0 R2.1	Total/NA
Perfluorobutanoic acid	8.95		4.13		ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	8.75		1.65		ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	3.31		1.65		ng/L	1		537 IDA	Total/NA
Perfluorohexanoic acid	11.6		1.65		ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	24.2		1.65		ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	5.81		1.65		ng/L	1		537 IDA	Total/NA
Arsenic	0.201		0.00400		mg/L	1		6010D	Total/NA
Iron	13.0		0.0500		mg/L	1		6010D	Total/NA
Manganese	0.201		0.00500		mg/L	1		6010D	Total/NA
Nickel	0.0406		0.00500		mg/L	1		6010D	Total/NA
Sodium	18.5		0.750		mg/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-4D — Lab Sample ID: 620-5103-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane (Freon 12)	3.11		2.00		ug/L	1		8260C	Total/NA
Chloride	2.11		2.00		mg/L	5		EPA 300.0 R2.1	Total/NA
Copper	0.00560		0.00500		mg/L	1		6010D	Total/NA
Iron	3.80		0.0500		mg/L	1		6010D	Total/NA
Manganese	0.187		0.00500		mg/L	1		6010D	Total/NA
Sodium	9.33		0.750		mg/L	1		6010D	Total/NA

Client Sample ID: MW-4D-FD — Lab Sample ID: 620-5103-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane (Freon 12)	3.05		2.00		ug/L	1		8260C	Total/NA
Arsenic	0.00400		0.00400		mg/L	1		6010D	Total/NA
Chromium	0.00775		0.00500		mg/L	1		6010D	Total/NA
Copper	0.00820		0.00500		mg/L	1		6010D	Total/NA
Iron	7.12		0.0500		mg/L	1		6010D	Total/NA
Manganese	0.227		0.00500		mg/L	1		6010D	Total/NA
Nickel	0.00720		0.00500		mg/L	1		6010D	Total/NA
Chemical Oxygen Demand	241		188		mg/L	2.5		410.4	Total/NA

Client Sample ID: MW-3D — Lab Sample ID: 620-5103-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	1.08		1.00		ug/L	1		8260C	Total/NA
Tetrahydrofuran	19.8		2.00		ug/L	1		8260C	Total/NA
Ethyl ether	10.0		1.00		ug/L	1		8260C	Total/NA
Chloride	35.6		20.0		mg/L	50		EPA 300.0 R2.1	Total/NA
Perfluorobutanesulfonic acid	5.00		1.83		ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	27.4		4.57		ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	42.1		1.83		ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	25.8		1.83		ng/L	1		537 IDA	Total/NA
Perfluorohexanoic acid	58.6		1.83		ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	4.78		1.83		ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	119		1.83		ng/L	1		537 IDA	Total/NA
Perfluoropentanesulfonic acid	4.50		1.83		ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	28.5		1.83		ng/L	1		537 IDA	Total/NA
6:2 Fluorotelomer sulfonic acid	24.5		4.57		ng/L	1		537 IDA	Total/NA
Arsenic	0.0140		0.00400		mg/L	1		6010D	Total/NA
Iron	4.03		0.0500		mg/L	1		6010D	Total/NA
Manganese	2.34		0.00500		mg/L	1		6010D	Total/NA
Nickel	0.0380		0.00500		mg/L	1		6010D	Total/NA
Sodium	75.4		0.750		mg/L	1		6010D	Total/NA

Client Sample ID: EB-060922 — Lab Sample ID: 620-5103-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sodium	3.61		0.750		mg/L	1		6010D	Total/NA

Client Sample ID: PW-060922 — Lab Sample ID: 620-5103-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 56 Forest Edge — Lab Sample ID: 620-5103-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.662		0.500		ug/L	1		524.2	Total/NA
Perfluorooctanoic acid	3.35		1.68		ng/L	1		EPA 537.1	Total/NA
Perfluorooctanesulfonic acid	4.46		1.68		ng/L	1		EPA 537.1	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 620-5103-13

No Detections.

Client Sample ID: 907 Bleecher-FD — Lab Sample ID: 620-5103-14

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.82		0.500		ug/L	1		524.2	Total/NA
Ethyl ether	8.15		0.500		ug/L	1		524.2	Total/NA
Methyl tertiary butyl ether	0.909		0.500		ug/L	1		524.2	Total/NA
Tetrahydrofuran	19.0		7.00		ug/L	1		524.2	Total/NA
Perfluorohexanoic acid	15.3		1.63		ng/L	1		EPA 537.1	Total/NA
Perfluoroheptanoic acid	9.65		1.63		ng/L	1		EPA 537.1	Total/NA
Perfluorooctanoic acid	28.5		1.63		ng/L	1		EPA 537.1	Total/NA
Perfluorobutanesulfonic acid	2.45		1.63		ng/L	1		EPA 537.1	Total/NA
Perfluorohexanesulfonic acid	6.58		1.63		ng/L	1		EPA 537.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-1R
Date Collected: 06/07/22 11:35
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 20:37	1
Acetone	ND		10.0		ug/L			06/17/22 20:37	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 20:37	1
Benzene	ND		1.00		ug/L			06/17/22 20:37	1
Bromobenzene	ND		1.00		ug/L			06/17/22 20:37	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 20:37	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 20:37	1
Bromoform	ND		1.00		ug/L			06/17/22 20:37	1
Bromomethane	ND		2.00		ug/L			06/17/22 20:37	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 20:37	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 20:37	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 20:37	1
Chlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
Chloroethane	ND		2.00		ug/L			06/17/22 20:37	1
Chloroform	ND		1.00		ug/L			06/17/22 20:37	1
Chloromethane	ND		2.00		ug/L			06/17/22 20:37	1
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 20:37	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 20:37	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 20:37	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 20:37	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 20:37	1
Dibromomethane	ND		1.00		ug/L			06/17/22 20:37	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/17/22 20:37	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 20:37	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 20:37	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 20:37	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 20:37	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 20:37	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 20:37	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 20:37	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 20:37	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 20:37	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 20:37	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 20:37	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 20:37	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 20:37	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 20:37	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 20:37	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 20:37	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 20:37	1
Naphthalene	ND		2.00		ug/L			06/17/22 20:37	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-1R
Date Collected: 06/07/22 11:35
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
Styrene	ND		1.00		ug/L			06/17/22 20:37	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 20:37	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 20:37	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 20:37	1
Toluene	ND		1.00		ug/L			06/17/22 20:37	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 20:37	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 20:37	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 20:37	1
Trichloroethene	ND		1.00		ug/L			06/17/22 20:37	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 20:37	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 20:37	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 20:37	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 20:37	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 20:37	1
o-Xylene	ND		1.00		ug/L			06/17/22 20:37	1
Tetrahydrofuran	ND		2.00		ug/L			06/17/22 20:37	1
Ethyl ether	ND		1.00		ug/L			06/17/22 20:37	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 20:37	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 20:37	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 20:37	1
tert-Butanol	ND		10.0		ug/L			06/17/22 20:37	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 20:37	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 20:37	1
Ethanol	ND		200		ug/L			06/17/22 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*06/17/22 20:37*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*06/17/22 20:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*06/17/22 20:37*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*06/17/22 20:37*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.00		mg/L			06/30/22 05:58	5

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.42		ng/L		06/17/22 15:17	06/23/22 06:50	1
NMeFOSAA	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorobutanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorobutanoic acid	ND		4.03		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorodecanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorodecanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorododecanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluoroheptanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluoroheptanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-1R
Lab Sample ID: 620-5103-1
Date Collected: 06/07/22 11:35
Matrix: Water
Date Received: 06/14/22 10:20

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorohexanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorononanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorononanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorooctanesulfonamide	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorooctanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorooctanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluoropentanesulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluoropentanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorotetradecanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluorotridecanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
Perfluoroundecanoic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1
6:2 Fluorotelomer sulfonic acid	ND		4.03		ng/L		06/17/22 15:17	06/23/22 06:50	1
8:2 Fluorotelomer sulfonic acid	ND		2.42		ng/L		06/17/22 15:17	06/23/22 06:50	1
4:2 Fluorotelomer sulfonic acid	ND		1.61		ng/L		06/17/22 15:17	06/23/22 06:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*500*	*5+	*10 - 200*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
M2-6:2 FTS	*223*	*5+	*17 - 200*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
M2-8:2 FTS	*121*		*33 - 200*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C2 PFTeDA	*54*		*10 - 179*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C3 HFPO-DA	*88*		*17 - 185*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C3 PFBS	*99*		*16 - 200*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C4 PFBA	*103*		*42 - 165*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C4 PFHpA	*122*		*31 - 182*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C5 PFPeA	*115*		*38 - 187*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C8 PFOA	*115*		*48 - 162*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C8 PFOS	*92*		*51 - 159*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
d3-NMeFOSAA	*105*		*31 - 174*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
d5-NEtFOSAA	*111*		*29 - 195*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
d9-N-EtFOSE-M	*65*		*10 - 177*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C3 PFHxS	*107*		*28 - 188*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C5 PFHxA	*125*		*24 - 179*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C6 PFDA	*104*		*49 - 163*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C7 PFUnA	*99*		*34 - 174*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
d3-NMePFOSA	*37*		*10 - 155*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
d5-NEtPFOSA	*39*		*10 - 159*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C8 FOSA	*82*		*10 - 168*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C2-PFDoDA	*87*		*17 - 176*	*06/17/22 15:17*	*06/23/22 06:50*	*1*
13C9 PFNA	*95*		*51 - 167*	*06/17/22 15:17*	*06/23/22 06:50*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00710**		0.00400		mg/L		06/14/22 14:16	06/15/22 17:36	1
Cadmium	ND		0.00250		mg/L		06/14/22 14:16	06/15/22 17:36	1
Chromium	**0.0158**		0.00500		mg/L		06/14/22 14:16	06/15/22 17:36	1
Copper	**0.0135**		0.00500		mg/L		06/14/22 14:16	06/15/22 17:36	1
Iron	**11.8**		0.0500		mg/L		06/14/22 14:16	06/15/22 17:36	1
Lead	**0.0104**		0.00750		mg/L		06/14/22 14:16	06/15/22 17:36	1
Manganese	**0.308**		0.00500		mg/L		06/14/22 14:16	06/15/22 17:36	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-1R
Lab Sample ID: 620-5103-1
Date Collected: 06/07/22 11:35
Matrix: Water
Date Received: 06/14/22 10:20

Method: 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0107		0.00500		mg/L		06/14/22 14:16	06/15/22 17:36	1
Sodium	3.64		0.750		mg/L		06/14/22 14:16	06/15/22 17:36	1
Zinc	0.0369		0.0250		mg/L		06/14/22 14:16	06/15/22 17:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/17/22 03:15	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-FB
Date Collected: 06/07/22 14:28
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-2
Matrix: Drinking Water

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluoroheptanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorooctanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorononanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorodecanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorotridecanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorotetradecanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorobutanesulfonic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorohexanesulfonic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorooctanesulfonic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
NEtFOSAA	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
NMeFOSAA	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluoroundecanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1
Perfluorododecanoic acid	ND		1.59		ng/L		06/17/22 10:29	06/21/22 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*98*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:26*	*1*
13C2 PFHxA	*91*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:26*	*1*
13C3 HFPO-DA	*99*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:26*	*1*
d5-NEtFOSAA	*101*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:26*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-EFF
Lab Sample ID: 620-5103-3
Date Collected: 06/07/22 14:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 15:52	1
1,1,1-Trichloroethane	ND		0.500		ug/L			06/16/22 15:52	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 15:52	1
1,1,2-Trichloroethane	ND		0.500		ug/L			06/16/22 15:52	1
1,1-Dichloroethane	ND		0.500		ug/L			06/16/22 15:52	1
1,1-Dichloroethene	ND		0.500		ug/L			06/16/22 15:52	1
1,1-Dichloropropene	ND		0.500		ug/L			06/16/22 15:52	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			06/16/22 15:52	1
1,2,3-Trichloropropane	ND		0.500		ug/L			06/16/22 15:52	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			06/16/22 15:52	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			06/16/22 15:52	1
1,2-Dibromoethane	ND		0.500		ug/L			06/16/22 15:52	1
1,2-Dichlorobenzene	ND		0.500		ug/L			06/16/22 15:52	1
1,2-Dichloroethane	ND		0.500		ug/L			06/16/22 15:52	1
1,2-Dichloropropane	ND		0.500		ug/L			06/16/22 15:52	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
1,3-Dichlorobenzene	ND		0.500		ug/L			06/16/22 15:52	1
1,3-Dichloropropane	ND		0.500		ug/L			06/16/22 15:52	1
1,4-Dichlorobenzene	ND		0.500		ug/L			06/16/22 15:52	1
2,2-Dichloropropane	ND		0.500		ug/L			06/16/22 15:52	1
2-Butanone	ND		5.00		ug/L			06/16/22 15:52	1
2-Chlorotoluene	ND		0.500		ug/L			06/16/22 15:52	1
2-Hexanone	ND		5.00		ug/L			06/16/22 15:52	1
4-Chlorotoluene	ND		0.500		ug/L			06/16/22 15:52	1
4-Methyl-2-pentanone	ND		5.00		ug/L			06/16/22 15:52	1
Acetone	ND		10.0		ug/L			06/16/22 15:52	1
Acrylonitrile	ND		10.0		ug/L			06/16/22 15:52	1
Benzene	ND		0.500		ug/L			06/16/22 15:52	1
Bromobenzene	ND		0.500		ug/L			06/16/22 15:52	1
Bromochloromethane	ND		0.500		ug/L			06/16/22 15:52	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 15:52	1
Bromoform	ND		0.500		ug/L			06/16/22 15:52	1
Bromomethane	ND		0.500		ug/L			06/16/22 15:52	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 15:52	1
Carbon tetrachloride	ND		0.500		ug/L			06/16/22 15:52	1
Chlorobenzene	ND		0.500		ug/L			06/16/22 15:52	1
Chloroethane	ND		0.500		ug/L			06/16/22 15:52	1
Chloroform	ND		0.500		ug/L			06/16/22 15:52	1
Chloromethane	ND		0.500		ug/L			06/16/22 15:52	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 15:52	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 15:52	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 15:52	1
Dibromomethane	ND		0.500		ug/L			06/16/22 15:52	1
Dichlorodifluoromethane	ND		0.500		ug/L			06/16/22 15:52	1
di-Isopropyl ether	ND		0.500		ug/L			06/16/22 15:52	1
Ethyl ether	ND		0.500		ug/L			06/16/22 15:52	1
Ethyl t-butyl ether	ND		0.500		ug/L			06/16/22 15:52	1
Ethylbenzene	ND		0.500		ug/L			06/16/22 15:52	1

Client Sample ID: 907 Bleecher-EFF
Lab Sample ID: 620-5103-3
Date Collected: 06/07/22 14:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			06/16/22 15:52	1
Hexachlorobutadiene	ND		0.500		ug/L			06/16/22 15:52	1
Isopropylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
m&p-Xylene	ND		1.00		ug/L			06/16/22 15:52	1
Methyl tertiary butyl ether	ND		0.500		ug/L			06/16/22 15:52	1
Methylene Chloride	ND		0.500		ug/L			06/16/22 15:52	1
Naphthalene	ND		0.500		ug/L			06/16/22 15:52	1
n-Butylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
N-Propylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
o-Xylene	ND		0.500		ug/L			06/16/22 15:52	1
p-Isopropyltoluene	ND		0.500		ug/L			06/16/22 15:52	1
sec-Butylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
Styrene	ND		0.500		ug/L			06/16/22 15:52	1
t-Amyl methyl ether	ND		0.500		ug/L			06/16/22 15:52	1
t-Butyl alcohol	ND		25.0		ug/L			06/16/22 15:52	1
tert-Butylbenzene	ND		0.500		ug/L			06/16/22 15:52	1
Tetrachloroethene	ND		0.500		ug/L			06/16/22 15:52	1
Tetrahydrofuran	ND		7.00		ug/L			06/16/22 15:52	1
Toluene	ND		0.500		ug/L			06/16/22 15:52	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 15:52	1
Trichloroethene	ND		0.500		ug/L			06/16/22 15:52	1
Trichlorofluoromethane	ND		0.500		ug/L			06/16/22 15:52	1
Vinyl chloride	ND		0.500		ug/L			06/16/22 15:52	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*94*		*80 - 120*		*06/16/22 15:52*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*06/16/22 15:52*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluoroheptanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorooctanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorononanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorodecanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorotridecanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorotetradecanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorobutanesulfonic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorohexanesulfonic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorooctanesulfonic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
NEtFOSAA	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
NMeFOSAA	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluoroundecanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1
Perfluorododecanoic acid	ND		1.65		ng/L		06/17/22 10:29	06/21/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*106*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:38*	*1*
13C2 PFHxA	*102*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:38*	*1*
13C3 HFPO-DA	*103*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:38*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-EFF
Lab Sample ID: 620-5103-3
Date Collected: 06/07/22 14:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	108		70 - 130	06/17/22 10:29	06/21/22 14:38	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-MID
Lab Sample ID: 620-5103-4
Date Collected: 06/07/22 14:34
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 16:15	1
1,1,1-Trichloroethane	ND		0.500		ug/L			06/16/22 16:15	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 16:15	1
1,1,2-Trichloroethane	ND		0.500		ug/L			06/16/22 16:15	1
1,1-Dichloroethane	ND		0.500		ug/L			06/16/22 16:15	1
1,1-Dichloroethene	ND		0.500		ug/L			06/16/22 16:15	1
1,1-Dichloropropene	ND		0.500		ug/L			06/16/22 16:15	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			06/16/22 16:15	1
1,2,3-Trichloropropane	ND		0.500		ug/L			06/16/22 16:15	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			06/16/22 16:15	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			06/16/22 16:15	1
1,2-Dibromoethane	ND		0.500		ug/L			06/16/22 16:15	1
1,2-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:15	1
1,2-Dichloroethane	ND		0.500		ug/L			06/16/22 16:15	1
1,2-Dichloropropane	ND		0.500		ug/L			06/16/22 16:15	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
1,3-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:15	1
1,3-Dichloropropane	ND		0.500		ug/L			06/16/22 16:15	1
1,4-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:15	1
2,2-Dichloropropane	ND		0.500		ug/L			06/16/22 16:15	1
2-Butanone	ND		5.00		ug/L			06/16/22 16:15	1
2-Chlorotoluene	ND		0.500		ug/L			06/16/22 16:15	1
2-Hexanone	ND		5.00		ug/L			06/16/22 16:15	1
4-Chlorotoluene	ND		0.500		ug/L			06/16/22 16:15	1
4-Methyl-2-pentanone	ND		5.00		ug/L			06/16/22 16:15	1
Acetone	ND		10.0		ug/L			06/16/22 16:15	1
Acrylonitrile	ND		10.0		ug/L			06/16/22 16:15	1
Benzene	ND		0.500		ug/L			06/16/22 16:15	1
Bromobenzene	ND		0.500		ug/L			06/16/22 16:15	1
Bromochloromethane	ND		0.500		ug/L			06/16/22 16:15	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 16:15	1
Bromoform	ND		0.500		ug/L			06/16/22 16:15	1
Bromomethane	ND		0.500		ug/L			06/16/22 16:15	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 16:15	1
Carbon tetrachloride	ND		0.500		ug/L			06/16/22 16:15	1
Chlorobenzene	ND		0.500		ug/L			06/16/22 16:15	1
Chloroethane	ND		0.500		ug/L			06/16/22 16:15	1
Chloroform	ND		0.500		ug/L			06/16/22 16:15	1
Chloromethane	ND		0.500		ug/L			06/16/22 16:15	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 16:15	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 16:15	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 16:15	1
Dibromomethane	ND		0.500		ug/L			06/16/22 16:15	1
Dichlorodifluoromethane	ND		0.500		ug/L			06/16/22 16:15	1
di-Isopropyl ether	ND		0.500		ug/L			06/16/22 16:15	1
Ethyl ether	ND		0.500		ug/L			06/16/22 16:15	1
Ethyl t-butyl ether	ND		0.500		ug/L			06/16/22 16:15	1
Ethylbenzene	ND		0.500		ug/L			06/16/22 16:15	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-MID
Date Collected: 06/07/22 14:34
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-4
Matrix: Drinking Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			06/16/22 16:15	1
Hexachlorobutadiene	ND		0.500		ug/L			06/16/22 16:15	1
Isopropylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
m&p-Xylene	ND		1.00		ug/L			06/16/22 16:15	1
Methyl tertiary butyl ether	ND		0.500		ug/L			06/16/22 16:15	1
Methylene Chloride	ND		0.500		ug/L			06/16/22 16:15	1
Naphthalene	ND		0.500		ug/L			06/16/22 16:15	1
n-Butylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
N-Propylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
o-Xylene	ND		0.500		ug/L			06/16/22 16:15	1
p-Isopropyltoluene	ND		0.500		ug/L			06/16/22 16:15	1
sec-Butylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
Styrene	ND		0.500		ug/L			06/16/22 16:15	1
t-Amyl methyl ether	ND		0.500		ug/L			06/16/22 16:15	1
t-Butyl alcohol	ND		25.0		ug/L			06/16/22 16:15	1
tert-Butylbenzene	ND		0.500		ug/L			06/16/22 16:15	1
Tetrachloroethene	ND		0.500		ug/L			06/16/22 16:15	1
Tetrahydrofuran	ND		7.00		ug/L			06/16/22 16:15	1
Toluene	ND		0.500		ug/L			06/16/22 16:15	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 16:15	1
Trichloroethene	ND		0.500		ug/L			06/16/22 16:15	1
Trichlorofluoromethane	ND		0.500		ug/L			06/16/22 16:15	1
Vinyl chloride	ND		0.500		ug/L			06/16/22 16:15	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*94*		*80 - 120*		*06/16/22 16:15*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*06/16/22 16:15*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluoroheptanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorooctanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorononanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorodecanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorotridecanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorotetradecanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorobutanesulfonic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorohexanesulfonic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorooctanesulfonic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
NEtFOSAA	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
NMeFOSAA	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluoroundecanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1
Perfluorododecanoic acid	ND		1.60		ng/L		06/17/22 10:29	06/21/22 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*109*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:49*	*1*
13C2 PFHxA	*106*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:49*	*1*
13C3 HFPO-DA	*111*		*70 - 130*	*06/17/22 10:29*	*06/21/22 14:49*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-MID
Lab Sample ID: 620-5103-4
Date Collected: 06/07/22 14:34
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130	06/17/22 10:29	06/21/22 14:49	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-INF
Lab Sample ID: 620-5103-5
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 16:37	1
1,1,1-Trichloroethane	ND		0.500		ug/L			06/16/22 16:37	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 16:37	1
1,1,2-Trichloroethane	ND		0.500		ug/L			06/16/22 16:37	1
1,1-Dichloroethane	ND		0.500		ug/L			06/16/22 16:37	1
1,1-Dichloroethene	ND		0.500		ug/L			06/16/22 16:37	1
1,1-Dichloropropene	ND		0.500		ug/L			06/16/22 16:37	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			06/16/22 16:37	1
1,2,3-Trichloropropane	ND		0.500		ug/L			06/16/22 16:37	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			06/16/22 16:37	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			06/16/22 16:37	1
1,2-Dibromoethane	ND		0.500		ug/L			06/16/22 16:37	1
1,2-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:37	1
1,2-Dichloroethane	ND		0.500		ug/L			06/16/22 16:37	1
1,2-Dichloropropane	ND		0.500		ug/L			06/16/22 16:37	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
1,3-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:37	1
1,3-Dichloropropane	ND		0.500		ug/L			06/16/22 16:37	1
1,4-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:37	1
2,2-Dichloropropane	ND		0.500		ug/L			06/16/22 16:37	1
2-Butanone	ND		5.00		ug/L			06/16/22 16:37	1
2-Chlorotoluene	ND		0.500		ug/L			06/16/22 16:37	1
2-Hexanone	ND		5.00		ug/L			06/16/22 16:37	1
4-Chlorotoluene	ND		0.500		ug/L			06/16/22 16:37	1
4-Methyl-2-pentanone	ND		5.00		ug/L			06/16/22 16:37	1
Acetone	ND		10.0		ug/L			06/16/22 16:37	1
Acrylonitrile	ND		10.0		ug/L			06/16/22 16:37	1
Benzene	ND		0.500		ug/L			06/16/22 16:37	1
Bromobenzene	ND		0.500		ug/L			06/16/22 16:37	1
Bromochloromethane	ND		0.500		ug/L			06/16/22 16:37	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 16:37	1
Bromoform	ND		0.500		ug/L			06/16/22 16:37	1
Bromomethane	ND		0.500		ug/L			06/16/22 16:37	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 16:37	1
Carbon tetrachloride	ND		0.500		ug/L			06/16/22 16:37	1
Chlorobenzene	ND		0.500		ug/L			06/16/22 16:37	1
Chloroethane	ND		0.500		ug/L			06/16/22 16:37	1
Chloroform	ND		0.500		ug/L			06/16/22 16:37	1
Chloromethane	ND		0.500		ug/L			06/16/22 16:37	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 16:37	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 16:37	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 16:37	1
Dibromomethane	ND		0.500		ug/L			06/16/22 16:37	1
Dichlorodifluoromethane	**2.84**		0.500		ug/L			06/16/22 16:37	1
di-Isopropyl ether	ND		0.500		ug/L			06/16/22 16:37	1
Ethyl ether	**8.23**		0.500		ug/L			06/16/22 16:37	1
Ethyl t-butyl ether	ND		0.500		ug/L			06/16/22 16:37	1
Ethylbenzene	ND		0.500		ug/L			06/16/22 16:37	1

Client Sample ID: 907 Bleecher-INF
Lab Sample ID: 620-5103-5
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			06/16/22 16:37	1
Hexachlorobutadiene	ND		0.500		ug/L			06/16/22 16:37	1
Isopropylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
m&p-Xylene	ND		1.00		ug/L			06/16/22 16:37	1
Methyl tertiary butyl ether	**0.847**		0.500		ug/L			06/16/22 16:37	1
Methylene Chloride	ND		0.500		ug/L			06/16/22 16:37	1
Naphthalene	ND		0.500		ug/L			06/16/22 16:37	1
n-Butylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
N-Propylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
o-Xylene	ND		0.500		ug/L			06/16/22 16:37	1
p-Isopropyltoluene	ND		0.500		ug/L			06/16/22 16:37	1
sec-Butylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
Styrene	ND		0.500		ug/L			06/16/22 16:37	1
t-Amyl methyl ether	ND		0.500		ug/L			06/16/22 16:37	1
t-Butyl alcohol	ND		25.0		ug/L			06/16/22 16:37	1
tert-Butylbenzene	ND		0.500		ug/L			06/16/22 16:37	1
Tetrachloroethene	ND		0.500		ug/L			06/16/22 16:37	1
Tetrahydrofuran	**18.8**		7.00		ug/L			06/16/22 16:37	1
Toluene	ND		0.500		ug/L			06/16/22 16:37	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 16:37	1
Trichloroethene	ND		0.500		ug/L			06/16/22 16:37	1
Trichlorofluoromethane	ND		0.500		ug/L			06/16/22 16:37	1
Vinyl chloride	ND		0.500		ug/L			06/16/22 16:37	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*93*		*80 - 120*		*06/16/22 16:37*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*06/16/22 16:37*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**16.1**		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluoroheptanoic acid	**9.89**		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorooctanoic acid	**29.2**		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorononanoic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorodecanoic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorotridecanoic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorotetradecanoic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorobutanesulfonic acid	**2.40**		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorohexanesulfonic acid	**6.66**		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorooctanesulfonic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
NEtFOSAA	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
NMeFOSAA	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluoroundecanoic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1
Perfluorododecanoic acid	ND		1.62		ng/L		06/17/22 10:29	06/21/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*98*		*70 - 130*	*06/17/22 10:29*	*06/21/22 15:01*	*1*
13C2 PFHxA	*108*		*70 - 130*	*06/17/22 10:29*	*06/21/22 15:01*	*1*
13C3 HFPO-DA	*114*		*70 - 130*	*06/17/22 10:29*	*06/21/22 15:01*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-INF
Lab Sample ID: 620-5103-5
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	93		70 - 130	06/17/22 10:29	06/21/22 15:01	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-4S

Date Collected: 06/07/22 15:45
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 21:04	1
Acetone	ND		10.0		ug/L			06/17/22 21:04	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 21:04	1
Benzene	**2.30**		1.00		ug/L			06/17/22 21:04	1
Bromobenzene	ND		1.00		ug/L			06/17/22 21:04	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 21:04	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 21:04	1
Bromoform	ND		1.00		ug/L			06/17/22 21:04	1
Bromomethane	ND		2.00		ug/L			06/17/22 21:04	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 21:04	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 21:04	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 21:04	1
Chlorobenzene	**2.46**		1.00		ug/L			06/17/22 21:04	1
Chloroethane	ND		2.00		ug/L			06/17/22 21:04	1
Chloroform	ND		1.00		ug/L			06/17/22 21:04	1
Chloromethane	ND		2.00		ug/L			06/17/22 21:04	1
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:04	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:04	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 21:04	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 21:04	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 21:04	1
Dibromomethane	ND		1.00		ug/L			06/17/22 21:04	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:04	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:04	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:04	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/17/22 21:04	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 21:04	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 21:04	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 21:04	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:04	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:04	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:04	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 21:04	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:04	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 21:04	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:04	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:04	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 21:04	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 21:04	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 21:04	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:04	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 21:04	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 21:04	1
Naphthalene	ND		2.00		ug/L			06/17/22 21:04	1

Client Sample ID: MW-4S
Lab Sample ID: 620-5103-6
Date Collected: 06/07/22 15:45
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
Styrene	ND		1.00		ug/L			06/17/22 21:04	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 21:04	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 21:04	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 21:04	1
Toluene	ND		1.00		ug/L			06/17/22 21:04	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:04	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:04	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:04	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 21:04	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 21:04	1
Trichloroethene	ND		1.00		ug/L			06/17/22 21:04	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 21:04	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 21:04	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:04	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 21:04	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 21:04	1
o-Xylene	ND		1.00		ug/L			06/17/22 21:04	1
Tetrahydrofuran	ND		2.00		ug/L			06/17/22 21:04	1
Ethyl ether	**7.11**		1.00		ug/L			06/17/22 21:04	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 21:04	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:04	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 21:04	1
tert-Butanol	ND		10.0		ug/L			06/17/22 21:04	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 21:04	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 21:04	1
Ethanol	ND		200		ug/L			06/17/22 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*06/17/22 21:04*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/17/22 21:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*06/17/22 21:04*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*06/17/22 21:04*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.70**		2.00		mg/L			06/29/22 21:58	5

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.48		ng/L		06/17/22 15:17	06/23/22 07:02	1
NMeFOSAA	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorobutanesulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorobutanoic acid	**8.95**		4.13		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorodecanesulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorodecanoic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorododecanoic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluoroheptanesulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluoroheptanoic acid	**8.75**		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1

Client Sample ID: MW-4S
Date Collected: 06/07/22 15:45
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-6
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid	**3.31**		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorohexanoic acid	**11.6**		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorononanesulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorononanoic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorooctanesulfonamide	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorooctanesulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorooctanoic acid	**24.2**		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluoropentanesulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluoropentanoic acid	**5.81**		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorotetradecanoic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluorotridecanoic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
Perfluoroundecanoic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1
6:2 Fluorotelomer sulfonic acid	ND		4.13		ng/L		06/17/22 15:17	06/23/22 07:02	1
8:2 Fluorotelomer sulfonic acid	ND		2.48		ng/L		06/17/22 15:17	06/23/22 07:02	1
4:2 Fluorotelomer sulfonic acid	ND		1.65		ng/L		06/17/22 15:17	06/23/22 07:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*493*	**5+*	*10 - 200*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
M2-6:2 FTS	*379*	**5+*	*17 - 200*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
M2-8:2 FTS	*224*	**5+*	*33 - 200*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C2 PFTeDA	*28*		*10 - 179*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C3 HFPO-DA	*76*		*17 - 185*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C3 PFBS	*178*		*16 - 200*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C4 PFBA	*96*		*42 - 165*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C4 PFHpA	*107*		*31 - 182*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C5 PFPeA	*127*		*38 - 187*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C8 PFOA	*98*		*48 - 162*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C8 PFOS	*81*		*51 - 159*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
d3-NMeFOSAA	*97*		*31 - 174*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
d5-NEtFOSAA	*90*		*29 - 195*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
d9-N-EtFOSE-M	*14*		*10 - 177*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C3 PFHxS	*141*		*28 - 188*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C5 PFHxA	*103*		*24 - 179*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C6 PFDA	*87*		*49 - 163*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C7 PFUnA	*84*		*34 - 174*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
d3-NMePFOSA	*3*	**5-*	*10 - 155*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
d5-NEtPFOSA	*2*	**5-*	*10 - 159*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C8 FOSA	*58*		*10 - 168*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C2-PFDoDA	*68*		*17 - 176*	*06/17/22 15:17*	*06/23/22 07:02*	*1*
13C9 PFNA	*69*		*51 - 167*	*06/17/22 15:17*	*06/23/22 07:02*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.201**		0.00400		mg/L		06/14/22 14:16	06/15/22 17:58	1
Cadmium	ND		0.00250		mg/L		06/14/22 14:16	06/15/22 17:58	1
Chromium	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 17:58	1
Copper	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 17:58	1
Iron	**13.0**		0.0500		mg/L		06/14/22 14:16	06/15/22 17:58	1
Lead	ND		0.00750		mg/L		06/14/22 14:16	06/15/22 17:58	1
Manganese	**0.201**		0.00500		mg/L		06/14/22 14:16	06/15/22 17:58	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-4S
Date Collected: 06/07/22 15:45
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-6
Matrix: Water

Method: 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0406		0.00500		mg/L		06/14/22 14:16	06/15/22 17:58	1
Sodium	18.5		0.750		mg/L		06/14/22 14:16	06/15/22 17:58	1
Zinc	ND		0.0250		mg/L		06/14/22 14:16	06/15/22 17:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 15:09	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/17/22 03:15	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-4D
Date Collected: 06/07/22 17:25
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 21:31	1
Acetone	ND		10.0		ug/L			06/17/22 21:31	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 21:31	1
Benzene	ND		1.00		ug/L			06/17/22 21:31	1
Bromobenzene	ND		1.00		ug/L			06/17/22 21:31	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 21:31	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 21:31	1
Bromoform	ND		1.00		ug/L			06/17/22 21:31	1
Bromomethane	ND		2.00		ug/L			06/17/22 21:31	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 21:31	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 21:31	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 21:31	1
Chlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
Chloroethane	ND		2.00		ug/L			06/17/22 21:31	1
Chloroform	ND		1.00		ug/L			06/17/22 21:31	1
Chloromethane	ND		2.00		ug/L			06/17/22 21:31	1
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:31	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:31	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 21:31	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 21:31	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 21:31	1
Dibromomethane	ND		1.00		ug/L			06/17/22 21:31	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
Dichlorodifluoromethane (Freon 12)	**3.11**		2.00		ug/L			06/17/22 21:31	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 21:31	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 21:31	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 21:31	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:31	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:31	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:31	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 21:31	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:31	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 21:31	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:31	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:31	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 21:31	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 21:31	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 21:31	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:31	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 21:31	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 21:31	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-4D
Lab Sample ID: 620-5103-7
Date Collected: 06/07/22 17:25
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			06/17/22 21:31	1
N-Propylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
Styrene	ND		1.00		ug/L			06/17/22 21:31	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 21:31	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 21:31	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 21:31	1
Toluene	ND		1.00		ug/L			06/17/22 21:31	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:31	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 21:31	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 21:31	1
Trichloroethene	ND		1.00		ug/L			06/17/22 21:31	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 21:31	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 21:31	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:31	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 21:31	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 21:31	1
o-Xylene	ND		1.00		ug/L			06/17/22 21:31	1
Tetrahydrofuran	ND		2.00		ug/L			06/17/22 21:31	1
Ethyl ether	ND		1.00		ug/L			06/17/22 21:31	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 21:31	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:31	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 21:31	1
tert-Butanol	ND		10.0		ug/L			06/17/22 21:31	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 21:31	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 21:31	1
Ethanol	ND		200		ug/L			06/17/22 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*06/17/22 21:31*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/17/22 21:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*06/17/22 21:31*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*06/17/22 21:31*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.11**		2.00		mg/L			06/29/22 22:06	5

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.75		ng/L		06/17/22 15:17	06/23/22 07:13	1
NMeFOSAA	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorobutanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorobutanoic acid	ND		4.59		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorodecanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorodecanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorododecanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluoroheptanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-4D
Date Collected: 06/07/22 17:25
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-7
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorohexanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorohexanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorononanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorononanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorooctanesulfonamide	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorooctanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorooctanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluoropentanesulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluoropentanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorotetradecanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluorotridecanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
Perfluoroundecanoic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1
6:2 Fluorotelomer sulfonic acid	ND		4.59		ng/L		06/17/22 15:17	06/23/22 07:13	1
8:2 Fluorotelomer sulfonic acid	ND		2.75		ng/L		06/17/22 15:17	06/23/22 07:13	1
4:2 Fluorotelomer sulfonic acid	ND		1.84		ng/L		06/17/22 15:17	06/23/22 07:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*457*	*5+	*10 - 200*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
M2-6:2 FTS	*239*	*5+	*17 - 200*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
M2-8:2 FTS	*140*		*33 - 200*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C2 PFTeDA	*61*		*10 - 179*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C3 HFPO-DA	*89*		*17 - 185*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C3 PFBS	*93*		*16 - 200*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C4 PFBA	*97*		*42 - 165*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C4 PFHpA	*110*		*31 - 182*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C5 PFPeA	*111*		*38 - 187*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C8 PFOA	*106*		*48 - 162*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C8 PFOS	*91*		*51 - 159*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
d3-NMeFOSAA	*97*		*31 - 174*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
d5-NEtFOSAA	*96*		*29 - 195*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
d9-N-EtFOSE-M	*51*		*10 - 177*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C3 PFHxS	*98*		*28 - 188*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C5 PFHxA	*115*		*24 - 179*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C6 PFDA	*88*		*49 - 163*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C7 PFUnA	*87*		*34 - 174*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
d3-NMePFOSA	*32*		*10 - 155*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
d5-NEtPFOSA	*29*		*10 - 159*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C8 FOSA	*77*		*10 - 168*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C2-PFDoDA	*79*		*17 - 176*	*06/17/22 15:17*	*06/23/22 07:13*	*1*
13C9 PFNA	*102*		*51 - 167*	*06/17/22 15:17*	*06/23/22 07:13*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00400		mg/L		06/14/22 14:16	06/15/22 18:20	1
Cadmium	ND		0.00250		mg/L		06/14/22 14:16	06/15/22 18:20	1
Chromium	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:20	1
Copper	**0.00560**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:20	1
Iron	**3.80**		0.0500		mg/L		06/14/22 14:16	06/15/22 18:20	1
Lead	ND		0.00750		mg/L		06/14/22 14:16	06/15/22 18:20	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-4D
Date Collected: 06/07/22 17:25
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-7
Matrix: Water

Method: 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.187**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:20	1
Nickel	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:20	1
Sodium	**9.33**		0.750		mg/L		06/14/22 14:16	06/15/22 18:20	1
Zinc	ND		0.0250		mg/L		06/14/22 14:16	06/15/22 18:20	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 15:10	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		188		mg/L			06/17/22 03:15	2.5

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-4D-FD
Date Collected: 06/07/22 17:25
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 21:57	1
Acetone	ND		10.0		ug/L			06/17/22 21:57	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 21:57	1
Benzene	ND		1.00		ug/L			06/17/22 21:57	1
Bromobenzene	ND		1.00		ug/L			06/17/22 21:57	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 21:57	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 21:57	1
Bromoform	ND		1.00		ug/L			06/17/22 21:57	1
Bromomethane	ND		2.00		ug/L			06/17/22 21:57	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 21:57	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 21:57	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 21:57	1
Chlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
Chloroethane	ND		2.00		ug/L			06/17/22 21:57	1
Chloroform	ND		1.00		ug/L			06/17/22 21:57	1
Chloromethane	ND		2.00		ug/L			06/17/22 21:57	1
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:57	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:57	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 21:57	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 21:57	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 21:57	1
Dibromomethane	ND		1.00		ug/L			06/17/22 21:57	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
Dichlorodifluoromethane (Freon 12)	**3.05**		2.00		ug/L			06/17/22 21:57	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 21:57	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 21:57	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 21:57	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:57	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:57	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:57	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 21:57	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:57	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 21:57	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:57	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:57	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 21:57	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 21:57	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 21:57	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:57	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 21:57	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 21:57	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-4D-FD
Lab Sample ID: 620-5103-8
Date Collected: 06/07/22 17:25
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			06/17/22 21:57	1
N-Propylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
Styrene	ND		1.00		ug/L			06/17/22 21:57	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 21:57	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 21:57	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 21:57	1
Toluene	ND		1.00		ug/L			06/17/22 21:57	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:57	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 21:57	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 21:57	1
Trichloroethene	ND		1.00		ug/L			06/17/22 21:57	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 21:57	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 21:57	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:57	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 21:57	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 21:57	1
o-Xylene	ND		1.00		ug/L			06/17/22 21:57	1
Tetrahydrofuran	ND		2.00		ug/L			06/17/22 21:57	1
Ethyl ether	ND		1.00		ug/L			06/17/22 21:57	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 21:57	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:57	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 21:57	1
tert-Butanol	ND		10.0		ug/L			06/17/22 21:57	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 21:57	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 21:57	1
Ethanol	ND		200		ug/L			06/17/22 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*06/17/22 21:57*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/17/22 21:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*06/17/22 21:57*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*06/17/22 21:57*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.77		ng/L		06/17/22 15:17	06/23/22 07:24	1
NMeFOSAA	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorobutanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorobutanoic acid	ND		4.62		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorodecanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorodecanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorododecanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluoroheptanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluoroheptanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorohexanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorohexanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorononanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-4D-FD

Date Collected: 06/07/22 17:25
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-8

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorooctanesulfonamide	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorooctanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorooctanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluoropentanesulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluoropentanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorotetradecanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluorotridecanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
Perfluoroundecanoic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1
6:2 Fluorotelomer sulfonic acid	ND		4.62		ng/L		06/17/22 15:17	06/23/22 07:24	1
8:2 Fluorotelomer sulfonic acid	ND		2.77		ng/L		06/17/22 15:17	06/23/22 07:24	1
4:2 Fluorotelomer sulfonic acid	ND		1.85		ng/L		06/17/22 15:17	06/23/22 07:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*449*	**5+*	*10 - 200*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
M2-6:2 FTS	*223*	**5+*	*17 - 200*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
M2-8:2 FTS	*120*		*33 - 200*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C2 PFTeDA	*63*		*10 - 179*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C3 HFPO-DA	*80*		*17 - 185*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C3 PFBS	*86*		*16 - 200*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C4 PFBA	*93*		*42 - 165*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C4 PFHpA	*109*		*31 - 182*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C5 PFPeA	*101*		*38 - 187*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C8 PFOA	*95*		*48 - 162*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C8 PFOS	*91*		*51 - 159*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
d3-NMeFOSAA	*91*		*31 - 174*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
d5-NEtFOSAA	*94*		*29 - 195*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
d9-N-EtFOSE-M	*48*		*10 - 177*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C3 PFHxS	*92*		*28 - 188*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C5 PFHxA	*106*		*24 - 179*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C6 PFDA	*89*		*49 - 163*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C7 PFUnA	*82*		*34 - 174*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
d3-NMePFOSA	*21*		*10 - 155*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
d5-NEtPFOSA	*20*		*10 - 159*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C8 FOSA	*67*		*10 - 168*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C2-PFDoDA	*78*		*17 - 176*	*06/17/22 15:17*	*06/23/22 07:24*	*1*
13C9 PFNA	*100*		*51 - 167*	*06/17/22 15:17*	*06/23/22 07:24*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00400**		0.00400		mg/L		06/14/22 14:16	06/15/22 18:27	1
Cadmium	ND		0.00250		mg/L		06/14/22 14:16	06/15/22 18:27	1
Chromium	**0.00775**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:27	1
Copper	**0.00820**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:27	1
Iron	**7.12**		0.0500		mg/L		06/14/22 14:16	06/15/22 18:27	1
Lead	ND		0.00750		mg/L		06/14/22 14:16	06/15/22 18:27	1
Manganese	**0.227**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:27	1
Nickel	**0.00720**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:27	1
Zinc	ND		0.0250		mg/L		06/14/22 14:16	06/15/22 18:27	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-4D-FD
Date Collected: 06/07/22 17:25
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-8
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 15:12	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	241		188		mg/L			06/17/22 03:15	2.5

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: MW-3D

Date Collected: 06/09/22 16:20
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 22:24	1
Acetone	ND		10.0		ug/L			06/17/22 22:24	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 22:24	1
Benzene	**1.08**		1.00		ug/L			06/17/22 22:24	1
Bromobenzene	ND		1.00		ug/L			06/17/22 22:24	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 22:24	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 22:24	1
Bromoform	ND		1.00		ug/L			06/17/22 22:24	1
Bromomethane	ND		2.00		ug/L			06/17/22 22:24	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 22:24	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 22:24	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 22:24	1
Chlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
Chloroethane	ND		2.00		ug/L			06/17/22 22:24	1
Chloroform	ND		1.00		ug/L			06/17/22 22:24	1
Chloromethane	ND		2.00		ug/L			06/17/22 22:24	1
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 22:24	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 22:24	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 22:24	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 22:24	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 22:24	1
Dibromomethane	ND		1.00		ug/L			06/17/22 22:24	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/17/22 22:24	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 22:24	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 22:24	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 22:24	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 22:24	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 22:24	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 22:24	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 22:24	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 22:24	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 22:24	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 22:24	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 22:24	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 22:24	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 22:24	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 22:24	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 22:24	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 22:24	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 22:24	1
Naphthalene	ND		2.00		ug/L			06/17/22 22:24	1

Client Sample ID: MW-3D
Date Collected: 06/09/22 16:20
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
Styrene	ND		1.00		ug/L			06/17/22 22:24	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 22:24	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 22:24	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 22:24	1
Toluene	ND		1.00		ug/L			06/17/22 22:24	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 22:24	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 22:24	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 22:24	1
Trichloroethene	ND		1.00		ug/L			06/17/22 22:24	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 22:24	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 22:24	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 22:24	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 22:24	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 22:24	1
o-Xylene	ND		1.00		ug/L			06/17/22 22:24	1
Tetrahydrofuran	**19.8**		2.00		ug/L			06/17/22 22:24	1
Ethyl ether	**10.0**		1.00		ug/L			06/17/22 22:24	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 22:24	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 22:24	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 22:24	1
tert-Butanol	ND		10.0		ug/L			06/17/22 22:24	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 22:24	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 22:24	1
Ethanol	ND		200		ug/L			06/17/22 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*06/17/22 22:24*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*06/17/22 22:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*06/17/22 22:24*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*06/17/22 22:24*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.6**		20.0		mg/L			06/29/22 21:33	50

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.74		ng/L		06/20/22 08:46	06/23/22 19:18	1
NMeFOSAA	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorobutanesulfonic acid	**5.00**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorobutanoic acid	**27.4**		4.57		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorodecanesulfonic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorodecanoic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorododecanoic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluoroheptanesulfonic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluoroheptanoic acid	**42.1**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-3D
Date Collected: 06/09/22 16:20
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-9
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid	**25.8**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorohexanoic acid	**58.6**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorononanesulfonic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorononanoic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorooctanesulfonamide	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorooctanesulfonic acid	**4.78**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorooctanoic acid	**119**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluoropentanesulfonic acid	**4.50**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluoropentanoic acid	**28.5**		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorotetradecanoic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluorotridecanoic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
Perfluoroundecanoic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1
6:2 Fluorotelomer sulfonic acid	**24.5**		4.57		ng/L		06/20/22 08:46	06/23/22 19:18	1
8:2 Fluorotelomer sulfonic acid	ND		2.74		ng/L		06/20/22 08:46	06/23/22 19:18	1
4:2 Fluorotelomer sulfonic acid	ND		1.83		ng/L		06/20/22 08:46	06/23/22 19:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*384*	*5+	*10 - 200*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
M2-6:2 FTS	*311*	*5+	*17 - 200*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
M2-8:2 FTS	*174*		*33 - 200*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C2 PFTeDA	*77*		*10 - 179*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C3 HFPO-DA	*84*		*17 - 185*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C3 PFBS	*180*		*16 - 200*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C4 PFBA	*83*		*42 - 165*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C4 PFHpA	*101*		*31 - 182*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C5 PFPeA	*114*		*38 - 187*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C8 PFOA	*83*		*48 - 162*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C8 PFOS	*88*		*51 - 159*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
d3-NMeFOSAA	*88*		*31 - 174*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
d5-NEtFOSAA	*85*		*29 - 195*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
d9-N-EtFOSE-M	*7*	*5-	*10 - 177*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C3 PFHxS	*125*		*28 - 188*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C5 PFHxA	*90*		*24 - 179*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C6 PFDA	*92*		*49 - 163*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C7 PFUnA	*82*		*34 - 174*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
d3-NMePFOSA	*2*	*5-	*10 - 155*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
d5-NEtPFOSA	*2*	*5-	*10 - 159*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C8 FOSA	*40*		*10 - 168*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C2-PFDoDA	*84*		*17 - 176*	*06/20/22 08:46*	*06/23/22 19:18*	*1*
13C9 PFNA	*89*		*51 - 167*	*06/20/22 08:46*	*06/23/22 19:18*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0140**		0.00400		mg/L		06/14/22 14:16	06/15/22 18:34	1
Cadmium	ND		0.00250		mg/L		06/14/22 14:16	06/15/22 18:34	1
Chromium	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:34	1
Copper	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:34	1
Iron	**4.03**		0.0500		mg/L		06/14/22 14:16	06/15/22 18:34	1
Lead	ND		0.00750		mg/L		06/14/22 14:16	06/15/22 18:34	1
Manganese	**2.34**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:34	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-3D
Lab Sample ID: 620-5103-9
Date Collected: 06/09/22 16:20
Matrix: Water
Date Received: 06/14/22 10:20

Method: 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0380**		0.00500		mg/L		06/14/22 14:16	06/15/22 18:34	1
Sodium	**75.4**		0.750		mg/L		06/14/22 14:16	06/15/22 18:34	1
Zinc	ND		0.0250		mg/L		06/14/22 14:16	06/15/22 18:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/17/22 03:15	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: EB-060922
Lab Sample ID: 620-5103-10
Date Collected: 06/09/22 17:30
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/18/22 00:03	1
Acetone	ND		10.0		ug/L			06/18/22 00:03	1
Acrylonitrile	ND		0.500		ug/L			06/18/22 00:03	1
Benzene	ND		1.00		ug/L			06/18/22 00:03	1
Bromobenzene	ND		1.00		ug/L			06/18/22 00:03	1
Bromochloromethane	ND		1.00		ug/L			06/18/22 00:03	1
Bromodichloromethane	ND		0.500		ug/L			06/18/22 00:03	1
Bromoform	ND	*-	1.00		ug/L			06/18/22 00:03	1
Bromomethane	ND	*+	2.00		ug/L			06/18/22 00:03	1
2-Butanone (MEK)	ND		2.00		ug/L			06/18/22 00:03	1
n-Butylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
sec-Butylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
tert-Butylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
Carbon disulfide	ND		2.00		ug/L			06/18/22 00:03	1
Carbon tetrachloride	ND		1.00		ug/L			06/18/22 00:03	1
Chlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
Chloroethane	ND		2.00		ug/L			06/18/22 00:03	1
Chloroform	ND		1.00		ug/L			06/18/22 00:03	1
Chloromethane	ND		2.00		ug/L			06/18/22 00:03	1
2-Chlorotoluene	ND		1.00		ug/L			06/18/22 00:03	1
4-Chlorotoluene	ND		1.00		ug/L			06/18/22 00:03	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/18/22 00:03	1
Dibromochloromethane	ND		0.500		ug/L			06/18/22 00:03	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/18/22 00:03	1
Dibromomethane	ND		1.00		ug/L			06/18/22 00:03	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/18/22 00:03	1
1,1-Dichloroethane	ND		1.00		ug/L			06/18/22 00:03	1
1,2-Dichloroethane	ND		1.00		ug/L			06/18/22 00:03	1
1,1-Dichloroethene	ND		1.00		ug/L			06/18/22 00:03	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/18/22 00:03	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/18/22 00:03	1
1,2-Dichloropropane	ND		1.00		ug/L			06/18/22 00:03	1
1,3-Dichloropropane	ND		1.00		ug/L			06/18/22 00:03	1
2,2-Dichloropropane	ND		1.00		ug/L			06/18/22 00:03	1
1,1-Dichloropropene	ND		1.00		ug/L			06/18/22 00:03	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/18/22 00:03	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/18/22 00:03	1
Ethylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
Hexachlorobutadiene	ND		1.00		ug/L			06/18/22 00:03	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/18/22 00:03	1
Isopropylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
4-Isopropyltoluene	ND		1.00		ug/L			06/18/22 00:03	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/18/22 00:03	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/18/22 00:03	1
Methylene Chloride	ND		2.00		ug/L			06/18/22 00:03	1
Naphthalene	ND		2.00		ug/L			06/18/22 00:03	1

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Client Sample ID: EB-060922
Date Collected: 06/09/22 17:30
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
Styrene	ND		1.00		ug/L			06/18/22 00:03	1
1,1,1,2-Tetrachloroethane	ND	*-	1.00		ug/L			06/18/22 00:03	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/18/22 00:03	1
Tetrachloroethene	ND		1.00		ug/L			06/18/22 00:03	1
Toluene	ND		1.00		ug/L			06/18/22 00:03	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/18/22 00:03	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/18/22 00:03	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/18/22 00:03	1
Trichloroethene	ND		1.00		ug/L			06/18/22 00:03	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/18/22 00:03	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/18/22 00:03	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/18/22 00:03	1
Vinyl chloride	ND	*+	1.00		ug/L			06/18/22 00:03	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/18/22 00:03	1
o-Xylene	ND		1.00		ug/L			06/18/22 00:03	1
Tetrahydrofuran	ND		2.00		ug/L			06/18/22 00:03	1
Ethyl ether	ND		1.00		ug/L			06/18/22 00:03	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/18/22 00:03	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/18/22 00:03	1
di-Isopropyl ether	ND		1.00		ug/L			06/18/22 00:03	1
tert-Butanol	ND		10.0		ug/L			06/18/22 00:03	1
1,4-Dioxane	ND		50.0		ug/L			06/18/22 00:03	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/18/22 00:03	1
Ethanol	ND		200		ug/L			06/18/22 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*06/18/22 00:03*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/18/22 00:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*06/18/22 00:03*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*06/18/22 00:03*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		3.08		ng/L		06/23/22 08:08	06/25/22 12:09	1
NMeFOSAA	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorobutanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorobutanoic acid	ND		5.13		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorodecanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorodecanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorododecanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluoroheptanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluoroheptanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorohexanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorohexanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorononanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorononanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1

Client Sample ID: EB-060922
Date Collected: 06/09/22 17:30
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-10
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorooctanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorooctanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluoropentanesulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluoropentanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorotetradecanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluorotridecanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
Perfluoroundecanoic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1
6:2 Fluorotelomer sulfonic acid	ND		5.13		ng/L		06/23/22 08:08	06/25/22 12:09	1
8:2 Fluorotelomer sulfonic acid	ND		3.08		ng/L		06/23/22 08:08	06/25/22 12:09	1
4:2 Fluorotelomer sulfonic acid	ND		2.05		ng/L		06/23/22 08:08	06/25/22 12:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*97*		*10 - 200*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
M2-6:2 FTS	*95*		*17 - 200*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
M2-8:2 FTS	*91*		*33 - 200*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C2 PFTeDA	*93*		*10 - 179*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C3 HFPO-DA	*85*		*17 - 185*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C3 PFBS	*108*		*16 - 200*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C4 PFBA	*96*		*42 - 165*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C4 PFHpA	*99*		*31 - 182*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C5 PFPeA	*106*		*38 - 187*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C8 PFOA	*98*		*48 - 162*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C8 PFOS	*106*		*51 - 159*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
d3-NMeFOSAA	*89*		*31 - 174*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
d5-NEtFOSAA	*97*		*29 - 195*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
d9-N-EtFOSE-M	*61*		*10 - 177*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C3 PFHxS	*108*		*28 - 188*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C5 PFHxA	*96*		*24 - 179*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C6 PFDA	*97*		*49 - 163*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C7 PFUnA	*102*		*34 - 174*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
d3-NMePFOSA	*21*		*10 - 155*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
d5-NEtPFOSA	*21*		*10 - 159*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C8 FOSA	*79*		*10 - 168*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C2-PFDoDA	*99*		*17 - 176*	*06/23/22 08:08*	*06/25/22 12:09*	*1*
13C9 PFNA	*109*		*51 - 167*	*06/23/22 08:08*	*06/25/22 12:09*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00400		mg/L		06/14/22 14:16	06/15/22 18:42	1
Cadmium	ND		0.00250		mg/L		06/14/22 14:16	06/15/22 18:42	1
Chromium	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:42	1
Copper	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:42	1
Iron	ND		0.0500		mg/L		06/14/22 14:16	06/15/22 18:42	1
Lead	ND		0.00750		mg/L		06/14/22 14:16	06/15/22 18:42	1
Manganese	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:42	1
Nickel	ND		0.00500		mg/L		06/14/22 14:16	06/15/22 18:42	1
Sodium	**3.61**		0.750		mg/L		06/14/22 14:16	06/15/22 18:42	1
Zinc	ND		0.0250		mg/L		06/14/22 14:16	06/15/22 18:42	1

Client Sample Results

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: EB-060922
Lab Sample ID: 620-5103-10
Date Collected: 06/09/22 17:30
Matrix: Water
Date Received: 06/14/22 10:20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/17/22 03:15	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: PW-060922
Lab Sample ID: 620-5103-11
Date Collected: 06/09/22 17:50
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
1,2-Dichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
1,3-Dichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
1,4-Dichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
1-Methylnaphthalene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,4,5-Trichlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,4,6-Trichlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,4-Dichlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,4-Dimethylphenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,4-Dinitrophenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,4-Dinitrotoluene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2,6-Dinitrotoluene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2-Chloronaphthalene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2-Chlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2-Methylnaphthalene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2-Methylphenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2-Nitroaniline	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
2-Nitrophenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
3 & 4 Methylphenol	ND		10.0		ug/L		06/16/22 13:28	06/20/22 15:02	1
3,3'-Dichlorobenzidine	ND	*+	5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
3-Nitroaniline	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4,6-Dinitro-2-methylphenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4-Bromophenyl phenyl ether	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4-Chloro-3-methylphenol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4-Chloroaniline	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4-Chlorophenyl phenyl ether	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4-Nitroaniline	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
4-Nitrophenol	ND		20.0		ug/L		06/16/22 13:28	06/20/22 15:02	1
Acenaphthene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Acenaphthylene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Aniline	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Anthracene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Azobenzene/Diphenyldiazene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzidine	ND	*- *1	10.0		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzo[a]anthracene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzo[a]pyrene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzo[b]fluoranthene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzo[g,h,i]perylene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzo[k]fluoranthene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzoic acid	ND	*-	10.0		ug/L		06/16/22 13:28	06/20/22 15:02	1
Benzyl alcohol	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Bis(2-chloroethoxy)methane	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Bis(2-chloroethyl)ether	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
bis (2-chloroisopropyl) ether	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Bis(2-ethylhexyl) phthalate	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Butyl benzyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Carbazole	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Chrysene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1

Client Sample ID: PW-060922
Lab Sample ID: 620-5103-11
Date Collected: 06/09/22 17:50
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Dibenzofuran	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Diethyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Dimethyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Di-n-butyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Di-n-octyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Fluoranthene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Fluorene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Hexachlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Hexachlorobutadiene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Hexachlorocyclopentadiene	ND	*1	5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Hexachloroethane	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Indeno[1,2,3-cd]pyrene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Isophorone	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Naphthalene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Nitrobenzene	ND	*1	5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
N-Nitrosodimethylamine	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
N-Nitrosodi-n-propylamine	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
N-Nitrosodiphenylamine	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Pentachloronitrobenzene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Pentachlorophenol	ND		20.0		ug/L		06/16/22 13:28	06/20/22 15:02	1
Phenanthrene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Phenol	ND	*-	5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Pyrene	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1
Pyridine	ND		5.00		ug/L		06/16/22 13:28	06/20/22 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*30 - 130*	*06/16/22 13:28*	*06/20/22 15:02*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*06/16/22 13:28*	*06/20/22 15:02*	*1*
Nitrobenzene-d5 (Surr)	*61*		*30 - 130*	*06/16/22 13:28*	*06/20/22 15:02*	*1*
Phenol-d5 (Surr)	*30*		*15 - 110*	*06/16/22 13:28*	*06/20/22 15:02*	*1*
2,4,6-Tribromophenol (Surr)	*74*		*15 - 110*	*06/16/22 13:28*	*06/20/22 15:02*	*1*
Terphenyl-d14 (Surr)	*68*		*30 - 130*	*06/16/22 13:28*	*06/20/22 15:02*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1221	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1232	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1242	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1248	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1254	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1260	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1262	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1
PCB-1268	ND		0.238		ug/L		06/16/22 13:46	06/16/22 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*30 - 150*	*06/16/22 13:46*	*06/16/22 19:14*	*1*
DCB Decachlorobiphenyl (Surr)	*61*		*30 - 150*	*06/16/22 13:46*	*06/16/22 19:14*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 56 Forest Edge
Date Collected: 06/09/22 18:30
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-12
Matrix: Drinking Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 16:59	1
1,1,1-Trichloroethane	ND		0.500		ug/L			06/16/22 16:59	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 16:59	1
1,1,2-Trichloroethane	ND		0.500		ug/L			06/16/22 16:59	1
1,1-Dichloroethane	ND		0.500		ug/L			06/16/22 16:59	1
1,1-Dichloroethene	ND		0.500		ug/L			06/16/22 16:59	1
1,1-Dichloropropene	ND		0.500		ug/L			06/16/22 16:59	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			06/16/22 16:59	1
1,2,3-Trichloropropane	ND		0.500		ug/L			06/16/22 16:59	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			06/16/22 16:59	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			06/16/22 16:59	1
1,2-Dibromoethane	ND		0.500		ug/L			06/16/22 16:59	1
1,2-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:59	1
1,2-Dichloroethane	ND		0.500		ug/L			06/16/22 16:59	1
1,2-Dichloropropane	ND		0.500		ug/L			06/16/22 16:59	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
1,3-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:59	1
1,3-Dichloropropane	ND		0.500		ug/L			06/16/22 16:59	1
1,4-Dichlorobenzene	ND		0.500		ug/L			06/16/22 16:59	1
2,2-Dichloropropane	ND		0.500		ug/L			06/16/22 16:59	1
2-Butanone	ND		5.00		ug/L			06/16/22 16:59	1
2-Chlorotoluene	ND		0.500		ug/L			06/16/22 16:59	1
2-Hexanone	ND		5.00		ug/L			06/16/22 16:59	1
4-Chlorotoluene	ND		0.500		ug/L			06/16/22 16:59	1
4-Methyl-2-pentanone	ND		5.00		ug/L			06/16/22 16:59	1
Acetone	ND		10.0		ug/L			06/16/22 16:59	1
Acrylonitrile	ND		10.0		ug/L			06/16/22 16:59	1
Benzene	ND		0.500		ug/L			06/16/22 16:59	1
Bromobenzene	ND		0.500		ug/L			06/16/22 16:59	1
Bromochloromethane	ND		0.500		ug/L			06/16/22 16:59	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 16:59	1
Bromoform	ND		0.500		ug/L			06/16/22 16:59	1
Bromomethane	ND		0.500		ug/L			06/16/22 16:59	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 16:59	1
Carbon tetrachloride	ND		0.500		ug/L			06/16/22 16:59	1
Chlorobenzene	ND		0.500		ug/L			06/16/22 16:59	1
Chloroethane	ND		0.500		ug/L			06/16/22 16:59	1
Chloroform	**0.662**		0.500		ug/L			06/16/22 16:59	1
Chloromethane	ND		0.500		ug/L			06/16/22 16:59	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 16:59	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 16:59	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 16:59	1
Dibromomethane	ND		0.500		ug/L			06/16/22 16:59	1
Dichlorodifluoromethane	ND		0.500		ug/L			06/16/22 16:59	1
di-Isopropyl ether	ND		0.500		ug/L			06/16/22 16:59	1
Ethyl ether	ND		0.500		ug/L			06/16/22 16:59	1
Ethyl t-butyl ether	ND		0.500		ug/L			06/16/22 16:59	1
Ethylbenzene	ND		0.500		ug/L			06/16/22 16:59	1

Client Sample ID: 56 Forest Edge
Lab Sample ID: 620-5103-12
Date Collected: 06/09/22 18:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			06/16/22 16:59	1
Hexachlorobutadiene	ND		0.500		ug/L			06/16/22 16:59	1
Isopropylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
m&p-Xylene	ND		1.00		ug/L			06/16/22 16:59	1
Methyl tertiary butyl ether	ND		0.500		ug/L			06/16/22 16:59	1
Methylene Chloride	ND		0.500		ug/L			06/16/22 16:59	1
Naphthalene	ND		0.500		ug/L			06/16/22 16:59	1
n-Butylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
N-Propylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
o-Xylene	ND		0.500		ug/L			06/16/22 16:59	1
p-Isopropyltoluene	ND		0.500		ug/L			06/16/22 16:59	1
sec-Butylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
Styrene	ND		0.500		ug/L			06/16/22 16:59	1
t-Amyl methyl ether	ND		0.500		ug/L			06/16/22 16:59	1
t-Butyl alcohol	ND		25.0		ug/L			06/16/22 16:59	1
tert-Butylbenzene	ND		0.500		ug/L			06/16/22 16:59	1
Tetrachloroethene	ND		0.500		ug/L			06/16/22 16:59	1
Tetrahydrofuran	ND		7.00		ug/L			06/16/22 16:59	1
Toluene	ND		0.500		ug/L			06/16/22 16:59	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 16:59	1
Trichloroethene	ND		0.500		ug/L			06/16/22 16:59	1
Trichlorofluoromethane	ND		0.500		ug/L			06/16/22 16:59	1
Vinyl chloride	ND		0.500		ug/L			06/16/22 16:59	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*94*		*80 - 120*		*06/16/22 16:59*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*06/16/22 16:59*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluoroheptanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorooctanoic acid	**3.35**		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorononanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorodecanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorotridecanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorotetradecanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorobutanesulfonic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorohexanesulfonic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorooctanesulfonic acid	**4.46**		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
NEtFOSAA	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
NMeFOSAA	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluoroundecanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1
Perfluorododecanoic acid	ND		1.68		ng/L		06/21/22 16:53	06/23/22 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*97*		*70 - 130*	*06/21/22 16:53*	*06/23/22 11:56*	*1*
13C2 PFHxA	*95*		*70 - 130*	*06/21/22 16:53*	*06/23/22 11:56*	*1*
13C3 HFPO-DA	*96*		*70 - 130*	*06/21/22 16:53*	*06/23/22 11:56*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 56 Forest Edge
Lab Sample ID: 620-5103-12
Date Collected: 06/09/22 18:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	98		70 - 130	06/21/22 16:53	06/23/22 11:56	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: Trip Blank
Lab Sample ID: 620-5103-13
Date Collected: 06/07/22 08:00
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	*+	1.00		ug/L			06/16/22 20:41	1
Acetone	ND		10.0		ug/L			06/16/22 20:41	1
Acrylonitrile	ND		0.500		ug/L			06/16/22 20:41	1
Benzene	ND	*+	1.00		ug/L			06/16/22 20:41	1
Bromobenzene	ND		1.00		ug/L			06/16/22 20:41	1
Bromochloromethane	ND	*+	1.00		ug/L			06/16/22 20:41	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 20:41	1
Bromoform	ND		1.00		ug/L			06/16/22 20:41	1
Bromomethane	ND		2.00		ug/L			06/16/22 20:41	1
2-Butanone (MEK)	ND		2.00		ug/L			06/16/22 20:41	1
n-Butylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
sec-Butylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
tert-Butylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 20:41	1
Carbon tetrachloride	ND		1.00		ug/L			06/16/22 20:41	1
Chlorobenzene	ND	*+	1.00		ug/L			06/16/22 20:41	1
Chloroethane	ND		2.00		ug/L			06/16/22 20:41	1
Chloroform	ND		1.00		ug/L			06/16/22 20:41	1
Chloromethane	ND		2.00		ug/L			06/16/22 20:41	1
2-Chlorotoluene	ND		1.00		ug/L			06/16/22 20:41	1
4-Chlorotoluene	ND		1.00		ug/L			06/16/22 20:41	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/16/22 20:41	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 20:41	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/16/22 20:41	1
Dibromomethane	ND		1.00		ug/L			06/16/22 20:41	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/16/22 20:41	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/16/22 20:41	1
1,4-Dichlorobenzene	ND	*+	1.00		ug/L			06/16/22 20:41	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/16/22 20:41	1
1,1-Dichloroethane	ND		1.00		ug/L			06/16/22 20:41	1
1,2-Dichloroethane	ND		1.00		ug/L			06/16/22 20:41	1
1,1-Dichloroethene	ND	*+	1.00		ug/L			06/16/22 20:41	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/16/22 20:41	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/16/22 20:41	1
1,2-Dichloropropane	ND		1.00		ug/L			06/16/22 20:41	1
1,3-Dichloropropane	ND		1.00		ug/L			06/16/22 20:41	1
2,2-Dichloropropane	ND		1.00		ug/L			06/16/22 20:41	1
1,1-Dichloropropene	ND		1.00		ug/L			06/16/22 20:41	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 20:41	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 20:41	1
Ethylbenzene	ND	*+	1.00		ug/L			06/16/22 20:41	1
Hexachlorobutadiene	ND		1.00		ug/L			06/16/22 20:41	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/16/22 20:41	1
Isopropylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
4-Isopropyltoluene	ND		1.00		ug/L			06/16/22 20:41	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/16/22 20:41	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/16/22 20:41	1
Methylene Chloride	ND	*+	2.00		ug/L			06/16/22 20:41	1
Naphthalene	ND		2.00		ug/L			06/16/22 20:41	1

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: Trip Blank
Lab Sample ID: 620-5103-13
Date Collected: 06/07/22 08:00
Matrix: Water
Date Received: 06/14/22 10:20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
Styrene	ND		1.00		ug/L			06/16/22 20:41	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/16/22 20:41	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 20:41	1
Tetrachloroethene	ND		1.00		ug/L			06/16/22 20:41	1
Toluene	ND	*+	1.00		ug/L			06/16/22 20:41	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/16/22 20:41	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/16/22 20:41	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/16/22 20:41	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/16/22 20:41	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/16/22 20:41	1
Trichloroethene	ND		1.00		ug/L			06/16/22 20:41	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/16/22 20:41	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/16/22 20:41	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/16/22 20:41	1
Vinyl chloride	ND		1.00		ug/L			06/16/22 20:41	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/16/22 20:41	1
o-Xylene	ND		1.00		ug/L			06/16/22 20:41	1
Tetrahydrofuran	ND		2.00		ug/L			06/16/22 20:41	1
Ethyl ether	ND		1.00		ug/L			06/16/22 20:41	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/16/22 20:41	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/16/22 20:41	1
di-Isopropyl ether	ND		1.00		ug/L			06/16/22 20:41	1
tert-Butanol	ND		10.0		ug/L			06/16/22 20:41	1
1,4-Dioxane	ND		50.0		ug/L			06/16/22 20:41	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/16/22 20:41	1
Ethanol	ND		200		ug/L			06/16/22 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*06/16/22 20:41*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/16/22 20:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*06/16/22 20:41*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*06/16/22 20:41*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-FD
Lab Sample ID: 620-5103-14
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 17:21	1
1,1,1-Trichloroethane	ND		0.500		ug/L			06/16/22 17:21	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 17:21	1
1,1,2-Trichloroethane	ND		0.500		ug/L			06/16/22 17:21	1
1,1-Dichloroethane	ND		0.500		ug/L			06/16/22 17:21	1
1,1-Dichloroethene	ND		0.500		ug/L			06/16/22 17:21	1
1,1-Dichloropropene	ND		0.500		ug/L			06/16/22 17:21	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			06/16/22 17:21	1
1,2,3-Trichloropropane	ND		0.500		ug/L			06/16/22 17:21	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			06/16/22 17:21	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			06/16/22 17:21	1
1,2-Dibromoethane	ND		0.500		ug/L			06/16/22 17:21	1
1,2-Dichlorobenzene	ND		0.500		ug/L			06/16/22 17:21	1
1,2-Dichloroethane	ND		0.500		ug/L			06/16/22 17:21	1
1,2-Dichloropropane	ND		0.500		ug/L			06/16/22 17:21	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
1,3-Dichlorobenzene	ND		0.500		ug/L			06/16/22 17:21	1
1,3-Dichloropropane	ND		0.500		ug/L			06/16/22 17:21	1
1,4-Dichlorobenzene	ND		0.500		ug/L			06/16/22 17:21	1
2,2-Dichloropropane	ND		0.500		ug/L			06/16/22 17:21	1
2-Butanone	ND		5.00		ug/L			06/16/22 17:21	1
2-Chlorotoluene	ND		0.500		ug/L			06/16/22 17:21	1
2-Hexanone	ND		5.00		ug/L			06/16/22 17:21	1
4-Chlorotoluene	ND		0.500		ug/L			06/16/22 17:21	1
4-Methyl-2-pentanone	ND		5.00		ug/L			06/16/22 17:21	1
Acetone	ND		10.0		ug/L			06/16/22 17:21	1
Acrylonitrile	ND		10.0		ug/L			06/16/22 17:21	1
Benzene	ND		0.500		ug/L			06/16/22 17:21	1
Bromobenzene	ND		0.500		ug/L			06/16/22 17:21	1
Bromochloromethane	ND		0.500		ug/L			06/16/22 17:21	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 17:21	1
Bromoform	ND		0.500		ug/L			06/16/22 17:21	1
Bromomethane	ND		0.500		ug/L			06/16/22 17:21	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 17:21	1
Carbon tetrachloride	ND		0.500		ug/L			06/16/22 17:21	1
Chlorobenzene	ND		0.500		ug/L			06/16/22 17:21	1
Chloroethane	ND		0.500		ug/L			06/16/22 17:21	1
Chloroform	ND		0.500		ug/L			06/16/22 17:21	1
Chloromethane	ND		0.500		ug/L			06/16/22 17:21	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 17:21	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 17:21	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 17:21	1
Dibromomethane	ND		0.500		ug/L			06/16/22 17:21	1
Dichlorodifluoromethane	**2.82**		0.500		ug/L			06/16/22 17:21	1
di-Isopropyl ether	ND		0.500		ug/L			06/16/22 17:21	1
Ethyl ether	**8.15**		0.500		ug/L			06/16/22 17:21	1
Ethyl t-butyl ether	ND		0.500		ug/L			06/16/22 17:21	1
Ethylbenzene	ND		0.500		ug/L			06/16/22 17:21	1

Client Sample ID: 907 Bleecher-FD
Date Collected: 06/07/22 14:38
Date Received: 06/14/22 10:20

Lab Sample ID: 620-5103-14
Matrix: Drinking Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.500		ug/L			06/16/22 17:21	1
Hexachlorobutadiene	ND		0.500		ug/L			06/16/22 17:21	1
Isopropylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
m&p-Xylene	ND		1.00		ug/L			06/16/22 17:21	1
Methyl tertiary butyl ether	**0.909**		0.500		ug/L			06/16/22 17:21	1
Methylene Chloride	ND		0.500		ug/L			06/16/22 17:21	1
Naphthalene	ND		0.500		ug/L			06/16/22 17:21	1
n-Butylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
N-Propylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
o-Xylene	ND		0.500		ug/L			06/16/22 17:21	1
p-Isopropyltoluene	ND		0.500		ug/L			06/16/22 17:21	1
sec-Butylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
Styrene	ND		0.500		ug/L			06/16/22 17:21	1
t-Amyl methyl ether	ND		0.500		ug/L			06/16/22 17:21	1
t-Butyl alcohol	ND		25.0		ug/L			06/16/22 17:21	1
tert-Butylbenzene	ND		0.500		ug/L			06/16/22 17:21	1
Tetrachloroethene	ND		0.500		ug/L			06/16/22 17:21	1
Tetrahydrofuran	**19.0**		7.00		ug/L			06/16/22 17:21	1
Toluene	ND		0.500		ug/L			06/16/22 17:21	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 17:21	1
Trichloroethene	ND		0.500		ug/L			06/16/22 17:21	1
Trichlorofluoromethane	ND		0.500		ug/L			06/16/22 17:21	1
Vinyl chloride	ND		0.500		ug/L			06/16/22 17:21	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*94*		*80 - 120*		*06/16/22 17:21*	*1*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*		*06/16/22 17:21*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**15.3**		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluoroheptanoic acid	**9.65**		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorooctanoic acid	**28.5**		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorononanoic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorodecanoic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorotridecanoic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorotetradecanoic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorobutanesulfonic acid	**2.45**		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorohexanesulfonic acid	**6.58**		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorooctanesulfonic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
NEtFOSAA	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
NMeFOSAA	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluoroundecanoic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1
Perfluorododecanoic acid	ND		1.63		ng/L		06/17/22 10:29	06/21/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*97*		*70 - 130*	*06/17/22 10:29*	*06/21/22 15:12*	*1*
13C2 PFHxA	*102*		*70 - 130*	*06/17/22 10:29*	*06/21/22 15:12*	*1*
13C3 HFPO-DA	*107*		*70 - 130*	*06/17/22 10:29*	*06/21/22 15:12*	*1*

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: 907 Bleecher-FD
Lab Sample ID: 620-5103-14
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	95		70 - 130	06/17/22 10:29	06/21/22 15:12	1

Surrogate Summary

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Drinking Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCZ	BFB
Lab Sample ID	Client Sample ID	(80-120)	(80-120)
620-5103-3	907 Bleecher-EFF	94	86
620-5103-4	907 Bleecher-MID	94	86
620-5103-5	907 Bleecher-INF	93	85
620-5103-12	56 Forest Edge	94	85
620-5103-14	907 Bleecher-FD	94	86
LCS 410-266165/4	Lab Control Sample	102	102
MB 410-266165/6	Method Blank	92	89

Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	TOL	DCA	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-5103-1	MW-1R	91	97	90	101
620-5103-6	MW-4S	91	98	87	99
620-5103-7	MW-4D	91	98	91	102
620-5103-8	MW-4D-FD	91	99	93	102
620-5103-9	MW-3D	90	97	88	99
620-5103-10	EB-060922	101	106	101	104
620-5103-13	Trip Blank	92	99	93	101
LCS 620-11999/4	Lab Control Sample	95	99	89	100
LCS 620-12053/4	Lab Control Sample	100	106	104	106
LCS 620-12054/4	Lab Control Sample	93	99	85	99
LCSD 620-11999/5	Lab Control Sample Dup	93	101	93	103
LCSD 620-12053/5	Lab Control Sample Dup	100	102	104	108
LCSD 620-12054/5	Lab Control Sample Dup	93	99	87	99
MB 620-11999/7	Method Blank	91	98	93	100
MB 620-12053/7	Method Blank	100	105	104	104
MB 620-12054/7	Method Blank	94	98	91	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TBP	TPHL
Lab Sample ID	Client Sample ID	(30-130)	(15-110)	(30-130)	(15-110)	(15-110)	(30-130)
620-5103-11	PW-060922	67	43	61	30	74	68
LCS 620-11992/2-A	Lab Control Sample	80	49	78	38	93	100
LCSD 620-11992/3-A	Lab Control Sample Dup	90	57	88	41	97	103
MB 620-11992/1-A	Method Blank	85	59	82	39	83	101

Surrogate Summary

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(30-150)	(30-150)
620-5103-11	PW-060922	86	61
LCS 620-11993/2-A	Lab Control Sample	77	116
LCSD 620-11993/3-A	Lab Control Sample Dup	88	125
MB 620-11993/1-A	Method Blank	81	114

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Matrix: Drinking Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		PFDA	PFHxA	HFPODA	d5NEFOS
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
620-5103-2	907 Bleecher-FB	98	91	99	101
620-5103-3	907 Bleecher-EFF	106	102	103	108
620-5103-4	907 Bleecher-MID	109	106	111	109
620-5103-5	907 Bleecher-INF	98	108	114	93
620-5103-12	56 Forest Edge	97	95	96	98
620-5103-14	907 Bleecher-FD	97	102	107	95
LCS 410-266745/2-A	Lab Control Sample	99	94	95	97
LCS 410-267827/2-A	Lab Control Sample	92	100	103	99
LCSD 410-266745/3-A	Lab Control Sample Dup	97	95	99	97
MB 410-266745/1-A	Method Blank	103	96	101	101
MB 410-267827/1-A	Method Blank	101	105	108	104

Surrogate Legend

PFDA = 13C2 PFDA
PFHxA = 13C2 PFHxA
HFPODA = 13C3 HFPO-DA
d5NEFOS = d5-NEtFOSAA

Isotope Dilution Summary

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M242FTS (10-200)	M262FTS (17-200)	M282FTS (33-200)	PFTDA (10-179)	HFPODA (17-185)	C3PFBS (16-200)	PFBA (42-165)	C4PFHA (31-182)
620-5103-1	MW-1R	500 *5+	223 *5+	121	54	88	99	103	122
620-5103-6	MW-4S	493 *5+	379 *5+	224 *5+	28	76	178	96	107
620-5103-7	MW-4D	457 *5+	239 *5+	140	61	89	93	97	110
620-5103-8	MW-4D-FD	449 *5+	223 *5+	120	63	80	86	93	109
620-5103-9	MW-3D	384 *5+	311 *5+	174	77	84	180	83	101
620-5103-10	EB-060922	97	95	91	93	85	108	96	99
LCS 410-266861/2-A	Lab Control Sample	123	90	90	94	85	96	95	95
LCS 410-267221/2-A	Lab Control Sample	96	83	82	101	101	83	84	89
LCS 410-268456/3-A	Lab Control Sample	112	97	105	110	98	107	108	107
LCSD 410-266861/3-A	Lab Control Sample Dup	123	93	98	95	83	101	96	105
LCSD 410-267221/3-A	Lab Control Sample Dup	91	82	85	94	91	86	87	85
LCSD 410-268456/4-A	Lab Control Sample Dup	108	92	89	108	95	106	105	105
MB 410-266861/1-A	Method Blank	116	93	88	93	86	94	94	103
MB 410-267221/1-A	Method Blank	82	72	73	83	94	78	80	84
MB 410-268456/1-A	Method Blank	99	87	97	101	84	100	101	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFPeA (38-187)	C8PFOA (48-162)	C8PFOS (51-159)	d3NMFOS (31-174)	d5NEFOS (29-195)	NEFM (10-177)	C3PFHS (28-188)	13C5PHA (24-179)
620-5103-1	MW-1R	115	115	92	105	111	65	107	125
620-5103-6	MW-4S	127	98	81	97	90	14	141	103
620-5103-7	MW-4D	111	106	91	97	96	51	98	115
620-5103-8	MW-4D-FD	101	95	91	91	94	48	92	106
620-5103-9	MW-3D	114	83	88	88	85	7 *5-	125	90
620-5103-10	EB-060922	106	98	106	89	97	61	108	96
LCS 410-266861/2-A	Lab Control Sample	96	101	95	87	99	68	97	94
LCS 410-267221/2-A	Lab Control Sample	82	88	85	90	90	68	89	90
LCS 410-268456/3-A	Lab Control Sample	111	107	110	103	109	100	115	105
LCSD 410-266861/3-A	Lab Control Sample Dup	100	99	108	107	101	79	104	99
LCSD 410-267221/3-A	Lab Control Sample Dup	85	87	87	93	98	79	90	86
LCSD 410-268456/4-A	Lab Control Sample Dup	107	101	104	114	111	97	108	105
MB 410-266861/1-A	Method Blank	99	100	95	97	99	78	101	101
MB 410-267221/1-A	Method Blank	80	83	80	83	82	67	82	81
MB 410-268456/1-A	Method Blank	107	99	101	103	102	95	104	98

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	C6PFDA (49-163)	13C7PUA (34-174)	d3NMFSA (10-155)	d5NPFSA (10-159)	PFOSA (10-168)	PFDoDA (17-176)	C9PFNA (51-167)
620-5103-1	MW-1R	104	99	37	39	82	87	95
620-5103-6	MW-4S	87	84	3 *5-	2 *5-	58	68	69
620-5103-7	MW-4D	88	87	32	29	77	79	102
620-5103-8	MW-4D-FD	89	82	21	20	67	78	100
620-5103-9	MW-3D	92	82	2 *5-	2 *5-	40	84	89
620-5103-10	EB-060922	97	102	21	21	79	99	109
LCS 410-266861/2-A	Lab Control Sample	97	100	29	39	65	95	97
LCS 410-267221/2-A	Lab Control Sample	87	87	48	53	75	94	84
LCS 410-268456/3-A	Lab Control Sample	114	104	82	85	105	107	109
LCSD 410-266861/3-A	Lab Control Sample Dup	107	105	36	44	76	98	108
LCSD 410-267221/3-A	Lab Control Sample Dup	91	91	49	57	76	92	87
LCSD 410-268456/4-A	Lab Control Sample Dup	112	113	79	82	111	113	113
MB 410-266861/1-A	Method Blank	102	102	35	45	72	98	95

Isotope Dilution Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	C6PFDA (49-163)	13C7PUA (34-174)	d3NMFSA (10-155)	d5NPFSA (10-159)	PFOSA (10-168)	PFDoDA (17-176)	C9PFNA (51-167)
MB 410-267221/1-A	Method Blank	77	79	41	48	65	79	84
MB 410-268456/1-A	Method Blank	100	101	67	73	99	103	93

Surrogate Legend

M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
PFTDA = 13C2 PFTeDA
HFPODA = 13C3 HFPO-DA
C3PFBS = 13C3 PFBS
PFBA = 13C4 PFBA
C4PFHA = 13C4 PFHpA
PFPeA = 13C5 PFPeA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
NEFM = d9-N-EtFOSE-M
C3PFHS = 13C3 PFHxS
13C5PHA = 13C5 PFHxA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
d3NMFSA = d3-NMePFOSA
d5NPFSA = d5-NEtPFOSA
PFOSA = 13C8 FOSA
PFDoDA = 13C2-PFDoDA
C9PFNA = 13C9 PFNA

Client: Stone Environmental
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Job ID: 620-5103-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-266165/6
Matrix: Drinking Water
Analysis Batch: 266165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 10:17	1
1,1,1-Trichloroethane	ND		0.500		ug/L			06/16/22 10:17	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 10:17	1
1,1,2-Trichloroethane	ND		0.500		ug/L			06/16/22 10:17	1
1,1-Dichloroethane	ND		0.500		ug/L			06/16/22 10:17	1
1,1-Dichloroethene	ND		0.500		ug/L			06/16/22 10:17	1
1,1-Dichloropropene	ND		0.500		ug/L			06/16/22 10:17	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			06/16/22 10:17	1
1,2,3-Trichloropropane	ND		0.500		ug/L			06/16/22 10:17	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			06/16/22 10:17	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
1,2-Dibromo-3-Chloropropane	ND		1.00		ug/L			06/16/22 10:17	1
1,2-Dibromoethane	ND		0.500		ug/L			06/16/22 10:17	1
1,2-Dichlorobenzene	ND		0.500		ug/L			06/16/22 10:17	1
1,2-Dichloroethane	ND		0.500		ug/L			06/16/22 10:17	1
1,2-Dichloropropane	ND		0.500		ug/L			06/16/22 10:17	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
1,3-Dichlorobenzene	ND		0.500		ug/L			06/16/22 10:17	1
1,3-Dichloropropane	ND		0.500		ug/L			06/16/22 10:17	1
1,4-Dichlorobenzene	ND		0.500		ug/L			06/16/22 10:17	1
2,2-Dichloropropane	ND		0.500		ug/L			06/16/22 10:17	1
2-Butanone	ND		5.00		ug/L			06/16/22 10:17	1
2-Chlorotoluene	ND		0.500		ug/L			06/16/22 10:17	1
2-Hexanone	ND		5.00		ug/L			06/16/22 10:17	1
4-Chlorotoluene	ND		0.500		ug/L			06/16/22 10:17	1
4-Methyl-2-pentanone	ND		5.00		ug/L			06/16/22 10:17	1
Acetone	ND		10.0		ug/L			06/16/22 10:17	1
Acrylonitrile	ND		10.0		ug/L			06/16/22 10:17	1
Benzene	ND		0.500		ug/L			06/16/22 10:17	1
Bromobenzene	ND		0.500		ug/L			06/16/22 10:17	1
Bromochloromethane	ND		0.500		ug/L			06/16/22 10:17	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 10:17	1
Bromoform	ND		0.500		ug/L			06/16/22 10:17	1
Bromomethane	ND		0.500		ug/L			06/16/22 10:17	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 10:17	1
Carbon tetrachloride	ND		0.500		ug/L			06/16/22 10:17	1
Chlorobenzene	ND		0.500		ug/L			06/16/22 10:17	1
Chloroethane	ND		0.500		ug/L			06/16/22 10:17	1
Chloroform	ND		0.500		ug/L			06/16/22 10:17	1
Chloromethane	ND		0.500		ug/L			06/16/22 10:17	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 10:17	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 10:17	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 10:17	1
Dibromomethane	ND		0.500		ug/L			06/16/22 10:17	1
Dichlorodifluoromethane	ND		0.500		ug/L			06/16/22 10:17	1
di-Isopropyl ether	ND		0.500		ug/L			06/16/22 10:17	1
Ethyl ether	ND		0.500		ug/L			06/16/22 10:17	1
Ethyl t-butyl ether	ND		0.500		ug/L			06/16/22 10:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-266165/6
Matrix: Drinking Water
Analysis Batch: 266165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
Freon 113	ND		0.500		ug/L			06/16/22 10:17	1
Hexachlorobutadiene	ND		0.500		ug/L			06/16/22 10:17	1
Isopropylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
m&p-Xylene	ND		1.00		ug/L			06/16/22 10:17	1
Methyl tertiary butyl ether	ND		0.500		ug/L			06/16/22 10:17	1
Methylene Chloride	ND		0.500		ug/L			06/16/22 10:17	1
Naphthalene	ND		0.500		ug/L			06/16/22 10:17	1
n-Butylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
N-Propylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
o-Xylene	ND		0.500		ug/L			06/16/22 10:17	1
p-Isopropyltoluene	ND		0.500		ug/L			06/16/22 10:17	1
sec-Butylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
Styrene	ND		0.500		ug/L			06/16/22 10:17	1
t-Amyl methyl ether	ND		0.500		ug/L			06/16/22 10:17	1
t-Butyl alcohol	ND		25.0		ug/L			06/16/22 10:17	1
tert-Butylbenzene	ND		0.500		ug/L			06/16/22 10:17	1
Tetrachloroethene	ND		0.500		ug/L			06/16/22 10:17	1
Tetrahydrofuran	ND		7.00		ug/L			06/16/22 10:17	1
Toluene	ND		0.500		ug/L			06/16/22 10:17	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			06/16/22 10:17	1
Trichloroethene	ND		0.500		ug/L			06/16/22 10:17	1
Trichlorofluoromethane	ND		0.500		ug/L			06/16/22 10:17	1
Vinyl chloride	ND		0.500		ug/L			06/16/22 10:17	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 10:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichlorobenzene-d4 (Surr)	*92*		*80 - 120*		*06/16/22 10:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*06/16/22 10:17*	*1*

Lab Sample ID: LCS 410-266165/4
Matrix: Drinking Water
Analysis Batch: 266165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane			5.00	4.873		ug/L		97	70 - 130		
1,1,1-Trichloroethane			5.00	4.564		ug/L		91	70 - 130		
1,1,2,2-Tetrachloroethane			5.00	4.611		ug/L		92	70 - 130		
1,1,2-Trichloroethane			5.00	4.630		ug/L		93	70 - 130		
1,1-Dichloroethane			5.00	4.084		ug/L		82	70 - 130		
1,1-Dichloroethene			5.00	4.732		ug/L		95	70 - 130		
1,1-Dichloropropene			5.00	4.577		ug/L		92	70 - 130		
1,2,3-Trichlorobenzene			5.00	4.390		ug/L		88	70 - 130		
1,2,3-Trichloropropane			5.00	4.351		ug/L		87	70 - 130		
1,2,4-Trichlorobenzene			5.00	4.431		ug/L		89	70 - 130		
1,2,4-Trimethylbenzene			5.00	4.670		ug/L		93	70 - 130		
1,2-Dibromo-3-Chloropropane			5.00	4.463		ug/L		89	70 - 130		
1,2-Dibromoethane			5.00	4.621		ug/L		92	70 - 130		

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-266165/4
Matrix: Drinking Water
Analysis Batch: 266165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	5.00	4.802		ug/L		96	70 - 130
1,2-Dichloroethane	5.00	4.279		ug/L		86	70 - 130
1,2-Dichloropropane	5.00	4.589		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	5.00	4.601		ug/L		92	70 - 130
1,3-Dichlorobenzene	5.00	4.920		ug/L		98	70 - 130
1,3-Dichloropropane	5.00	4.391		ug/L		88	70 - 130
1,4-Dichlorobenzene	5.00	4.981		ug/L		100	70 - 130
2,2-Dichloropropane	5.00	4.698		ug/L		94	70 - 130
2-Butanone	62.5	51.72		ug/L		83	70 - 130
2-Chlorotoluene	5.00	4.731		ug/L		95	70 - 130
2-Hexanone	62.5	53.36		ug/L		85	70 - 130
4-Chlorotoluene	5.00	4.831		ug/L		97	70 - 130
4-Methyl-2-pentanone	62.5	52.83		ug/L		85	70 - 130
Acetone	62.5	48.92		ug/L		78	70 - 130
Acrylonitrile	113	88.51		ug/L		79	70 - 130
Benzene	5.00	4.669		ug/L		93	70 - 130
Bromobenzene	5.00	4.977		ug/L		100	70 - 130
Bromochloromethane	5.00	4.874		ug/L		97	70 - 130
Bromodichloromethane	5.00	4.612		ug/L		92	70 - 130
Bromoform	5.00	5.090		ug/L		102	70 - 130
Bromomethane	2.00	1.854		ug/L		93	70 - 130
Carbon disulfide	5.00	4.912		ug/L		98	70 - 130
Carbon tetrachloride	5.00	4.759		ug/L		95	70 - 130
Chlorobenzene	5.00	4.878		ug/L		98	70 - 130
Chloroethane	2.00	1.825		ug/L		91	70 - 130
Chloroform	5.00	4.582		ug/L		92	70 - 130
Chloromethane	2.00	1.826		ug/L		91	70 - 130
cis-1,2-Dichloroethene	5.00	4.708		ug/L		94	70 - 130
cis-1,3-Dichloropropene	5.00	4.240		ug/L		85	70 - 130
Dibromochloromethane	5.00	4.685		ug/L		94	70 - 130
Dibromomethane	5.00	4.670		ug/L		93	70 - 130
Dichlorodifluoromethane	2.00	1.932		ug/L		97	70 - 130
di-Isopropyl ether	5.00	4.348		ug/L		87	70 - 130
Ethyl ether	5.00	3.973		ug/L		79	70 - 130
Ethyl t-butyl ether	5.00	4.262		ug/L		85	70 - 130
Ethylbenzene	5.00	4.697		ug/L		94	70 - 130
Freon 113	5.00	4.790		ug/L		96	70 - 130
Hexachlorobutadiene	5.00	5.000		ug/L		100	70 - 130
Isopropylbenzene	5.00	4.556		ug/L		91	70 - 130
m&p-Xylene	10.0	9.661		ug/L		97	70 - 130
Methyl tertiary butyl ether	5.00	4.158		ug/L		83	70 - 130
Methylene Chloride	5.00	5.016		ug/L		100	70 - 130
Naphthalene	5.00	3.704		ug/L		74	70 - 130
n-Butylbenzene	5.00	4.623		ug/L		92	70 - 130
N-Propylbenzene	5.00	4.683		ug/L		94	70 - 130
o-Xylene	5.00	4.415		ug/L		88	70 - 130
p-Isopropyltoluene	5.00	4.728		ug/L		95	70 - 130
sec-Butylbenzene	5.00	4.785		ug/L		96	70 - 130
Styrene	5.00	4.750		ug/L		95	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-266165/4
Matrix: Drinking Water
Analysis Batch: 266165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
t-Amyl methyl ether	5.00	4.021		ug/L		80	70 - 130
t-Butyl alcohol	50.0	42.65		ug/L		85	70 - 130
tert-Butylbenzene	5.00	4.886		ug/L		98	70 - 130
Tetrachloroethene	5.00	4.980		ug/L		100	70 - 130
Tetrahydrofuran	46.9	39.29		ug/L		84	70 - 130
Toluene	5.00	4.648		ug/L		93	70 - 130
trans-1,2-Dichloroethene	5.00	4.410		ug/L		88	70 - 130
Trichloroethene	5.00	4.456		ug/L		89	70 - 130
Trichlorofluoromethane	2.00	1.855		ug/L		93	70 - 130
Vinyl chloride	2.00	1.812		ug/L		91	70 - 130
trans-1,3-Dichloropropene	5.00	4.417		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichlorobenzene-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 620-11999/7
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/16/22 20:14	1
Acetone	ND		10.0		ug/L			06/16/22 20:14	1
Acrylonitrile	ND		0.500		ug/L			06/16/22 20:14	1
Benzene	ND		1.00		ug/L			06/16/22 20:14	1
Bromobenzene	ND		1.00		ug/L			06/16/22 20:14	1
Bromochloromethane	ND		1.00		ug/L			06/16/22 20:14	1
Bromodichloromethane	ND		0.500		ug/L			06/16/22 20:14	1
Bromoform	ND		1.00		ug/L			06/16/22 20:14	1
Bromomethane	ND		2.00		ug/L			06/16/22 20:14	1
2-Butanone (MEK)	ND		2.00		ug/L			06/16/22 20:14	1
n-Butylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
sec-Butylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
tert-Butylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
Carbon disulfide	ND		2.00		ug/L			06/16/22 20:14	1
Carbon tetrachloride	ND		1.00		ug/L			06/16/22 20:14	1
Chlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
Chloroethane	ND		2.00		ug/L			06/16/22 20:14	1
Chloroform	ND		1.00		ug/L			06/16/22 20:14	1
Chloromethane	ND		2.00		ug/L			06/16/22 20:14	1
2-Chlorotoluene	ND		1.00		ug/L			06/16/22 20:14	1
4-Chlorotoluene	ND		1.00		ug/L			06/16/22 20:14	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/16/22 20:14	1
Dibromochloromethane	ND		0.500		ug/L			06/16/22 20:14	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/16/22 20:14	1
Dibromomethane	ND		1.00		ug/L			06/16/22 20:14	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11999/7
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/16/22 20:14	1
1,1-Dichloroethane	ND		1.00		ug/L			06/16/22 20:14	1
1,2-Dichloroethane	ND		1.00		ug/L			06/16/22 20:14	1
1,1-Dichloroethene	ND		1.00		ug/L			06/16/22 20:14	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/16/22 20:14	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/16/22 20:14	1
1,2-Dichloropropane	ND		1.00		ug/L			06/16/22 20:14	1
1,3-Dichloropropane	ND		1.00		ug/L			06/16/22 20:14	1
2,2-Dichloropropane	ND		1.00		ug/L			06/16/22 20:14	1
1,1-Dichloropropene	ND		1.00		ug/L			06/16/22 20:14	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 20:14	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/16/22 20:14	1
Ethylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
Hexachlorobutadiene	ND		1.00		ug/L			06/16/22 20:14	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/16/22 20:14	1
Isopropylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
4-Isopropyltoluene	ND		1.00		ug/L			06/16/22 20:14	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/16/22 20:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/16/22 20:14	1
Methylene Chloride	ND		2.00		ug/L			06/16/22 20:14	1
Naphthalene	ND		2.00		ug/L			06/16/22 20:14	1
N-Propylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
Styrene	ND		1.00		ug/L			06/16/22 20:14	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/16/22 20:14	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/16/22 20:14	1
Tetrachloroethene	ND		1.00		ug/L			06/16/22 20:14	1
Toluene	ND		1.00		ug/L			06/16/22 20:14	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/16/22 20:14	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/16/22 20:14	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/16/22 20:14	1
Trichloroethene	ND		1.00		ug/L			06/16/22 20:14	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/16/22 20:14	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/16/22 20:14	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/16/22 20:14	1
Vinyl chloride	ND		1.00		ug/L			06/16/22 20:14	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/16/22 20:14	1
o-Xylene	ND		1.00		ug/L			06/16/22 20:14	1
Tetrahydrofuran	ND		2.00		ug/L			06/16/22 20:14	1
Ethyl ether	ND		1.00		ug/L			06/16/22 20:14	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/16/22 20:14	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/16/22 20:14	1
di-Isopropyl ether	ND		1.00		ug/L			06/16/22 20:14	1
tert-Butanol	ND		10.0		ug/L			06/16/22 20:14	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-11999/7
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		50.0		ug/L			06/16/22 20:14	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/16/22 20:14	1
Ethanol	ND		200		ug/L			06/16/22 20:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*06/16/22 20:14*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/16/22 20:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*06/16/22 20:14*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*06/16/22 20:14*	*1*

Lab Sample ID: LCS 620-11999/4
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	24.42		ug/L		122	85 - 124
Acetone	20.0	15.15		ug/L		76	14 - 133
Acrylonitrile	20.0	19.94		ug/L		100	62 - 134
Benzene	20.0	21.04		ug/L		105	86 - 111
Bromobenzene	20.0	21.22		ug/L		106	82 - 120
Bromochloromethane	20.0	23.22		ug/L		116	83 - 123
Bromodichloromethane	20.0	20.39		ug/L		102	83 - 137
Bromoform	20.0	20.05		ug/L		100	91 - 137
Bromomethane	20.0	15.01		ug/L		75	29 - 148
2-Butanone (MEK)	20.0	16.01		ug/L		80	10 - 200
n-Butylbenzene	20.0	21.54		ug/L		108	85 - 138
sec-Butylbenzene	20.0	22.09		ug/L		110	75 - 118
tert-Butylbenzene	20.0	19.89		ug/L		99	85 - 122
Carbon disulfide	20.0	23.71		ug/L		119	69 - 150
Carbon tetrachloride	20.0	21.38		ug/L		107	84 - 123
Chlorobenzene	20.0	22.47		ug/L		112	93 - 115
Chloroethane	20.0	19.31		ug/L		97	56 - 155
Chloroform	20.0	21.15		ug/L		106	84 - 116
Chloromethane	20.0	19.50		ug/L		97	45 - 138
2-Chlorotoluene	20.0	21.32		ug/L		107	88 - 116
4-Chlorotoluene	20.0	21.35		ug/L		107	81 - 128
1,2-Dibromo-3-Chloropropane	20.0	17.15		ug/L		86	70 - 139
Dibromochloromethane	20.0	19.67		ug/L		98	83 - 132
1,2-Dibromoethane (EDB)	20.0	20.17		ug/L		101	82 - 125
Dibromomethane	20.0	20.44		ug/L		102	80 - 125
1,2-Dichlorobenzene	20.0	21.97		ug/L		110	84 - 128
1,3-Dichlorobenzene	20.0	21.61		ug/L		108	85 - 120
1,4-Dichlorobenzene	20.0	22.40		ug/L		112	86 - 116
Dichlorodifluoromethane (Freon 12)	20.0	22.34		ug/L		112	36 - 131
1,1-Dichloroethane	20.0	20.42		ug/L		102	81 - 120
1,2-Dichloroethane	20.0	19.36		ug/L		97	82 - 116
1,1-Dichloroethene	20.0	23.14		ug/L		116	83 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11999/4
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	20.0	21.19		ug/L		106	81 - 124
trans-1,2-Dichloroethene	20.0	23.31		ug/L		117	81 - 127
1,2-Dichloropropane	20.0	19.91		ug/L		100	76 - 132
1,3-Dichloropropane	20.0	20.51		ug/L		103	74 - 122
2,2-Dichloropropane	20.0	19.00		ug/L		95	77 - 130
1,1-Dichloropropene	20.0	20.95		ug/L		105	81 - 115
cis-1,3-Dichloropropene	20.0	18.91		ug/L		95	74 - 129
trans-1,3-Dichloropropene	20.0	20.02		ug/L		100	78 - 126
Ethylbenzene	20.0	22.34		ug/L		112	89 - 117
Hexachlorobutadiene	20.0	20.32		ug/L		102	77 - 118
2-Hexanone (MBK)	20.0	13.68		ug/L		68	37 - 123
Isopropylbenzene	20.0	21.58		ug/L		108	83 - 117
4-Isopropyltoluene	20.0	21.26		ug/L		106	83 - 124
Methyl tert-butyl ether	20.0	19.00		ug/L		95	70 - 126
4-Methyl-2-pentanone (MIBK)	20.0	14.02		ug/L		70	59 - 118
Methylene Chloride	20.0	22.71		ug/L		114	75 - 121
Naphthalene	20.0	18.55		ug/L		93	67 - 123
N-Propylbenzene	20.0	21.60		ug/L		108	84 - 128
Styrene	20.0	20.74		ug/L		104	78 - 127
1,1,1,2-Tetrachloroethane	20.0	22.05		ug/L		110	91 - 118
1,1,2,2-Tetrachloroethane	20.0	22.04		ug/L		110	77 - 129
Tetrachloroethene	20.0	21.19		ug/L		106	85 - 116
Toluene	20.0	21.27		ug/L		106	88 - 109
1,2,3-Trichlorobenzene	20.0	20.54		ug/L		103	67 - 134
1,2,4-Trichlorobenzene	20.0	19.85		ug/L		99	78 - 133
1,3,5-Trichlorobenzene	20.0	21.53		ug/L		108	77 - 127
1,1,1-Trichloroethane	20.0	21.27		ug/L		106	83 - 124
1,1,2-Trichloroethane	20.0	22.65		ug/L		113	84 - 132
Trichloroethene	20.0	21.66		ug/L		108	74 - 118
Trichlorofluoromethane (Freon 11)	20.0	23.31		ug/L		117	82 - 126
1,2,3-Trichloropropane	20.0	21.10		ug/L		105	77 - 124
1,2,4-Trimethylbenzene	20.0	21.04		ug/L		105	89 - 126
1,3,5-Trimethylbenzene	20.0	21.13		ug/L		106	89 - 125
Vinyl chloride	20.0	19.83		ug/L		99	62 - 130
m-Xylene & p-Xylene	20.0	20.84		ug/L		104	85 - 123
o-Xylene	20.0	20.40		ug/L		102	85 - 119
Tetrahydrofuran	20.0	15.51		ug/L		78	60 - 133
Ethyl ether	20.0	20.08		ug/L		100	69 - 122
Tert-amyl methyl ether	20.0	18.15		ug/L		91	50 - 140
Ethyl tert-butyl ether	20.0	17.35		ug/L		87	60 - 131
di-Isopropyl ether	20.0	16.42		ug/L		82	67 - 125
tert-Butanol	200	160.6		ug/L		80	50 - 169
1,4-Dioxane	200	153.0		ug/L		76	28 - 150
trans-1,4-Dichloro-2-butene	20.0	15.96		ug/L		80	48 - 153
Ethanol	400	442.7		ug/L		111	47 - 170

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-11999/4
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 620-11999/5
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	25.52	*+	ug/L		128	85 - 124	4	20
Acetone			20.0	15.89		ug/L		79	14 - 133	5	20
Acrylonitrile			20.0	20.88		ug/L		104	62 - 134	5	20
Benzene			20.0	22.93	*+	ug/L		115	86 - 111	9	20
Bromobenzene			20.0	22.41		ug/L		112	82 - 120	5	20
Bromochloromethane			20.0	25.97	*+	ug/L		130	83 - 123	11	20
Bromodichloromethane			20.0	21.91		ug/L		110	83 - 137	7	20
Bromoform			20.0	21.36		ug/L		107	91 - 137	6	20
Bromomethane			20.0	16.20		ug/L		81	29 - 148	8	20
2-Butanone (MEK)			20.0	17.71		ug/L		89	10 - 200	10	20
n-Butylbenzene			20.0	22.86		ug/L		114	85 - 138	6	20
sec-Butylbenzene			20.0	22.81		ug/L		114	75 - 118	3	20
tert-Butylbenzene			20.0	21.13		ug/L		106	85 - 122	6	20
Carbon disulfide			20.0	25.49		ug/L		127	69 - 150	7	20
Carbon tetrachloride			20.0	22.83		ug/L		114	84 - 123	7	20
Chlorobenzene			20.0	23.66	*+	ug/L		118	93 - 115	5	20
Chloroethane			20.0	20.80		ug/L		104	56 - 155	7	20
Chloroform			20.0	22.90		ug/L		114	84 - 116	8	20
Chloromethane			20.0	21.17		ug/L		106	45 - 138	8	20
2-Chlorotoluene			20.0	22.11		ug/L		111	88 - 116	4	20
4-Chlorotoluene			20.0	22.56		ug/L		113	81 - 128	5	20
1,2-Dibromo-3-Chloropropane			20.0	17.96		ug/L		90	70 - 139	5	20
Dibromochloromethane			20.0	21.41		ug/L		107	83 - 132	8	20
1,2-Dibromoethane (EDB)			20.0	21.98		ug/L		110	82 - 125	9	20
Dibromomethane			20.0	22.12		ug/L		111	80 - 125	8	20
1,2-Dichlorobenzene			20.0	23.74		ug/L		119	84 - 128	8	20
1,3-Dichlorobenzene			20.0	23.12		ug/L		116	85 - 120	7	20
1,4-Dichlorobenzene			20.0	23.96	*+	ug/L		120	86 - 116	7	20
Dichlorodifluoromethane (Freon 12)			20.0	23.99		ug/L		120	36 - 131	7	20
1,1-Dichloroethane			20.0	22.06		ug/L		110	81 - 120	8	20
1,2-Dichloroethane			20.0	20.49		ug/L		102	82 - 116	6	20
1,1-Dichloroethene			20.0	24.69	*+	ug/L		123	83 - 120	6	20
cis-1,2-Dichloroethene			20.0	23.38		ug/L		117	81 - 124	10	20
trans-1,2-Dichloroethene			20.0	25.27		ug/L		126	81 - 127	8	20
1,2-Dichloropropane			20.0	21.86		ug/L		109	76 - 132	9	20
1,3-Dichloropropane			20.0	22.31		ug/L		112	74 - 122	8	20
2,2-Dichloropropane			20.0	20.52		ug/L		103	77 - 130	8	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-11999/5
Matrix: Water
Analysis Batch: 11999

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene			20.0	22.70		ug/L		114	81 - 115	8	20
cis-1,3-Dichloropropene			20.0	20.48		ug/L		102	74 - 129	8	20
trans-1,3-Dichloropropene			20.0	21.43		ug/L		107	78 - 126	7	20
Ethylbenzene			20.0	23.55	*+	ug/L		118	89 - 117	5	20
Hexachlorobutadiene			20.0	21.53		ug/L		108	77 - 118	6	20
2-Hexanone (MBK)			20.0	14.55		ug/L		73	37 - 123	6	20
Isopropylbenzene			20.0	22.72		ug/L		114	83 - 117	5	20
4-Isopropyltoluene			20.0	22.45		ug/L		112	83 - 124	5	20
Methyl tert-butyl ether			20.0	20.65		ug/L		103	70 - 126	8	20
4-Methyl-2-pentanone (MIBK)			20.0	14.90		ug/L		75	59 - 118	6	20
Methylene Chloride			20.0	24.83	*+	ug/L		124	75 - 121	9	20
Naphthalene			20.0	19.63		ug/L		98	67 - 123	6	20
N-Propylbenzene			20.0	22.41		ug/L		112	84 - 128	4	20
Styrene			20.0	21.77		ug/L		109	78 - 127	5	20
1,1,1,2-Tetrachloroethane			20.0	23.49		ug/L		117	91 - 118	6	20
1,1,2,2-Tetrachloroethane			20.0	22.99		ug/L		115	77 - 129	4	20
Tetrachloroethene			20.0	22.73		ug/L		114	85 - 116	7	20
Toluene			20.0	22.91	*+	ug/L		115	88 - 109	7	20
1,2,3-Trichlorobenzene			20.0	21.78		ug/L		109	67 - 134	6	20
1,2,4-Trichlorobenzene			20.0	21.38		ug/L		107	78 - 133	7	20
1,3,5-Trichlorobenzene			20.0	22.85		ug/L		114	77 - 127	6	20
1,1,1-Trichloroethane			20.0	22.67		ug/L		113	83 - 124	6	20
1,1,2-Trichloroethane			20.0	24.70		ug/L		124	84 - 132	9	20
Trichloroethene			20.0	23.11		ug/L		116	74 - 118	6	20
Trichlorofluoromethane (Freon 11)			20.0	25.12		ug/L		126	82 - 126	7	20
1,2,3-Trichloropropane			20.0	22.65		ug/L		113	77 - 124	7	20
1,2,4-Trimethylbenzene			20.0	22.09		ug/L		110	89 - 126	5	20
1,3,5-Trimethylbenzene			20.0	22.16		ug/L		111	89 - 125	5	20
Vinyl chloride			20.0	21.16		ug/L		106	62 - 130	6	20
m-Xylene & p-Xylene			20.0	22.04		ug/L		110	85 - 123	6	20
o-Xylene			20.0	21.42		ug/L		107	85 - 119	5	20
Tetrahydrofuran			20.0	16.51		ug/L		83	60 - 133	6	20
Ethyl ether			20.0	22.20		ug/L		111	69 - 122	10	20
Tert-amyl methyl ether			20.0	20.32		ug/L		102	50 - 140	11	20
Ethyl tert-butyl ether			20.0	19.31		ug/L		97	60 - 131	11	20
di-Isopropyl ether			20.0	18.22		ug/L		91	67 - 125	10	20
tert-Butanol			200	167.6		ug/L		84	50 - 169	4	20
1,4-Dioxane			200	169.9		ug/L		85	28 - 150	10	20
trans-1,4-Dichloro-2-butene			20.0	17.18		ug/L		86	48 - 153	7	20
Ethanol			400	463.4		ug/L		116	47 - 170	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12053/7
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 21:00	1
Acetone	ND		10.0		ug/L			06/17/22 21:00	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 21:00	1
Benzene	ND		1.00		ug/L			06/17/22 21:00	1
Bromobenzene	ND		1.00		ug/L			06/17/22 21:00	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 21:00	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 21:00	1
Bromoform	ND		1.00		ug/L			06/17/22 21:00	1
Bromomethane	ND		2.00		ug/L			06/17/22 21:00	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 21:00	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 21:00	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 21:00	1
Chlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
Chloroethane	ND		2.00		ug/L			06/17/22 21:00	1
Chloroform	ND		1.00		ug/L			06/17/22 21:00	1
Chloromethane	ND		2.00		ug/L			06/17/22 21:00	1
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:00	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 21:00	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 21:00	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 21:00	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 21:00	1
Dibromomethane	ND		1.00		ug/L			06/17/22 21:00	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/17/22 21:00	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 21:00	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 21:00	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 21:00	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:00	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 21:00	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:00	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 21:00	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 21:00	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 21:00	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:00	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 21:00	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 21:00	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 21:00	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 21:00	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:00	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 21:00	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 21:00	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12053/7
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.00		ug/L			06/17/22 21:00	1
N-Propylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
Styrene	ND		1.00		ug/L			06/17/22 21:00	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 21:00	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 21:00	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 21:00	1
Toluene	ND		1.00		ug/L			06/17/22 21:00	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 21:00	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 21:00	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 21:00	1
Trichloroethene	ND		1.00		ug/L			06/17/22 21:00	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 21:00	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 21:00	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 21:00	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 21:00	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 21:00	1
o-Xylene	ND		1.00		ug/L			06/17/22 21:00	1
Tetrahydrofuran	ND		2.00		ug/L			06/17/22 21:00	1
Ethyl ether	ND		1.00		ug/L			06/17/22 21:00	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 21:00	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 21:00	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 21:00	1
tert-Butanol	ND		10.0		ug/L			06/17/22 21:00	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 21:00	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 21:00	1
Ethanol	ND		200		ug/L			06/17/22 21:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*06/17/22 21:00*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*06/17/22 21:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/17/22 21:00*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*06/17/22 21:00*	*1*

Lab Sample ID: LCS 620-12053/4
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	22.31		ug/L		112	85 - 124
Acetone	20.0	14.68		ug/L		73	14 - 133
Acrylonitrile	20.0	17.35		ug/L		87	62 - 134
Benzene	20.0	19.63		ug/L		98	86 - 111
Bromobenzene	20.0	19.76		ug/L		99	82 - 120
Bromochloromethane	20.0	20.26		ug/L		101	83 - 123
Bromodichloromethane	20.0	18.53		ug/L		93	83 - 137

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12053/4
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromoform	20.0	14.58	*-	ug/L		73	91 - 137
Bromomethane	20.0	32.02	*+	ug/L		160	29 - 148
2-Butanone (MEK)	20.0	15.30		ug/L		76	10 - 200
n-Butylbenzene	20.0	19.47		ug/L		97	85 - 138
sec-Butylbenzene	20.0	20.12		ug/L		101	75 - 118
tert-Butylbenzene	20.0	20.67		ug/L		103	85 - 122
Carbon disulfide	20.0	19.49		ug/L		97	69 - 150
Carbon tetrachloride	20.0	19.99		ug/L		100	84 - 123
Chlorobenzene	20.0	19.79		ug/L		99	93 - 115
Chloroethane	20.0	25.93		ug/L		130	56 - 155
Chloroform	20.0	21.48		ug/L		107	84 - 116
Chloromethane	20.0	23.30		ug/L		116	45 - 138
2-Chlorotoluene	20.0	19.76		ug/L		99	88 - 116
4-Chlorotoluene	20.0	19.26		ug/L		96	81 - 128
1,2-Dibromo-3-Chloropropane	20.0	14.67		ug/L		73	70 - 139
Dibromochloromethane	20.0	18.26		ug/L		91	83 - 132
1,2-Dibromoethane (EDB)	20.0	20.44		ug/L		102	82 - 125
Dibromomethane	20.0	18.48		ug/L		92	80 - 125
1,2-Dichlorobenzene	20.0	18.93		ug/L		95	84 - 128
1,3-Dichlorobenzene	20.0	20.46		ug/L		102	85 - 120
1,4-Dichlorobenzene	20.0	19.62		ug/L		98	86 - 116
Dichlorodifluoromethane (Freon 12)	20.0	24.45		ug/L		122	36 - 131
1,1-Dichloroethane	20.0	20.24		ug/L		101	81 - 120
1,2-Dichloroethane	20.0	21.24		ug/L		106	82 - 116
1,1-Dichloroethene	20.0	20.93		ug/L		105	83 - 120
cis-1,2-Dichloroethene	20.0	20.37		ug/L		102	81 - 124
trans-1,2-Dichloroethene	20.0	20.79		ug/L		104	81 - 127
1,2-Dichloropropane	20.0	18.13		ug/L		91	76 - 132
1,3-Dichloropropane	20.0	20.41		ug/L		102	74 - 122
2,2-Dichloropropane	20.0	19.06		ug/L		95	77 - 130
1,1-Dichloropropene	20.0	20.30		ug/L		101	81 - 115
cis-1,3-Dichloropropene	20.0	17.75		ug/L		89	74 - 129
trans-1,3-Dichloropropene	20.0	17.62		ug/L		88	78 - 126
Ethylbenzene	20.0	18.94		ug/L		95	89 - 117
Hexachlorobutadiene	20.0	19.08		ug/L		95	77 - 118
2-Hexanone (MBK)	20.0	13.06		ug/L		65	37 - 123
Isopropylbenzene	20.0	19.64		ug/L		98	83 - 117
4-Isopropyltoluene	20.0	18.51		ug/L		93	83 - 124
Methyl tert-butyl ether	20.0	17.49		ug/L		87	70 - 126
4-Methyl-2-pentanone (MIBK)	20.0	14.04		ug/L		70	59 - 118
Methylene Chloride	20.0	20.69		ug/L		103	75 - 121
Naphthalene	20.0	18.20		ug/L		91	67 - 123
N-Propylbenzene	20.0	19.60		ug/L		98	84 - 128
Styrene	20.0	18.08		ug/L		90	78 - 127
1,1,1,2-Tetrachloroethane	20.0	17.53	*-	ug/L		88	91 - 118
1,1,2,2-Tetrachloroethane	20.0	18.97		ug/L		95	77 - 129
Tetrachloroethene	20.0	21.35		ug/L		107	85 - 116
Toluene	20.0	20.28		ug/L		101	88 - 109

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12053/4
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichlorobenzene			20.0	19.80		ug/L		99	67 - 134		
1,2,4-Trichlorobenzene			20.0	20.70		ug/L		103	78 - 133		
1,3,5-Trichlorobenzene			20.0	19.97		ug/L		100	77 - 127		
1,1,1-Trichloroethane			20.0	20.77		ug/L		104	83 - 124		
1,1,2-Trichloroethane			20.0	20.31		ug/L		102	84 - 132		
Trichloroethene			20.0	21.38		ug/L		107	74 - 118		
Trichlorofluoromethane (Freon 11)			20.0	23.47		ug/L		117	82 - 126		
1,2,3-Trichloropropane			20.0	18.38		ug/L		92	77 - 124		
1,2,4-Trimethylbenzene			20.0	19.17		ug/L		96	89 - 126		
1,3,5-Trimethylbenzene			20.0	18.93		ug/L		95	89 - 125		
Vinyl chloride			20.0	26.27	*+	ug/L		131	62 - 130		
m-Xylene & p-Xylene			20.0	18.89		ug/L		94	85 - 123		
o-Xylene			20.0	19.51		ug/L		98	85 - 119		
Tetrahydrofuran			20.0	16.08		ug/L		80	60 - 133		
Ethyl ether			20.0	18.44		ug/L		92	69 - 122		
Tert-amyl methyl ether			20.0	16.99		ug/L		85	50 - 140		
Ethyl tert-butyl ether			20.0	16.85		ug/L		84	60 - 131		
di-Isopropyl ether			20.0	16.87		ug/L		84	67 - 125		
tert-Butanol			200	176.5		ug/L		88	50 - 169		
1,4-Dioxane			200	181.0		ug/L		90	28 - 150		
trans-1,4-Dichloro-2-butene			20.0	17.79		ug/L		89	48 - 153		
Ethanol			400	363.7		ug/L		91	47 - 170		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 620-12053/5
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	21.34		ug/L		107	85 - 124	4	20
Acetone			20.0	16.48		ug/L		82	14 - 133	12	20
Acrylonitrile			20.0	17.57		ug/L		88	62 - 134	1	20
Benzene			20.0	18.99		ug/L		95	86 - 111	3	20
Bromobenzene			20.0	19.62		ug/L		98	82 - 120	1	20
Bromochloromethane			20.0	20.36		ug/L		102	83 - 123	1	20
Bromodichloromethane			20.0	19.15		ug/L		96	83 - 137	3	20
Bromoform			20.0	14.86	*-	ug/L		74	91 - 137	2	20
Bromomethane			20.0	29.87	*+	ug/L		149	29 - 148	7	20
2-Butanone (MEK)			20.0	14.91		ug/L		75	10 - 200	3	20
n-Butylbenzene			20.0	19.42		ug/L		97	85 - 138	0	20
sec-Butylbenzene			20.0	19.94		ug/L		100	75 - 118	1	20
tert-Butylbenzene			20.0	19.85		ug/L		99	85 - 122	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12053/5
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon disulfide	20.0	18.89		ug/L		94	69 - 150	3	20
Carbon tetrachloride	20.0	19.31		ug/L		97	84 - 123	3	20
Chlorobenzene	20.0	19.48		ug/L		97	93 - 115	2	20
Chloroethane	20.0	24.84		ug/L		124	56 - 155	4	20
Chloroform	20.0	21.04		ug/L		105	84 - 116	2	20
Chloromethane	20.0	23.60		ug/L		118	45 - 138	1	20
2-Chlorotoluene	20.0	19.64		ug/L		98	88 - 116	1	20
4-Chlorotoluene	20.0	19.39		ug/L		97	81 - 128	1	20
1,2-Dibromo-3-Chloropropane	20.0	14.69		ug/L		73	70 - 139	0	20
Dibromochloromethane	20.0	17.70		ug/L		89	83 - 132	3	20
1,2-Dibromoethane (EDB)	20.0	19.48		ug/L		97	82 - 125	5	20
Dibromomethane	20.0	20.41		ug/L		102	80 - 125	10	20
1,2-Dichlorobenzene	20.0	19.07		ug/L		95	84 - 128	1	20
1,3-Dichlorobenzene	20.0	20.35		ug/L		102	85 - 120	1	20
1,4-Dichlorobenzene	20.0	19.52		ug/L		98	86 - 116	1	20
Dichlorodifluoromethane (Freon 12)	20.0	23.34		ug/L		117	36 - 131	5	20
1,1-Dichloroethane	20.0	19.39		ug/L		97	81 - 120	4	20
1,2-Dichloroethane	20.0	21.25		ug/L		106	82 - 116	0	20
1,1-Dichloroethene	20.0	20.04		ug/L		100	83 - 120	4	20
cis-1,2-Dichloroethene	20.0	20.12		ug/L		101	81 - 124	1	20
trans-1,2-Dichloroethene	20.0	20.45		ug/L		102	81 - 127	2	20
1,2-Dichloropropane	20.0	18.45		ug/L		92	76 - 132	2	20
1,3-Dichloropropane	20.0	19.71		ug/L		99	74 - 122	3	20
2,2-Dichloropropane	20.0	18.31		ug/L		92	77 - 130	4	20
1,1-Dichloropropene	20.0	19.63		ug/L		98	81 - 115	3	20
cis-1,3-Dichloropropene	20.0	17.03		ug/L		85	74 - 129	4	20
trans-1,3-Dichloropropene	20.0	17.25		ug/L		86	78 - 126	2	20
Ethylbenzene	20.0	18.87		ug/L		94	89 - 117	0	20
Hexachlorobutadiene	20.0	19.23		ug/L		96	77 - 118	1	20
2-Hexanone (MBK)	20.0	13.80		ug/L		69	37 - 123	6	20
Isopropylbenzene	20.0	19.55		ug/L		98	83 - 117	0	20
4-Isopropyltoluene	20.0	18.41		ug/L		92	83 - 124	1	20
Methyl tert-butyl ether	20.0	17.60		ug/L		88	70 - 126	1	20
4-Methyl-2-pentanone (MIBK)	20.0	13.95		ug/L		70	59 - 118	1	20
Methylene Chloride	20.0	20.36		ug/L		102	75 - 121	2	20
Naphthalene	20.0	18.26		ug/L		91	67 - 123	0	20
N-Propylbenzene	20.0	19.58		ug/L		98	84 - 128	0	20
Styrene	20.0	18.12		ug/L		91	78 - 127	0	20
1,1,1,2-Tetrachloroethane	20.0	17.60	*-	ug/L		88	91 - 118	0	20
1,1,2,2-Tetrachloroethane	20.0	18.76		ug/L		94	77 - 129	1	20
Tetrachloroethene	20.0	20.63		ug/L		103	85 - 116	3	20
Toluene	20.0	19.45		ug/L		97	88 - 109	4	20
1,2,3-Trichlorobenzene	20.0	19.61		ug/L		98	67 - 134	1	20
1,2,4-Trichlorobenzene	20.0	20.59		ug/L		103	78 - 133	1	20
1,3,5-Trichlorobenzene	20.0	19.92		ug/L		100	77 - 127	0	20
1,1,1-Trichloroethane	20.0	20.07		ug/L		100	83 - 124	3	20
1,1,2-Trichloroethane	20.0	19.81		ug/L		99	84 - 132	2	20
Trichloroethene	20.0	20.32		ug/L		102	74 - 118	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12053/5
Matrix: Water
Analysis Batch: 12053

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)			20.0	22.40		ug/L		112	82 - 126	5	20
1,2,3-Trichloropropane			20.0	18.11		ug/L		91	77 - 124	1	20
1,2,4-Trimethylbenzene			20.0	19.28		ug/L		96	89 - 126	1	20
1,3,5-Trimethylbenzene			20.0	18.91		ug/L		95	89 - 125	0	20
Vinyl chloride			20.0	27.16	*+	ug/L		136	62 - 130	3	20
m-Xylene & p-Xylene			20.0	18.68		ug/L		93	85 - 123	1	20
o-Xylene			20.0	19.23		ug/L		96	85 - 119	1	20
Tetrahydrofuran			20.0	16.05		ug/L		80	60 - 133	0	20
Ethyl ether			20.0	18.58		ug/L		93	69 - 122	1	20
Tert-amyl methyl ether			20.0	17.87		ug/L		89	50 - 140	5	20
Ethyl tert-butyl ether			20.0	17.40		ug/L		87	60 - 131	3	20
di-Isopropyl ether			20.0	16.63		ug/L		83	67 - 125	1	20
tert-Butanol			200	163.3		ug/L		82	50 - 169	8	20
1,4-Dioxane			200	178.5		ug/L		89	28 - 150	1	20
trans-1,4-Dichloro-2-butene			20.0	17.02		ug/L		85	48 - 153	4	20
Ethanol			400	378.4		ug/L		95	47 - 170	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 620-12054/7
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND		1.00		ug/L			06/17/22 19:42	1
Acetone	ND		10.0		ug/L			06/17/22 19:42	1
Acrylonitrile	ND		0.500		ug/L			06/17/22 19:42	1
Benzene	ND		1.00		ug/L			06/17/22 19:42	1
Bromobenzene	ND		1.00		ug/L			06/17/22 19:42	1
Bromochloromethane	ND		1.00		ug/L			06/17/22 19:42	1
Bromodichloromethane	ND		0.500		ug/L			06/17/22 19:42	1
Bromoform	ND		1.00		ug/L			06/17/22 19:42	1
Bromomethane	ND		2.00		ug/L			06/17/22 19:42	1
2-Butanone (MEK)	ND		2.00		ug/L			06/17/22 19:42	1
n-Butylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
sec-Butylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
tert-Butylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
Carbon disulfide	ND		2.00		ug/L			06/17/22 19:42	1
Carbon tetrachloride	ND		1.00		ug/L			06/17/22 19:42	1
Chlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
Chloroethane	ND		2.00		ug/L			06/17/22 19:42	1
Chloroform	ND		1.00		ug/L			06/17/22 19:42	1
Chloromethane	ND		2.00		ug/L			06/17/22 19:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12054/7
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.00		ug/L			06/17/22 19:42	1
4-Chlorotoluene	ND		1.00		ug/L			06/17/22 19:42	1
1,2-Dibromo-3-Chloropropane	ND		2.00		ug/L			06/17/22 19:42	1
Dibromochloromethane	ND		0.500		ug/L			06/17/22 19:42	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			06/17/22 19:42	1
Dibromomethane	ND		1.00		ug/L			06/17/22 19:42	1
1,2-Dichlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
1,3-Dichlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
1,4-Dichlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
Dichlorodifluoromethane (Freon 12)	ND		2.00		ug/L			06/17/22 19:42	1
1,1-Dichloroethane	ND		1.00		ug/L			06/17/22 19:42	1
1,2-Dichloroethane	ND		1.00		ug/L			06/17/22 19:42	1
1,1-Dichloroethene	ND		1.00		ug/L			06/17/22 19:42	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 19:42	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			06/17/22 19:42	1
1,2-Dichloropropane	ND		1.00		ug/L			06/17/22 19:42	1
1,3-Dichloropropane	ND		1.00		ug/L			06/17/22 19:42	1
2,2-Dichloropropane	ND		1.00		ug/L			06/17/22 19:42	1
1,1-Dichloropropene	ND		1.00		ug/L			06/17/22 19:42	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 19:42	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			06/17/22 19:42	1
Ethylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
Hexachlorobutadiene	ND		1.00		ug/L			06/17/22 19:42	1
2-Hexanone (MBK)	ND		2.00		ug/L			06/17/22 19:42	1
Isopropylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
4-Isopropyltoluene	ND		1.00		ug/L			06/17/22 19:42	1
Methyl tert-butyl ether	ND		1.00		ug/L			06/17/22 19:42	1
4-Methyl-2-pentanone (MIBK)	ND		2.00		ug/L			06/17/22 19:42	1
Methylene Chloride	ND		2.00		ug/L			06/17/22 19:42	1
Naphthalene	ND		2.00		ug/L			06/17/22 19:42	1
N-Propylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
Styrene	ND		1.00		ug/L			06/17/22 19:42	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			06/17/22 19:42	1
1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			06/17/22 19:42	1
Tetrachloroethene	ND		1.00		ug/L			06/17/22 19:42	1
Toluene	ND		1.00		ug/L			06/17/22 19:42	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
1,3,5-Trichlorobenzene	ND		1.00		ug/L			06/17/22 19:42	1
1,1,1-Trichloroethane	ND		1.00		ug/L			06/17/22 19:42	1
1,1,2-Trichloroethane	ND		1.00		ug/L			06/17/22 19:42	1
Trichloroethene	ND		1.00		ug/L			06/17/22 19:42	1
Trichlorofluoromethane (Freon 11)	ND		1.00		ug/L			06/17/22 19:42	1
1,2,3-Trichloropropane	ND		1.00		ug/L			06/17/22 19:42	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			06/17/22 19:42	1
Vinyl chloride	ND		1.00		ug/L			06/17/22 19:42	1
m-Xylene & p-Xylene	ND		1.00		ug/L			06/17/22 19:42	1
o-Xylene	ND		1.00		ug/L			06/17/22 19:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 620-12054/7
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND		2.00		ug/L			06/17/22 19:42	1
Ethyl ether	ND		1.00		ug/L			06/17/22 19:42	1
Tert-amyl methyl ether	ND		1.00		ug/L			06/17/22 19:42	1
Ethyl tert-butyl ether	ND		1.00		ug/L			06/17/22 19:42	1
di-Isopropyl ether	ND		1.00		ug/L			06/17/22 19:42	1
tert-Butanol	ND		10.0		ug/L			06/17/22 19:42	1
1,4-Dioxane	ND		50.0		ug/L			06/17/22 19:42	1
trans-1,4-Dichloro-2-butene	ND		5.00		ug/L			06/17/22 19:42	1
Ethanol	ND		200		ug/L			06/17/22 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/17/22 19:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/17/22 19:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*06/17/22 19:42*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*06/17/22 19:42*	*1*

Lab Sample ID: LCS 620-12054/4
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	24.32		ug/L		122	85 - 124
Acetone	20.0	14.02		ug/L		70	14 - 133
Acrylonitrile	20.0	19.03		ug/L		95	62 - 134
Benzene	20.0	21.67		ug/L		108	86 - 111
Bromobenzene	20.0	21.28		ug/L		106	82 - 120
Bromochloromethane	20.0	23.89		ug/L		119	83 - 123
Bromodichloromethane	20.0	20.43		ug/L		102	83 - 137
Bromoform	20.0	19.98		ug/L		100	91 - 137
Bromomethane	20.0	15.36		ug/L		77	29 - 148
2-Butanone (MEK)	20.0	15.69		ug/L		78	10 - 200
n-Butylbenzene	20.0	22.73		ug/L		114	85 - 138
sec-Butylbenzene	20.0	22.09		ug/L		110	75 - 118
tert-Butylbenzene	20.0	20.04		ug/L		100	85 - 122
Carbon disulfide	20.0	23.27		ug/L		116	69 - 150
Carbon tetrachloride	20.0	21.28		ug/L		106	84 - 123
Chlorobenzene	20.0	22.82		ug/L		114	93 - 115
Chloroethane	20.0	18.53		ug/L		93	56 - 155
Chloroform	20.0	21.41		ug/L		107	84 - 116
Chloromethane	20.0	18.67		ug/L		93	45 - 138
2-Chlorotoluene	20.0	21.47		ug/L		107	88 - 116
4-Chlorotoluene	20.0	21.36		ug/L		107	81 - 128
1,2-Dibromo-3-Chloropropane	20.0	18.21		ug/L		91	70 - 139
Dibromochloromethane	20.0	19.71		ug/L		99	83 - 132
1,2-Dibromoethane (EDB)	20.0	20.36		ug/L		102	82 - 125
Dibromomethane	20.0	20.44		ug/L		102	80 - 125
1,2-Dichlorobenzene	20.0	22.58		ug/L		113	84 - 128
1,3-Dichlorobenzene	20.0	21.36		ug/L		107	85 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12054/4
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	20.0	23.11		ug/L		116	86 - 116
Dichlorodifluoromethane (Freon 12)	20.0	20.98		ug/L		105	36 - 131
1,1-Dichloroethane	20.0	20.65		ug/L		103	81 - 120
1,2-Dichloroethane	20.0	18.71		ug/L		94	82 - 116
1,1-Dichloroethene	20.0	23.52		ug/L		118	83 - 120
cis-1,2-Dichloroethene	20.0	22.09		ug/L		110	81 - 124
trans-1,2-Dichloroethene	20.0	23.59		ug/L		118	81 - 127
1,2-Dichloropropane	20.0	20.85		ug/L		104	76 - 132
1,3-Dichloropropane	20.0	20.77		ug/L		104	74 - 122
2,2-Dichloropropane	20.0	19.84		ug/L		99	77 - 130
1,1-Dichloropropene	20.0	21.83		ug/L		109	81 - 115
cis-1,3-Dichloropropene	20.0	19.86		ug/L		99	74 - 129
trans-1,3-Dichloropropene	20.0	20.42		ug/L		102	78 - 126
Ethylbenzene	20.0	22.71		ug/L		114	89 - 117
Hexachlorobutadiene	20.0	20.74		ug/L		104	77 - 118
2-Hexanone (MBK)	20.0	13.42		ug/L		67	37 - 123
Isopropylbenzene	20.0	22.04		ug/L		110	83 - 117
4-Isopropyltoluene	20.0	22.40		ug/L		112	83 - 124
Methyl tert-butyl ether	20.0	19.76		ug/L		99	70 - 126
4-Methyl-2-pentanone (MIBK)	20.0	13.76		ug/L		69	59 - 118
Methylene Chloride	20.0	22.52		ug/L		113	75 - 121
Naphthalene	20.0	19.53		ug/L		98	67 - 123
N-Propylbenzene	20.0	21.67		ug/L		108	84 - 128
Styrene	20.0	21.27		ug/L		106	78 - 127
1,1,1,2-Tetrachloroethane	20.0	22.07		ug/L		110	91 - 118
1,1,2,2-Tetrachloroethane	20.0	21.24		ug/L		106	77 - 129
Tetrachloroethene	20.0	21.48		ug/L		107	85 - 116
Toluene	20.0	21.84		ug/L		109	88 - 109
1,2,3-Trichlorobenzene	20.0	21.16		ug/L		106	67 - 134
1,2,4-Trichlorobenzene	20.0	19.83		ug/L		99	78 - 133
1,3,5-Trichlorobenzene	20.0	21.95		ug/L		110	77 - 127
1,1,1-Trichloroethane	20.0	21.26		ug/L		106	83 - 124
1,1,2-Trichloroethane	20.0	22.96		ug/L		115	84 - 132
Trichloroethene	20.0	22.24		ug/L		111	74 - 118
Trichlorofluoromethane (Freon 11)	20.0	22.70		ug/L		114	82 - 126
1,2,3-Trichloropropane	20.0	20.45		ug/L		102	77 - 124
1,2,4-Trimethylbenzene	20.0	20.98		ug/L		105	89 - 126
1,3,5-Trimethylbenzene	20.0	21.09		ug/L		105	89 - 125
Vinyl chloride	20.0	19.29		ug/L		96	62 - 130
m-Xylene & p-Xylene	20.0	21.28		ug/L		106	85 - 123
o-Xylene	20.0	20.91		ug/L		105	85 - 119
Tetrahydrofuran	20.0	15.06		ug/L		75	60 - 133
Ethyl ether	20.0	19.91		ug/L		100	69 - 122
Tert-amyl methyl ether	20.0	19.36		ug/L		97	50 - 140
Ethyl tert-butyl ether	20.0	18.38		ug/L		92	60 - 131
di-Isopropyl ether	20.0	17.12		ug/L		86	67 - 125
tert-Butanol	200	161.0		ug/L		81	50 - 169

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 620-12054/4
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			200	172.1		ug/L		86	28 - 150		
trans-1,4-Dichloro-2-butene			20.0	15.79		ug/L		79	48 - 153		
Ethanol			400	379.1		ug/L		95	47 - 170		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 620-12054/5
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichlorotrifluoroethane (Freon 113)			20.0	24.10		ug/L		121	85 - 124	1	20
Acetone			20.0	14.12		ug/L		71	14 - 133	1	20
Acrylonitrile			20.0	19.04		ug/L		95	62 - 134	0	20
Benzene			20.0	21.87		ug/L		109	86 - 111	1	20
Bromobenzene			20.0	21.26		ug/L		106	82 - 120	0	20
Bromochloromethane			20.0	24.28		ug/L		121	83 - 123	2	20
Bromodichloromethane			20.0	20.86		ug/L		104	83 - 137	2	20
Bromoform			20.0	19.84		ug/L		99	91 - 137	1	20
Bromomethane			20.0	16.15		ug/L		81	29 - 148	5	20
2-Butanone (MEK)			20.0	15.83		ug/L		79	10 - 200	1	20
n-Butylbenzene			20.0	22.29		ug/L		111	85 - 138	2	20
sec-Butylbenzene			20.0	21.62		ug/L		108	75 - 118	2	20
tert-Butylbenzene			20.0	20.04		ug/L		100	85 - 122	0	20
Carbon disulfide			20.0	23.54		ug/L		118	69 - 150	1	20
Carbon tetrachloride			20.0	21.36		ug/L		107	84 - 123	0	20
Chlorobenzene			20.0	22.71		ug/L		114	93 - 115	0	20
Chloroethane			20.0	18.86		ug/L		94	56 - 155	2	20
Chloroform			20.0	21.09		ug/L		105	84 - 116	1	20
Chloromethane			20.0	18.70		ug/L		94	45 - 138	0	20
2-Chlorotoluene			20.0	21.35		ug/L		107	88 - 116	1	20
4-Chlorotoluene			20.0	21.20		ug/L		106	81 - 128	1	20
1,2-Dibromo-3-Chloropropane			20.0	17.44		ug/L		87	70 - 139	4	20
Dibromochloromethane			20.0	19.98		ug/L		100	83 - 132	1	20
1,2-Dibromoethane (EDB)			20.0	20.74		ug/L		104	82 - 125	2	20
Dibromomethane			20.0	20.90		ug/L		105	80 - 125	2	20
1,2-Dichlorobenzene			20.0	22.25		ug/L		111	84 - 128	1	20
1,3-Dichlorobenzene			20.0	21.17		ug/L		106	85 - 120	1	20
1,4-Dichlorobenzene			20.0	22.44		ug/L		112	86 - 116	3	20
Dichlorodifluoromethane (Freon 12)			20.0	20.82		ug/L		104	36 - 131	1	20
1,1-Dichloroethane			20.0	20.79		ug/L		104	81 - 120	1	20
1,2-Dichloroethane			20.0	18.86		ug/L		94	82 - 116	1	20
1,1-Dichloroethene			20.0	23.17		ug/L		116	83 - 120	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12054/5
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	22.54		ug/L		113	81 - 124	2	20
trans-1,2-Dichloroethene	20.0	23.63		ug/L		118	81 - 127	0	20
1,2-Dichloropropane	20.0	20.67		ug/L		103	76 - 132	1	20
1,3-Dichloropropane	20.0	20.97		ug/L		105	74 - 122	1	20
2,2-Dichloropropane	20.0	19.63		ug/L		98	77 - 130	1	20
1,1-Dichloropropene	20.0	22.08		ug/L		110	81 - 115	1	20
cis-1,3-Dichloropropene	20.0	20.10		ug/L		101	74 - 129	1	20
trans-1,3-Dichloropropene	20.0	20.49		ug/L		102	78 - 126	0	20
Ethylbenzene	20.0	22.75		ug/L		114	89 - 117	0	20
Hexachlorobutadiene	20.0	19.92		ug/L		100	77 - 118	4	20
2-Hexanone (MBK)	20.0	13.63		ug/L		68	37 - 123	2	20
Isopropylbenzene	20.0	21.81		ug/L		109	83 - 117	1	20
4-Isopropyltoluene	20.0	22.13		ug/L		111	83 - 124	1	20
Methyl tert-butyl ether	20.0	19.89		ug/L		99	70 - 126	1	20
4-Methyl-2-pentanone (MIBK)	20.0	13.57		ug/L		68	59 - 118	1	20
Methylene Chloride	20.0	22.75		ug/L		114	75 - 121	1	20
Naphthalene	20.0	18.90		ug/L		94	67 - 123	3	20
N-Propylbenzene	20.0	21.67		ug/L		108	84 - 128	0	20
Styrene	20.0	21.15		ug/L		106	78 - 127	1	20
1,1,1,2-Tetrachloroethane	20.0	22.13		ug/L		111	91 - 118	0	20
1,1,2,2-Tetrachloroethane	20.0	21.23		ug/L		106	77 - 129	0	20
Tetrachloroethene	20.0	21.75		ug/L		109	85 - 116	1	20
Toluene	20.0	21.30		ug/L		106	88 - 109	3	20
1,2,3-Trichlorobenzene	20.0	20.52		ug/L		103	67 - 134	3	20
1,2,4-Trichlorobenzene	20.0	19.71		ug/L		99	78 - 133	1	20
1,3,5-Trichlorobenzene	20.0	21.57		ug/L		108	77 - 127	2	20
1,1,1-Trichloroethane	20.0	21.31		ug/L		107	83 - 124	0	20
1,1,2-Trichloroethane	20.0	23.26		ug/L		116	84 - 132	1	20
Trichloroethene	20.0	21.85		ug/L		109	74 - 118	2	20
Trichlorofluoromethane (Freon 11)	20.0	22.41		ug/L		112	82 - 126	1	20
1,2,3-Trichloropropane	20.0	20.34		ug/L		102	77 - 124	1	20
1,2,4-Trimethylbenzene	20.0	20.89		ug/L		104	89 - 126	0	20
1,3,5-Trimethylbenzene	20.0	21.07		ug/L		105	89 - 125	0	20
Vinyl chloride	20.0	19.66		ug/L		98	62 - 130	2	20
m-Xylene & p-Xylene	20.0	21.47		ug/L		107	85 - 123	1	20
o-Xylene	20.0	20.72		ug/L		104	85 - 119	1	20
Tetrahydrofuran	20.0	14.88		ug/L		74	60 - 133	1	20
Ethyl ether	20.0	20.34		ug/L		102	69 - 122	2	20
Tert-amyl methyl ether	20.0	19.54		ug/L		98	50 - 140	1	20
Ethyl tert-butyl ether	20.0	18.48		ug/L		92	60 - 131	1	20
di-Isopropyl ether	20.0	17.12		ug/L		86	67 - 125	0	20
tert-Butanol	200	163.9		ug/L		82	50 - 169	2	20
1,4-Dioxane	200	165.0		ug/L		83	28 - 150	4	20
trans-1,4-Dichloro-2-butene	20.0	14.92		ug/L		75	48 - 153	6	20
Ethanol	400	360.8		ug/L		90	47 - 170	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 620-12054/5
Matrix: Water
Analysis Batch: 12054

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 620-11992/1-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11992

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
1,2,4-Trichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
1,2-Dichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
1,3-Dichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
1,4-Dichlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
1-Methylnaphthalene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,4,5-Trichlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,4,6-Trichlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,4-Dichlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,4-Dimethylphenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,4-Dinitrophenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,4-Dinitrotoluene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2,6-Dinitrotoluene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2-Chloronaphthalene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2-Chlorophenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2-Methylnaphthalene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2-Methylphenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2-Nitroaniline	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
2-Nitrophenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
3 & 4 Methylphenol	ND		10.0		ug/L		06/16/22 13:28	06/16/22 18:07	1
3,3'-Dichlorobenzidine	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
3-Nitroaniline	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4,6-Dinitro-2-methylphenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4-Bromophenyl phenyl ether	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4-Chloro-3-methylphenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4-Chloroaniline	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4-Chlorophenyl phenyl ether	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4-Nitroaniline	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
4-Nitrophenol	ND		20.0		ug/L		06/16/22 13:28	06/16/22 18:07	1
Acenaphthene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Acenaphthylene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Aniline	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Anthracene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Azobenzene/Diphenyldiazene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzidine	ND		10.0		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzo[a]anthracene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzo[a]pyrene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 620-11992/1-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11992

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzo[g,h,i]perylene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzo[k]fluoranthene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzoic acid	ND		10.0		ug/L		06/16/22 13:28	06/16/22 18:07	1
Benzyl alcohol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Bis(2-chloroethoxy)methane	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Bis(2-chloroethyl)ether	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
bis (2-chloroisopropyl) ether	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Bis(2-ethylhexyl) phthalate	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Butyl benzyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Carbazole	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Chrysene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Dibenz(a,h)anthracene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Dibenzofuran	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Diethyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Dimethyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Di-n-butyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Di-n-octyl phthalate	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Fluoranthene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Fluorene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Hexachlorobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Hexachlorobutadiene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Hexachlorocyclopentadiene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Hexachloroethane	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Indeno[1,2,3-cd]pyrene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Isophorone	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Naphthalene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Nitrobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
N-Nitrosodimethylamine	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
N-Nitrosodi-n-propylamine	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
N-Nitrosodiphenylamine	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Pentachloronitrobenzene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Pentachlorophenol	ND		20.0		ug/L		06/16/22 13:28	06/16/22 18:07	1
Phenanthrene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Phenol	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Pyrene	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1
Pyridine	ND		5.00		ug/L		06/16/22 13:28	06/16/22 18:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*30 - 130*	*06/16/22 13:28*	*06/16/22 18:07*	*1*
2-Fluorophenol (Surr)	*59*		*15 - 110*	*06/16/22 13:28*	*06/16/22 18:07*	*1*
Nitrobenzene-d5 (Surr)	*82*		*30 - 130*	*06/16/22 13:28*	*06/16/22 18:07*	*1*
Phenol-d5 (Surr)	*39*		*15 - 110*	*06/16/22 13:28*	*06/16/22 18:07*	*1*
2,4,6-Tribromophenol (Surr)	*83*		*15 - 110*	*06/16/22 13:28*	*06/16/22 18:07*	*1*
Terphenyl-d14 (Surr)	*101*		*30 - 130*	*06/16/22 13:28*	*06/16/22 18:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-11992/2-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	50.0	40.21		ug/L		80	40 - 140
1,2,4-Trichlorobenzene	50.0	36.56		ug/L		73	40 - 140
1,2-Dichlorobenzene	50.0	35.78		ug/L		72	40 - 140
1,3-Dichlorobenzene	50.0	33.66		ug/L		67	40 - 140
1,4-Dichlorobenzene	50.0	35.66		ug/L		71	40 - 140
1-Methylnaphthalene	50.0	41.13		ug/L		82	40 - 140
2,4,5-Trichlorophenol	50.0	42.16		ug/L		84	30 - 130
2,4,6-Trichlorophenol	50.0	41.14		ug/L		82	30 - 130
2,4-Dichlorophenol	50.0	37.07		ug/L		74	30 - 130
2,4-Dimethylphenol	50.0	34.32		ug/L		69	30 - 130
2,4-Dinitrophenol	50.0	27.10		ug/L		54	30 - 130
2,4-Dinitrotoluene	50.0	47.85		ug/L		96	40 - 140
2,6-Dinitrotoluene	50.0	47.30		ug/L		95	40 - 140
2-Chloronaphthalene	50.0	43.36		ug/L		87	40 - 140
2-Chlorophenol	50.0	32.81		ug/L		66	30 - 130
2-Methylnaphthalene	50.0	39.97		ug/L		80	40 - 140
2-Methylphenol	50.0	31.37		ug/L		63	30 - 130
2-Nitroaniline	50.0	42.99		ug/L		86	40 - 140
2-Nitrophenol	50.0	36.54		ug/L		73	30 - 130
3 & 4 Methylphenol	50.0	29.93		ug/L		60	30 - 130
3,3'-Dichlorobenzidine	50.0	104.6	E *+	ug/L		209	40 - 140
3-Nitroaniline	50.0	37.93		ug/L		76	40 - 140
4,6-Dinitro-2-methylphenol	50.0	37.42		ug/L		75	30 - 130
4-Bromophenyl phenyl ether	50.0	48.22		ug/L		96	40 - 140
4-Chloro-3-methylphenol	50.0	39.60		ug/L		79	30 - 130
4-Chloroaniline	50.0	27.62		ug/L		55	40 - 140
4-Chlorophenyl phenyl ether	50.0	50.64		ug/L		101	40 - 140
4-Nitroaniline	50.0	53.84		ug/L		108	40 - 140
4-Nitrophenol	50.0	29.85		ug/L		60	30 - 130
Acenaphthene	50.0	41.85		ug/L		84	40 - 140
Acenaphthylene	50.0	42.97		ug/L		86	40 - 140
Aniline	50.0	20.15		ug/L		40	40 - 140
Anthracene	50.0	49.39		ug/L		99	40 - 140
Azobenzene/Diphenyldiazene	50.0	46.73		ug/L		93	40 - 140
Benzidine	50.0	13.58	*-	ug/L		27	40 - 140
Benzo[a]anthracene	50.0	53.84		ug/L		108	40 - 140
Benzo[a]pyrene	50.0	50.06		ug/L		100	40 - 140
Benzo[b]fluoranthene	50.0	51.26		ug/L		103	40 - 140
Benzo[g,h,i]perylene	50.0	53.29		ug/L		107	40 - 140
Benzo[k]fluoranthene	50.0	58.69		ug/L		117	40 - 140
Benzoic acid	50.0	12.29	*-	ug/L		25	30 - 130
Benzyl alcohol	50.0	26.47		ug/L		53	40 - 140
Bis(2-chloroethoxy)methane	50.0	38.19		ug/L		76	40 - 140
Bis(2-chloroethyl)ether	50.0	42.25		ug/L		85	40 - 140
bis (2-chloroisopropyl) ether	50.0	41.95		ug/L		84	40 - 140
Bis(2-ethylhexyl) phthalate	50.0	50.85		ug/L		102	40 - 140
Butyl benzyl phthalate	50.0	50.82		ug/L		102	40 - 140
Carbazole	50.0	50.90		ug/L		102	40 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 620-11992/2-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chrysene	50.0	51.83		ug/L		104	40 - 140
Dibenz(a,h)anthracene	50.0	52.04		ug/L		104	40 - 140
Dibenzofuran	50.0	44.24		ug/L		88	40 - 140
Diethyl phthalate	50.0	47.22		ug/L		94	40 - 140
Dimethyl phthalate	50.0	42.09		ug/L		84	40 - 140
Di-n-butyl phthalate	50.0	49.73		ug/L		99	40 - 140
Di-n-octyl phthalate	50.0	51.81		ug/L		104	40 - 140
Fluoranthene	50.0	52.06		ug/L		104	40 - 140
Fluorene	50.0	47.83		ug/L		96	40 - 140
Hexachlorobenzene	50.0	46.76		ug/L		94	40 - 140
Hexachlorobutadiene	50.0	34.27		ug/L		69	40 - 140
Hexachlorocyclopentadiene	50.0	23.09		ug/L		46	40 - 140
Hexachloroethane	50.0	36.78		ug/L		74	40 - 140
Indeno[1,2,3-cd]pyrene	50.0	52.63		ug/L		105	40 - 140
Isophorone	50.0	35.37		ug/L		71	40 - 140
Naphthalene	50.0	38.15		ug/L		76	40 - 140
Nitrobenzene	50.0	42.75		ug/L		85	40 - 140
N-Nitrosodimethylamine	50.0	23.57		ug/L		47	40 - 140
N-Nitrosodi-n-propylamine	50.0	40.42		ug/L		81	40 - 140
N-Nitrosodiphenylamine	50.0	48.20		ug/L		96	40 - 140
Pentachloronitrobenzene	50.0	52.71		ug/L		105	40 - 140
Pentachlorophenol	50.0	26.48		ug/L		53	30 - 130
Phenanthrene	50.0	48.01		ug/L		96	40 - 140
Phenol	50.0	16.30	*-	ug/L		33	40 - 140
Pyrene	50.0	48.33		ug/L		97	40 - 140
Pyridine	50.0	22.67		ug/L		45	40 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*80*		*30 - 130*
2-Fluorophenol (Surr)	*49*		*15 - 110*
Nitrobenzene-d5 (Surr)	*78*		*30 - 130*
Phenol-d5 (Surr)	*38*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*93*		*15 - 110*
Terphenyl-d14 (Surr)	*100*		*30 - 130*

Lab Sample ID: LCSD 620-11992/3-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11992

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	50.0	45.51		ug/L		91	40 - 140	12	20
1,2,4-Trichlorobenzene	50.0	42.02		ug/L		84	40 - 140	14	20
1,2-Dichlorobenzene	50.0	40.36		ug/L		81	40 - 140	12	20
1,3-Dichlorobenzene	50.0	38.53		ug/L		77	40 - 140	13	20
1,4-Dichlorobenzene	50.0	39.47		ug/L		79	40 - 140	10	20
1-Methylnaphthalene	50.0	46.45		ug/L		93	40 - 140	12	20
2,4,5-Trichlorophenol	50.0	44.33		ug/L		89	30 - 130	5	20
2,4,6-Trichlorophenol	50.0	45.69		ug/L		91	30 - 130	10	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-11992/3-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11992

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dichlorophenol			50.0	42.07		ug/L		84	30 - 130	13	20
2,4-Dimethylphenol			50.0	38.75		ug/L		78	30 - 130	12	20
2,4-Dinitrophenol			50.0	32.21		ug/L		64	30 - 130	17	20
2,4-Dinitrotoluene			50.0	49.33		ug/L		99	40 - 140	3	20
2,6-Dinitrotoluene			50.0	49.63		ug/L		99	40 - 140	5	20
2-Chloronaphthalene			50.0	47.96		ug/L		96	40 - 140	10	20
2-Chlorophenol			50.0	37.58		ug/L		75	30 - 130	14	20
2-Methylnaphthalene			50.0	45.11		ug/L		90	40 - 140	12	20
2-Methylphenol			50.0	35.44		ug/L		71	30 - 130	12	20
2-Nitroaniline			50.0	46.39		ug/L		93	40 - 140	8	20
2-Nitrophenol			50.0	42.05		ug/L		84	30 - 130	14	20
3 & 4 Methylphenol			50.0	33.69		ug/L		67	30 - 130	12	20
3,3'-Dichlorobenzidine			50.0	NQ	E	ug/L		NaN	40 - 140	NaN	20
3-Nitroaniline			50.0	39.82		ug/L		80	40 - 140	5	20
4,6-Dinitro-2-methylphenol			50.0	41.21		ug/L		82	30 - 130	10	20
4-Bromophenyl phenyl ether			50.0	50.38		ug/L		101	40 - 140	4	20
4-Chloro-3-methylphenol			50.0	43.25		ug/L		87	30 - 130	9	20
4-Chloroaniline			50.0	30.26		ug/L		61	40 - 140	9	20
4-Chlorophenyl phenyl ether			50.0	52.14		ug/L		104	40 - 140	3	20
4-Nitroaniline			50.0	55.52		ug/L		111	40 - 140	3	20
4-Nitrophenol			50.0	29.81		ug/L		60	30 - 130	0	20
Acenaphthene			50.0	45.85		ug/L		92	40 - 140	9	20
Acenaphthylene			50.0	47.18		ug/L		94	40 - 140	9	20
Aniline			50.0	22.87		ug/L		46	40 - 140	13	20
Anthracene			50.0	51.14		ug/L		102	40 - 140	3	20
Azobenzene/Diphenyldiazene			50.0	48.92		ug/L		98	40 - 140	5	20
Benzidine			50.0	18.80	*- *1	ug/L		38	40 - 140	32	20
Benzo[a]anthracene			50.0	55.26		ug/L		111	40 - 140	3	20
Benzo[a]pyrene			50.0	52.14		ug/L		104	40 - 140	4	20
Benzo[b]fluoranthene			50.0	56.06		ug/L		112	40 - 140	9	20
Benzo[g,h,i]perylene			50.0	55.20		ug/L		110	40 - 140	4	20
Benzo[k]fluoranthene			50.0	53.29		ug/L		107	40 - 140	10	20
Benzoic acid			50.0	13.67	*-	ug/L		27	30 - 130	11	20
Benzyl alcohol			50.0	30.22		ug/L		60	40 - 140	13	20
Bis(2-chloroethoxy)methane			50.0	43.55		ug/L		87	40 - 140	13	20
Bis(2-chloroethyl)ether			50.0	49.16		ug/L		98	40 - 140	15	20
bis (2-chloroisopropyl) ether			50.0	47.04		ug/L		94	40 - 140	11	20
Bis(2-ethylhexyl) phthalate			50.0	52.79		ug/L		106	40 - 140	4	20
Butyl benzyl phthalate			50.0	52.80		ug/L		106	40 - 140	4	20
Carbazole			50.0	51.79		ug/L		104	40 - 140	2	20
Chrysene			50.0	53.71		ug/L		107	40 - 140	4	20
Dibenz(a,h)anthracene			50.0	53.89		ug/L		108	40 - 140	3	20
Dibenzofuran			50.0	48.19		ug/L		96	40 - 140	9	20
Diethyl phthalate			50.0	48.82		ug/L		98	40 - 140	3	20
Dimethyl phthalate			50.0	43.56		ug/L		87	40 - 140	3	20
Di-n-butyl phthalate			50.0	50.78		ug/L		102	40 - 140	2	20
Di-n-octyl phthalate			50.0	53.97		ug/L		108	40 - 140	4	20
Fluoranthene			50.0	53.90		ug/L		108	40 - 140	3	20
Fluorene			50.0	49.68		ug/L		99	40 - 140	4	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 620-11992/3-A
Matrix: Water
Analysis Batch: 11959

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11992

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorobenzene			50.0	47.82		ug/L		96	40 - 140	2	20
Hexachlorobutadiene			50.0	38.93		ug/L		78	40 - 140	13	20
Hexachlorocyclopentadiene			50.0	30.91	*1	ug/L		62	40 - 140	29	20
Hexachloroethane			50.0	41.37		ug/L		83	40 - 140	12	20
Indeno[1,2,3-cd]pyrene			50.0	54.83		ug/L		110	40 - 140	4	20
Isophorone			50.0	39.95		ug/L		80	40 - 140	12	20
Naphthalene			50.0	43.12		ug/L		86	40 - 140	12	20
Nitrobenzene			50.0	52.60	*1	ug/L		105	40 - 140	21	20
N-Nitrosodimethylamine			50.0	26.04		ug/L		52	40 - 140	10	20
N-Nitrosodi-n-propylamine			50.0	45.75		ug/L		91	40 - 140	12	20
N-Nitrosodiphenylamine			50.0	49.86		ug/L		100	40 - 140	3	20
Pentachloronitrobenzene			50.0	54.61		ug/L		109	40 - 140	4	20
Pentachlorophenol			50.0	28.03		ug/L		56	30 - 130	6	20
Phenanthrene			50.0	49.19		ug/L		98	40 - 140	2	20
Phenol			50.0	17.94	*-	ug/L		36	40 - 140	10	20
Pyrene			50.0	50.38		ug/L		101	40 - 140	4	20
Pyridine			50.0	27.68		ug/L		55	40 - 140	20	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*90*		*30 - 130*
2-Fluorophenol (Surr)	*57*		*15 - 110*
Nitrobenzene-d5 (Surr)	*88*		*30 - 130*
Phenol-d5 (Surr)	*41*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*97*		*15 - 110*
Terphenyl-d14 (Surr)	*103*		*30 - 130*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 620-11993/1-A
Matrix: Water
Analysis Batch: 11979

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11993

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1221	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1232	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1242	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1248	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1254	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1260	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1262	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1
PCB-1268	ND		0.250		ug/L		06/16/22 13:46	06/16/22 18:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*30 - 150*	*06/16/22 13:46*	*06/16/22 18:22*	*1*
DCB Decachlorobiphenyl (Surr)	*114*		*30 - 150*	*06/16/22 13:46*	*06/16/22 18:22*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 620-11993/2-A
Matrix: Water
Analysis Batch: 11979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11993

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			2.50	2.276		ug/L		91	40 - 132		
PCB-1260			2.50	2.791		ug/L		112	44 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*116*		*30 - 150*

Lab Sample ID: LCSD 620-11993/3-A
Matrix: Water
Analysis Batch: 11979

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11993

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			2.50	2.476		ug/L		99	40 - 132	8	20
PCB-1260			2.50	2.984		ug/L		119	44 - 140	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*30 - 150*
DCB Decachlorobiphenyl (Surr)	*125*		*30 - 150*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-270935/5
Matrix: Water
Analysis Batch: 270935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.400		mg/L			06/30/22 02:49	1

Lab Sample ID: LCS 410-270935/3
Matrix: Water
Analysis Batch: 270935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			3.00	2.907		mg/L		97	90 - 110		

Lab Sample ID: LCSD 410-270935/4
Matrix: Water
Analysis Batch: 270935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			3.00	2.897		mg/L		97	90 - 110	0	20

Lab Sample ID: 620-5103-1 MS
Matrix: Water
Analysis Batch: 270935

Client Sample ID: MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		10.0	10.74		mg/L		107	90 - 110		

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 620-5103-1 DU
Matrix: Water
Analysis Batch: 270935

Client Sample ID: MW-1R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	ND			ND		mg/L				NC	15

Lab Sample ID: MB 410-270964/5
Matrix: Water
Analysis Batch: 270964

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.400		mg/L			06/29/22 16:04	1

Lab Sample ID: LCS 410-270964/3
Matrix: Water
Analysis Batch: 270964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			3.00	2.903		mg/L		97	90 - 110		

Lab Sample ID: LCSD 410-270964/4
Matrix: Water
Analysis Batch: 270964

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			3.00	2.951		mg/L		98	90 - 110	2	20

Lab Sample ID: 620-5103-7 MS
Matrix: Water
Analysis Batch: 270964

Client Sample ID: MW-4D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2.11		10.0	11.56		mg/L		95	90 - 110		

Lab Sample ID: 620-5103-7 DU
Matrix: Water
Analysis Batch: 270964

Client Sample ID: MW-4D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	2.11			2.144		mg/L				2	15

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-266861/1-A
Matrix: Water
Analysis Batch: 268222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266861

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		3.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
NMeFOSAA	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorobutanoic acid	ND		5.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorodecanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorodecanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-266861/1-A
Matrix: Water
Analysis Batch: 268222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266861

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluoroheptanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluoroheptanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorohexanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorononanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorononanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorooctanesulfonamide	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorooctanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluoropentanesulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluoropentanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluorotridecanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
Perfluoroundecanoic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
6:2 Fluorotelomer sulfonic acid	ND		5.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
8:2 Fluorotelomer sulfonic acid	ND		3.00		ng/L		06/17/22 15:17	06/23/22 06:17	1
4:2 Fluorotelomer sulfonic acid	ND		2.00		ng/L		06/17/22 15:17	06/23/22 06:17	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*116*		*10 - 200*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
M2-6:2 FTS	*93*		*17 - 200*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
M2-8:2 FTS	*88*		*33 - 200*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C2 PFTeDA	*93*		*10 - 179*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C3 HFPO-DA	*86*		*17 - 185*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C3 PFBS	*94*		*16 - 200*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C4 PFBA	*94*		*42 - 165*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C4 PFHpA	*103*		*31 - 182*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C5 PFPeA	*99*		*38 - 187*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C8 PFOA	*100*		*48 - 162*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C8 PFOS	*95*		*51 - 159*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
d3-NMeFOSAA	*97*		*31 - 174*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
d5-NEtFOSAA	*99*		*29 - 195*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
d9-N-EtFOSE-M	*78*		*10 - 177*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C3 PFHxS	*101*		*28 - 188*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C5 PFHxA	*101*		*24 - 179*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C6 PFDA	*102*		*49 - 163*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C7 PFUnA	*102*		*34 - 174*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
d3-NMePFOSA	*35*		*10 - 155*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
d5-NEtPFOSA	*45*		*10 - 159*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C8 FOSA	*72*		*10 - 168*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C2-PFDoDA	*98*		*17 - 176*	*06/17/22 15:17*	*06/23/22 06:17*	*1*
13C9 PFNA	*95*		*51 - 167*	*06/17/22 15:17*	*06/23/22 06:17*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-266861/2-A
Matrix: Water
Analysis Batch: 268222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
NEtFOSAA	25.6	21.37		ng/L		83	55 - 134
NMeFOSAA	25.6	24.41		ng/L		95	59 - 140
Perfluorobutanesulfonic acid	22.7	20.69		ng/L		91	53 - 138
Perfluorobutanoic acid	25.6	22.28		ng/L		87	59 - 136
Perfluorodecanesulfonic acid	24.7	18.71		ng/L		76	55 - 137
Perfluorodecanoic acid	25.6	22.44		ng/L		88	56 - 138
Perfluorododecanoic acid	25.6	20.63		ng/L		81	59 - 143
Perfluoroheptanesulfonic acid	24.4	19.94		ng/L		82	56 - 140
Perfluoroheptanoic acid	25.6	24.06		ng/L		94	59 - 145
Perfluorohexanesulfonic acid	23.3	19.99		ng/L		86	58 - 134
Perfluorohexanoic acid	25.6	24.35		ng/L		95	58 - 139
Perfluorononanesulfonic acid	24.6	18.43		ng/L		75	59 - 136
Perfluorononanoic acid	25.6	22.36		ng/L		87	61 - 139
Perfluorooctanesulfonamide	25.6	23.42		ng/L		92	43 - 167
Perfluorooctanesulfonic acid	23.7	21.48		ng/L		91	45 - 150
Perfluorooctanoic acid	25.6	23.24		ng/L		91	51 - 145
Perfluoropentanesulfonic acid	24.0	21.67		ng/L		90	55 - 140
Perfluoropentanoic acid	25.6	21.35		ng/L		83	57 - 141
Perfluorotetradecanoic acid	25.6	24.34		ng/L		95	62 - 139
Perfluorotridecanoic acid	25.6	21.36		ng/L		83	58 - 146
Perfluoroundecanoic acid	25.6	22.52		ng/L		88	60 - 141
6:2 Fluorotelomer sulfonic acid	24.3	22.10		ng/L		91	28 - 173
8:2 Fluorotelomer sulfonic acid	24.5	20.94		ng/L		85	55 - 138
4:2 Fluorotelomer sulfonic acid	23.9	17.24		ng/L		72	55 - 139

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*123*		*10 - 200*
M2-6:2 FTS	*90*		*17 - 200*
M2-8:2 FTS	*90*		*33 - 200*
13C2 PFTeDA	*94*		*10 - 179*
13C3 HFPO-DA	*85*		*17 - 185*
13C3 PFBS	*96*		*16 - 200*
13C4 PFBA	*95*		*42 - 165*
13C4 PFHpA	*95*		*31 - 182*
13C5 PFPeA	*96*		*38 - 187*
13C8 PFOA	*101*		*48 - 162*
13C8 PFOS	*95*		*51 - 159*
d3-NMeFOSAA	*87*		*31 - 174*
d5-NEtFOSAA	*99*		*29 - 195*
d9-N-EtFOSE-M	*68*		*10 - 177*
13C3 PFHxS	*97*		*28 - 188*
13C5 PFHxA	*94*		*24 - 179*
13C6 PFDA	*97*		*49 - 163*
13C7 PFUnA	*100*		*34 - 174*
d3-NMePFOSA	*29*		*10 - 155*
d5-NEtPFOSA	*39*		*10 - 159*
13C8 FOSA	*65*		*10 - 168*
13C2-PFDoDA	*95*		*17 - 176*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-266861/2-A
Matrix: Water
Analysis Batch: 268222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266861

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C9 PFNA	97		51 - 167

Lab Sample ID: LCSD 410-266861/3-A
Matrix: Water
Analysis Batch: 268222

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 266861

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSAA			25.6	23.36		ng/L		91	55 - 134	9	30
NMeFOSAA			25.6	20.89		ng/L		82	59 - 140	16	30
Perfluorobutanesulfonic acid			22.7	20.89		ng/L		92	53 - 138	1	30
Perfluorobutanoic acid			25.6	22.70		ng/L		89	59 - 136	2	30
Perfluorodecanesulfonic acid			24.7	18.60		ng/L		75	55 - 137	1	30
Perfluorodecanoic acid			25.6	21.67		ng/L		85	56 - 138	3	30
Perfluorododecanoic acid			25.6	20.17		ng/L		79	59 - 143	2	30
Perfluoroheptanesulfonic acid			24.4	19.98		ng/L		82	56 - 140	0	30
Perfluoroheptanoic acid			25.6	22.78		ng/L		89	59 - 145	5	30
Perfluorohexanesulfonic acid			23.3	20.19		ng/L		86	58 - 134	1	30
Perfluorohexanoic acid			25.6	24.39		ng/L		95	58 - 139	0	30
Perfluorononanesulfonic acid			24.6	18.57		ng/L		76	59 - 136	1	30
Perfluorononanoic acid			25.6	23.05		ng/L		90	61 - 139	3	30
Perfluorooctanesulfonamide			25.6	22.52		ng/L		88	43 - 167	4	30
Perfluorooctanesulfonic acid			23.7	21.98		ng/L		93	45 - 150	2	30
Perfluorooctanoic acid			25.6	24.48		ng/L		96	51 - 145	5	30
Perfluoropentanesulfonic acid			24.0	20.73		ng/L		86	55 - 140	4	30
Perfluoropentanoic acid			25.6	21.67		ng/L		85	57 - 141	1	30
Perfluorotetradecanoic acid			25.6	24.88		ng/L		97	62 - 139	2	30
Perfluorotridecanoic acid			25.6	24.32		ng/L		95	58 - 146	13	30
Perfluoroundecanoic acid			25.6	21.98		ng/L		86	60 - 141	2	30
6:2 Fluorotelomer sulfonic acid			24.3	21.53		ng/L		89	28 - 173	3	30
8:2 Fluorotelomer sulfonic acid			24.5	21.92		ng/L		89	55 - 138	5	30
4:2 Fluorotelomer sulfonic acid			23.9	20.80		ng/L		87	55 - 139	19	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
M2-4:2 FTS	123		10 - 200
M2-6:2 FTS	93		17 - 200
M2-8:2 FTS	98		33 - 200
13C2 PFTeDA	95		10 - 179
13C3 HFPO-DA	83		17 - 185
13C3 PFBS	101		16 - 200
13C4 PFBA	96		42 - 165
13C4 PFHpA	105		31 - 182
13C5 PFPeA	100		38 - 187
13C8 PFOA	99		48 - 162
13C8 PFOS	108		51 - 159
d3-NMeFOSAA	107		31 - 174
d5-NEtFOSAA	101		29 - 195
d9-N-EtFOSE-M	79		10 - 177
13C3 PFHxS	104		28 - 188
13C5 PFHxA	99		24 - 179

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-266861/3-A
Matrix: Water
Analysis Batch: 268222

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 266861

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C6 PFDA	107		49 - 163
13C7 PFUnA	105		34 - 174
d3-NMePFOSA	36		10 - 155
d5-NEtPFOSA	44		10 - 159
13C8 FOSA	76		10 - 168
13C2-PFDoDA	98		17 - 176
13C9 PFNA	108		51 - 167

Lab Sample ID: MB 410-267221/1-A
Matrix: Water
Analysis Batch: 268501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267221

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		3.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
NMeFOSAA	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorobutanoic acid	ND		5.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorodecanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorodecanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorododecanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluoroheptanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluoroheptanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorohexanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorononanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorononanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorooctanesulfonamide	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorooctanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluoropentanesulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluoropentanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluorotridecanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
Perfluoroundecanoic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
6:2 Fluorotelomer sulfonic acid	ND		5.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
8:2 Fluorotelomer sulfonic acid	ND		3.00		ng/L		06/20/22 08:46	06/23/22 15:58	1
4:2 Fluorotelomer sulfonic acid	ND		2.00		ng/L		06/20/22 08:46	06/23/22 15:58	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-4:2 FTS	82		10 - 200	06/20/22 08:46	06/23/22 15:58	1
M2-6:2 FTS	72		17 - 200	06/20/22 08:46	06/23/22 15:58	1
M2-8:2 FTS	73		33 - 200	06/20/22 08:46	06/23/22 15:58	1
13C2 PFTeDA	83		10 - 179	06/20/22 08:46	06/23/22 15:58	1
13C3 HFPO-DA	94		17 - 185	06/20/22 08:46	06/23/22 15:58	1
13C3 PFBS	78		16 - 200	06/20/22 08:46	06/23/22 15:58	1
13C4 PFBA	80		42 - 165	06/20/22 08:46	06/23/22 15:58	1
13C4 PFHpA	84		31 - 182	06/20/22 08:46	06/23/22 15:58	1
13C5 PFPeA	80		38 - 187	06/20/22 08:46	06/23/22 15:58	1
13C8 PFOA	83		48 - 162	06/20/22 08:46	06/23/22 15:58	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-267221/1-A
Matrix: Water
Analysis Batch: 268501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267221

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	80		51 - 159	06/20/22 08:46	06/23/22 15:58	1
d3-NMeFOSAA	83		31 - 174	06/20/22 08:46	06/23/22 15:58	1
d5-NEtFOSAA	82		29 - 195	06/20/22 08:46	06/23/22 15:58	1
d9-N-EtFOSE-M	67		10 - 177	06/20/22 08:46	06/23/22 15:58	1
13C3 PFHxS	82		28 - 188	06/20/22 08:46	06/23/22 15:58	1
13C5 PFHxA	81		24 - 179	06/20/22 08:46	06/23/22 15:58	1
13C6 PFDA	77		49 - 163	06/20/22 08:46	06/23/22 15:58	1
13C7 PFUnA	79		34 - 174	06/20/22 08:46	06/23/22 15:58	1
d3-NMePFOSA	41		10 - 155	06/20/22 08:46	06/23/22 15:58	1
d5-NEtPFOSA	48		10 - 159	06/20/22 08:46	06/23/22 15:58	1
13C8 FOSA	65		10 - 168	06/20/22 08:46	06/23/22 15:58	1
13C2-PFDoDA	79		17 - 176	06/20/22 08:46	06/23/22 15:58	1
13C9 PFNA	84		51 - 167	06/20/22 08:46	06/23/22 15:58	1

Lab Sample ID: LCS 410-267221/2-A
Matrix: Water
Analysis Batch: 268501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267221

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
NEtFOSAA	25.6	30.29		ng/L		118	55 - 134
NMeFOSAA	25.6	29.59		ng/L		116	59 - 140
Perfluorobutanesulfonic acid	22.7	25.21		ng/L		111	53 - 138
Perfluorobutanoic acid	25.6	26.68		ng/L		104	59 - 136
Perfluorodecanesulfonic acid	24.7	24.04		ng/L		97	55 - 137
Perfluorodecanoic acid	25.6	29.21		ng/L		114	56 - 138
Perfluorododecanoic acid	25.6	25.87		ng/L		101	59 - 143
Perfluoroheptanesulfonic acid	24.4	24.60		ng/L		101	56 - 140
Perfluoroheptanoic acid	25.6	28.24		ng/L		110	59 - 145
Perfluorohexanesulfonic acid	23.3	24.74		ng/L		106	58 - 134
Perfluorohexanoic acid	25.6	28.03		ng/L		110	58 - 139
Perfluorononanesulfonic acid	24.6	23.41		ng/L		95	59 - 136
Perfluorononanoic acid	25.6	28.34		ng/L		111	61 - 139
Perfluorooctanesulfonamide	25.6	26.15		ng/L		102	43 - 167
Perfluorooctanesulfonic acid	23.7	26.27		ng/L		111	45 - 150
Perfluorooctanoic acid	25.6	28.40		ng/L		111	51 - 145
Perfluoropentanesulfonic acid	24.0	25.20		ng/L		105	55 - 140
Perfluoropentanoic acid	25.6	26.08		ng/L		102	57 - 141
Perfluorotetradecanoic acid	25.6	26.97		ng/L		105	62 - 139
Perfluorotridecanoic acid	25.6	25.37		ng/L		99	58 - 146
Perfluoroundecanoic acid	25.6	28.47		ng/L		111	60 - 141
6:2 Fluorotelomer sulfonic acid	24.3	27.27		ng/L		112	28 - 173
8:2 Fluorotelomer sulfonic acid	24.5	26.84		ng/L		109	55 - 138
4:2 Fluorotelomer sulfonic acid	23.9	23.03		ng/L		96	55 - 139

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-4:2 FTS	96		10 - 200
M2-6:2 FTS	83		17 - 200
M2-8:2 FTS	82		33 - 200
13C2 PFTeDA	101		10 - 179

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-267221/2-A
Matrix: Water
Analysis Batch: 268501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267221

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3 HFPO-DA	101		17 - 185
13C3 PFBS	83		16 - 200
13C4 PFBA	84		42 - 165
13C4 PFHpA	89		31 - 182
13C5 PFPeA	82		38 - 187
13C8 PFOA	88		48 - 162
13C8 PFOS	85		51 - 159
d3-NMeFOSAA	90		31 - 174
d5-NEtFOSAA	90		29 - 195
d9-N-EtFOSE-M	68		10 - 177
13C3 PFHxS	89		28 - 188
13C5 PFHxA	90		24 - 179
13C6 PFDA	87		49 - 163
13C7 PFUnA	87		34 - 174
d3-NMePFOSA	48		10 - 155
d5-NEtPFOSA	53		10 - 159
13C8 FOSA	75		10 - 168
13C2-PFDoDA	94		17 - 176
13C9 PFNA	84		51 - 167

Lab Sample ID: LCSD 410-267221/3-A
Matrix: Water
Analysis Batch: 268501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 267221

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSAA			25.6	29.57		ng/L		115	55 - 134	2	30
NMeFOSAA			25.6	29.90		ng/L		117	59 - 140	1	30
Perfluorobutanesulfonic acid			22.7	24.75		ng/L		109	53 - 138	2	30
Perfluorobutanoic acid			25.6	26.26		ng/L		103	59 - 136	2	30
Perfluorodecanesulfonic acid			24.7	23.56		ng/L		95	55 - 137	2	30
Perfluorodecanoic acid			25.6	28.43		ng/L		111	56 - 138	3	30
Perfluorododecanoic acid			25.6	25.60		ng/L		100	59 - 143	1	30
Perfluoroheptanesulfonic acid			24.4	24.38		ng/L		100	56 - 140	1	30
Perfluoroheptanoic acid			25.6	27.80		ng/L		109	59 - 145	2	30
Perfluorohexanesulfonic acid			23.3	24.25		ng/L		104	58 - 134	2	30
Perfluorohexanoic acid			25.6	27.99		ng/L		109	58 - 139	0	30
Perfluorononanesulfonic acid			24.6	23.48		ng/L		96	59 - 136	0	30
Perfluorononanoic acid			25.6	27.40		ng/L		107	61 - 139	3	30
Perfluorooctanesulfonamide			25.6	27.11		ng/L		106	43 - 167	4	30
Perfluorooctanesulfonic acid			23.7	25.36		ng/L		107	45 - 150	4	30
Perfluorooctanoic acid			25.6	27.61		ng/L		108	51 - 145	3	30
Perfluoropentanesulfonic acid			24.0	25.46		ng/L		106	55 - 140	1	30
Perfluoropentanoic acid			25.6	24.99		ng/L		98	57 - 141	4	30
Perfluorotetradecanoic acid			25.6	28.10		ng/L		110	62 - 139	4	30
Perfluorotridecanoic acid			25.6	25.89		ng/L		101	58 - 146	2	30
Perfluoroundecanoic acid			25.6	29.26		ng/L		114	60 - 141	3	30
6:2 Fluorotelomer sulfonic acid			24.3	27.98		ng/L		115	28 - 173	3	30
8:2 Fluorotelomer sulfonic acid			24.5	25.59		ng/L		104	55 - 138	5	30
4:2 Fluorotelomer sulfonic acid			23.9	24.08		ng/L		101	55 - 139	4	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
M2-4:2 FTS	91		10 - 200
M2-6:2 FTS	82		17 - 200
M2-8:2 FTS	85		33 - 200
13C2 PFTeDA	94		10 - 179
13C3 HFPO-DA	91		17 - 185
13C3 PFBS	86		16 - 200
13C4 PFBA	87		42 - 165
13C4 PFHpA	85		31 - 182
13C5 PFPeA	85		38 - 187
13C8 PFOA	87		48 - 162
13C8 PFOS	87		51 - 159
d3-NMeFOSAA	93		31 - 174
d5-NEtFOSAA	98		29 - 195
d9-N-EtFOSE-M	79		10 - 177
13C3 PFHxS	90		28 - 188
13C5 PFHxA	86		24 - 179
13C6 PFDA	91		49 - 163
13C7 PFUnA	91		34 - 174
d3-NMePFOSA	49		10 - 155
d5-NEtPFOSA	57		10 - 159
13C8 FOSA	76		10 - 168
13C2-PFDoDA	92		17 - 176
13C9 PFNA	87		51 - 167

Lab Sample ID: MB 410-268456/1-A
Matrix: Water
Analysis Batch: 269114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268456

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		3.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
NMeFOSAA	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorobutanoic acid	ND		5.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorodecanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorodecanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorododecanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluoroheptanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluoroheptanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorohexanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorononanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorononanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorooctanesulfonamide	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorooctanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluoropentanesulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluoropentanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluorotridecanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
Perfluoroundecanoic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
6:2 Fluorotelomer sulfonic acid	ND		5.00		ng/L		06/23/22 08:08	06/25/22 07:53	1
8:2 Fluorotelomer sulfonic acid	ND		3.00		ng/L		06/23/22 08:08	06/25/22 07:53	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-268456/1-A
Matrix: Water
Analysis Batch: 269114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268456

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4:2 Fluorotelomer sulfonic acid	ND		2.00		ng/L		06/23/22 08:08	06/25/22 07:53	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*99*		*10 - 200*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
M2-6:2 FTS	*87*		*17 - 200*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
M2-8:2 FTS	*97*		*33 - 200*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C2 PFTeDA	*101*		*10 - 179*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C3 HFPO-DA	*84*		*17 - 185*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C3 PFBS	*100*		*16 - 200*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C4 PFBA	*101*		*42 - 165*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C4 PFHpA	*100*		*31 - 182*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C5 PFPeA	*107*		*38 - 187*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C8 PFOA	*99*		*48 - 162*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C8 PFOS	*101*		*51 - 159*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
d3-NMeFOSAA	*103*		*31 - 174*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
d5-NEtFOSAA	*102*		*29 - 195*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
d9-N-EtFOSE-M	*95*		*10 - 177*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C3 PFHxS	*104*		*28 - 188*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C5 PFHxA	*98*		*24 - 179*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C6 PFDA	*100*		*49 - 163*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C7 PFUnA	*101*		*34 - 174*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
d3-NMePFOSA	*67*		*10 - 155*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
d5-NEtPFOSA	*73*		*10 - 159*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C8 FOSA	*99*		*10 - 168*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C2-PFDoDA	*103*		*17 - 176*	*06/23/22 08:08*	*06/25/22 07:53*	*1*
13C9 PFNA	*93*		*51 - 167*	*06/23/22 08:08*	*06/25/22 07:53*	*1*

Lab Sample ID: LCS 410-268456/3-A
Matrix: Water
Analysis Batch: 269114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268456

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
NEtFOSAA	25.6	23.86		ng/L		93	55 - 134
NMeFOSAA	25.6	22.42		ng/L		88	59 - 140
Perfluorobutanesulfonic acid	22.7	21.92		ng/L		97	53 - 138
Perfluorobutanoic acid	25.6	22.64		ng/L		88	59 - 136
Perfluorodecanesulfonic acid	24.7	18.88		ng/L		76	55 - 137
Perfluorodecanoic acid	25.6	23.84		ng/L		93	56 - 138
Perfluorododecanoic acid	25.6	23.75		ng/L		93	59 - 143
Perfluoroheptanesulfonic acid	24.4	21.36		ng/L		88	56 - 140
Perfluoroheptanoic acid	25.6	24.40		ng/L		95	59 - 145
Perfluorohexanesulfonic acid	23.3	21.31		ng/L		91	58 - 134
Perfluorohexanoic acid	25.6	23.76		ng/L		93	58 - 139
Perfluorononanesulfonic acid	24.6	19.49		ng/L		79	59 - 136
Perfluorononanoic acid	25.6	23.57		ng/L		92	61 - 139
Perfluorooctanesulfonamide	25.6	24.24		ng/L		95	43 - 167
Perfluorooctanesulfonic acid	23.7	21.97		ng/L		93	45 - 150
Perfluorooctanoic acid	25.6	26.81		ng/L		105	51 - 145
Perfluoropentanesulfonic acid	24.0	24.60		ng/L		102	55 - 140

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-268456/3-A
Matrix: Water
Analysis Batch: 269114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268456

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluoropentanoic acid			25.6	22.52		ng/L		88	57 - 141		
Perfluorotetradecanoic acid			25.6	23.78		ng/L		93	62 - 139		
Perfluorotridecanoic acid			25.6	23.10		ng/L		90	58 - 146		
Perfluoroundecanoic acid			25.6	26.37		ng/L		103	60 - 141		
6:2 Fluorotelomer sulfonic acid			24.3	23.10		ng/L		95	28 - 173		
8:2 Fluorotelomer sulfonic acid			24.5	20.57		ng/L		84	55 - 138		
4:2 Fluorotelomer sulfonic acid			23.9	21.08		ng/L		88	55 - 139		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*112*		*10 - 200*
M2-6:2 FTS	*97*		*17 - 200*
M2-8:2 FTS	*105*		*33 - 200*
13C2 PFTeDA	*110*		*10 - 179*
13C3 HFPO-DA	*98*		*17 - 185*
13C3 PFBS	*107*		*16 - 200*
13C4 PFBA	*108*		*42 - 165*
13C4 PFHpA	*107*		*31 - 182*
13C5 PFPeA	*111*		*38 - 187*
13C8 PFOA	*107*		*48 - 162*
13C8 PFOS	*110*		*51 - 159*
d3-NMeFOSAA	*103*		*31 - 174*
d5-NEtFOSAA	*109*		*29 - 195*
d9-N-EtFOSE-M	*100*		*10 - 177*
13C3 PFHxS	*115*		*28 - 188*
13C5 PFHxA	*105*		*24 - 179*
13C6 PFDA	*114*		*49 - 163*
13C7 PFUnA	*104*		*34 - 174*
d3-NMePFOSA	*82*		*10 - 155*
d5-NEtPFOSA	*85*		*10 - 159*
13C8 FOSA	*105*		*10 - 168*
13C2-PFDoDA	*107*		*17 - 176*
13C9 PFNA	*109*		*51 - 167*

Lab Sample ID: LCSD 410-268456/4-A
Matrix: Water
Analysis Batch: 269114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 268456

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSAA			25.6	24.63		ng/L		96	55 - 134	3	30
NMeFOSAA			25.6	23.18		ng/L		91	59 - 140	3	30
Perfluorobutanesulfonic acid			22.7	22.20		ng/L		98	53 - 138	1	30
Perfluorobutanoic acid			25.6	23.39		ng/L		91	59 - 136	3	30
Perfluorodecanesulfonic acid			24.7	19.84		ng/L		80	55 - 137	5	30
Perfluorodecanoic acid			25.6	24.48		ng/L		96	56 - 138	3	30
Perfluorododecanoic acid			25.6	21.42		ng/L		84	59 - 143	10	30
Perfluoroheptanesulfonic acid			24.4	22.74		ng/L		93	56 - 140	6	30
Perfluoroheptanoic acid			25.6	23.48		ng/L		92	59 - 145	4	30
Perfluorohexanesulfonic acid			23.3	21.77		ng/L		93	58 - 134	2	30
Perfluorohexanoic acid			25.6	25.45		ng/L		99	58 - 139	7	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-268456/4-A
Matrix: Water
Analysis Batch: 269114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 268456

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorononanesulfonic acid			24.6	20.64		ng/L		84	59 - 136	6	30
Perfluorononanoic acid			25.6	22.80		ng/L		89	61 - 139	3	30
Perfluorooctanesulfonamide			25.6	22.64		ng/L		88	43 - 167	7	30
Perfluorooctanesulfonic acid			23.7	22.56		ng/L		95	45 - 150	3	30
Perfluorooctanoic acid			25.6	26.24		ng/L		102	51 - 145	2	30
Perfluoropentanesulfonic acid			24.0	24.50		ng/L		102	55 - 140	0	30
Perfluoropentanoic acid			25.6	23.69		ng/L		93	57 - 141	5	30
Perfluorotetradecanoic acid			25.6	26.30		ng/L		103	62 - 139	10	30
Perfluorotridecanoic acid			25.6	22.86		ng/L		89	58 - 146	1	30
Perfluoroundecanoic acid			25.6	24.14		ng/L		94	60 - 141	9	30
6:2 Fluorotelomer sulfonic acid			24.3	24.95		ng/L		103	28 - 173	8	30
8:2 Fluorotelomer sulfonic acid			24.5	26.47		ng/L		108	55 - 138	25	30
4:2 Fluorotelomer sulfonic acid			23.9	21.72		ng/L		91	55 - 139	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
M2-4:2 FTS	*108*		*10 - 200*
M2-6:2 FTS	*92*		*17 - 200*
M2-8:2 FTS	*89*		*33 - 200*
13C2 PFTeDA	*108*		*10 - 179*
13C3 HFPO-DA	*95*		*17 - 185*
13C3 PFBS	*106*		*16 - 200*
13C4 PFBA	*105*		*42 - 165*
13C4 PFHpA	*105*		*31 - 182*
13C5 PFPeA	*107*		*38 - 187*
13C8 PFOA	*101*		*48 - 162*
13C8 PFOS	*104*		*51 - 159*
d3-NMeFOSAA	*114*		*31 - 174*
d5-NEtFOSAA	*111*		*29 - 195*
d9-N-EtFOSE-M	*97*		*10 - 177*
13C3 PFHxS	*108*		*28 - 188*
13C5 PFHxA	*105*		*24 - 179*
13C6 PFDA	*112*		*49 - 163*
13C7 PFUnA	*113*		*34 - 174*
d3-NMePFOSA	*79*		*10 - 155*
d5-NEtPFOSA	*82*		*10 - 159*
13C8 FOSA	*111*		*10 - 168*
13C2-PFDoDA	*113*		*17 - 176*
13C9 PFNA	*113*		*51 - 167*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018

Lab Sample ID: MB 410-266745/1-A
Matrix: Drinking Water
Analysis Batch: 267638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266745

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluoroheptanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorooctanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Lab Sample ID: MB 410-266745/1-A
Matrix: Drinking Water
Analysis Batch: 267638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266745

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorodecanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorotridecanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
NEtFOSAA	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
NMeFOSAA	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluoroundecanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1
Perfluorododecanoic acid	ND		2.00		ng/L		06/17/22 10:29	06/21/22 09:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*103*		*70 - 130*	*06/17/22 10:29*	*06/21/22 09:01*	*1*
13C2 PFHxA	*96*		*70 - 130*	*06/17/22 10:29*	*06/21/22 09:01*	*1*
13C3 HFPO-DA	*101*		*70 - 130*	*06/17/22 10:29*	*06/21/22 09:01*	*1*
d5-NEtFOSAA	*101*		*70 - 130*	*06/17/22 10:29*	*06/21/22 09:01*	*1*

Lab Sample ID: LCS 410-266745/2-A
Matrix: Drinking Water
Analysis Batch: 267638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanoic acid	20.5	19.42		ng/L		95	70 - 130
Perfluoroheptanoic acid	20.5	19.25		ng/L		94	70 - 130
Perfluorooctanoic acid	20.5	20.38		ng/L		99	70 - 130
Perfluorononanoic acid	20.5	19.17		ng/L		94	70 - 130
Perfluorodecanoic acid	20.5	20.77		ng/L		101	70 - 130
Perfluorotridecanoic acid	20.5	20.98		ng/L		102	70 - 130
Perfluorotetradecanoic acid	20.5	20.40		ng/L		100	70 - 130
Perfluorobutanesulfonic acid	18.1	17.71		ng/L		98	70 - 130
Perfluorohexanesulfonic acid	18.7	17.78		ng/L		95	70 - 130
Perfluorooctanesulfonic acid	19.0	18.37		ng/L		97	70 - 130
NEtFOSAA	20.5	20.08		ng/L		98	70 - 130
NMeFOSAA	20.5	19.18		ng/L		94	70 - 130
Perfluoroundecanoic acid	20.5	22.19		ng/L		108	70 - 130
Perfluorododecanoic acid	20.5	22.12		ng/L		108	70 - 130
HFPODA	20.5	20.49		ng/L		100	70 - 130
9Cl-PF3ONS	19.0	17.80		ng/L		93	70 - 130
11Cl-PF3OUdS	19.0	18.13		ng/L		95	70 - 130
DONA	19.4	18.94		ng/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 PFDA	*99*		*70 - 130*
13C2 PFHxA	*94*		*70 - 130*
13C3 HFPO-DA	*95*		*70 - 130*
d5-NEtFOSAA	*97*		*70 - 130*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Lab Sample ID: LCSD 410-266745/3-A
Matrix: Drinking Water
Analysis Batch: 267638

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 266745

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanoic acid			20.5	19.72		ng/L		96	70 - 130	2	30
Perfluoroheptanoic acid			20.5	19.49		ng/L		95	70 - 130	1	30
Perfluorooctanoic acid			20.5	20.14		ng/L		98	70 - 130	1	30
Perfluorononanoic acid			20.5	18.89		ng/L		92	70 - 130	1	30
Perfluorodecanoic acid			20.5	19.92		ng/L		97	70 - 130	4	30
Perfluorotridecanoic acid			20.5	19.87		ng/L		97	70 - 130	5	30
Perfluorotetradecanoic acid			20.5	18.97		ng/L		93	70 - 130	7	30
Perfluorobutanesulfonic acid			18.1	17.97		ng/L		99	70 - 130	1	30
Perfluorohexanesulfonic acid			18.7	18.08		ng/L		97	70 - 130	2	30
Perfluorooctanesulfonic acid			19.0	18.20		ng/L		96	70 - 130	1	30
NEtFOSAA			20.5	19.34		ng/L		94	70 - 130	4	30
NMeFOSAA			20.5	19.62		ng/L		96	70 - 130	2	30
Perfluoroundecanoic acid			20.5	20.63		ng/L		101	70 - 130	7	30
Perfluorododecanoic acid			20.5	20.86		ng/L		102	70 - 130	6	30
HFPODA			20.5	20.75		ng/L		101	70 - 130	1	30
9Cl-PF3ONS			19.0	17.62		ng/L		93	70 - 130	1	30
11Cl-PF3OUdS			19.0	18.03		ng/L		95	70 - 130	1	30
DONA			19.4	18.81		ng/L		97	70 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C2 PFDA	*97*		*70 - 130*
13C2 PFHxA	*95*		*70 - 130*
13C3 HFPO-DA	*99*		*70 - 130*
d5-NEtFOSAA	*97*		*70 - 130*

Lab Sample ID: MB 410-267827/1-A
Matrix: Drinking Water
Analysis Batch: 268583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267827

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluoroheptanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorooctanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorononanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorodecanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorotridecanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorotetradecanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorobutanesulfonic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorohexanesulfonic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorooctanesulfonic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
NEtFOSAA	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
NMeFOSAA	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluoroundecanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1
Perfluorododecanoic acid	ND		2.00		ng/L		06/21/22 16:53	06/23/22 10:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*101*		*70 - 130*	*06/21/22 16:53*	*06/23/22 10:32*	*1*
13C2 PFHxA	*105*		*70 - 130*	*06/21/22 16:53*	*06/23/22 10:32*	*1*

Method: EPA 537.1 - EPA 537.1, Ver 1.0 Nov 2018 (Continued)

Lab Sample ID: MB 410-267827/1-A
Matrix: Drinking Water
Analysis Batch: 268583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267827

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		70 - 130	06/21/22 16:53	06/23/22 10:32	1
d5-NEtFOSAA	104		70 - 130	06/21/22 16:53	06/23/22 10:32	1

Lab Sample ID: LCS 410-267827/2-A
Matrix: Drinking Water
Analysis Batch: 268583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267827

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanoic acid	80.0	77.36		ng/L		97	70 - 130
Perfluoroheptanoic acid	80.0	78.95		ng/L		99	70 - 130
Perfluorooctanoic acid	80.0	79.30		ng/L		99	70 - 130
Perfluorononanoic acid	80.0	74.69		ng/L		93	70 - 130
Perfluorodecanoic acid	80.0	75.44		ng/L		94	70 - 130
Perfluorotridecanoic acid	80.0	77.05		ng/L		96	70 - 130
Perfluorotetradecanoic acid	80.0	72.35		ng/L		90	70 - 130
Perfluorobutanesulfonic acid	70.8	68.99		ng/L		97	70 - 130
Perfluorohexanesulfonic acid	73.0	75.36	E	ng/L		103	70 - 130
Perfluorooctanesulfonic acid	74.0	73.75		ng/L		100	70 - 130
NEtFOSAA	80.0	81.06	E	ng/L		101	70 - 130
NMeFOSAA	80.0	81.03	E	ng/L		101	70 - 130
Perfluoroundecanoic acid	80.0	76.93		ng/L		96	70 - 130
Perfluorododecanoic acid	80.0	79.42		ng/L		99	70 - 130
HFPODA	80.0	84.54	E	ng/L		106	70 - 130
9Cl-PF3ONS	74.4	71.27		ng/L		96	70 - 130
11Cl-PF3OUdS	74.4	71.01		ng/L		95	70 - 130
DONA	75.6	72.68		ng/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
13C2 PFDA	92		70 - 130
13C2 PFHxA	100		70 - 130
13C3 HFPO-DA	103		70 - 130
d5-NEtFOSAA	99		70 - 130

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 620-11872/1-A
Matrix: Water
Analysis Batch: 11914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11872

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00400	mg/L		06/14/22 14:16	06/15/22 15:25	1
Cadmium	ND		0.00250	mg/L		06/14/22 14:16	06/15/22 15:25	1
Chromium	ND		0.00500	mg/L		06/14/22 14:16	06/15/22 15:25	1
Copper	ND		0.00500	mg/L		06/14/22 14:16	06/15/22 15:25	1
Iron	ND		0.0500	mg/L		06/14/22 14:16	06/15/22 15:25	1
Lead	ND		0.00750	mg/L		06/14/22 14:16	06/15/22 15:25	1
Manganese	ND		0.00500	mg/L		06/14/22 14:16	06/15/22 15:25	1
Nickel	ND		0.00500	mg/L		06/14/22 14:16	06/15/22 15:25	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 620-11872/1-A
Matrix: Water
Analysis Batch: 11914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11872

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		0.750		mg/L		06/14/22 14:16	06/15/22 15:25	1
Zinc	ND		0.0250		mg/L		06/14/22 14:16	06/15/22 15:25	1

Lab Sample ID: LCS 620-11872/2-A
Matrix: Water
Analysis Batch: 11914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11872

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			2.50	2.522		mg/L		101	85 - 115		
Cadmium			2.50	2.524		mg/L		101	85 - 115		
Chromium			2.50	2.511		mg/L		100	85 - 115		
Copper			2.50	2.526		mg/L		101	85 - 115		
Iron			2.50	2.625		mg/L		105	85 - 115		
Lead			2.50	2.401		mg/L		96	85 - 115		
Manganese			2.50	2.620		mg/L		105	85 - 115		
Nickel			2.50	2.532		mg/L		101	85 - 115		
Sodium			12.5	12.57		mg/L		101	85 - 115		
Zinc			2.50	2.494		mg/L		100	85 - 115		

Lab Sample ID: LCSD 620-11872/3-A
Matrix: Water
Analysis Batch: 11914

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11872

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			2.50	2.562		mg/L		102	85 - 115	2	20
Cadmium			2.50	2.550		mg/L		102	85 - 115	1	20
Chromium			2.50	2.539		mg/L		102	85 - 115	1	20
Copper			2.50	2.563		mg/L		103	85 - 115	1	20
Iron			2.50	2.661		mg/L		106	85 - 115	1	20
Lead			2.50	2.448		mg/L		98	85 - 115	2	20
Manganese			2.50	2.633		mg/L		105	85 - 115	1	20
Nickel			2.50	2.554		mg/L		102	85 - 115	1	20
Sodium			12.5	12.76		mg/L		102	85 - 115	2	20
Zinc			2.50	2.534		mg/L		101	85 - 115	2	20

Lab Sample ID: 620-5103-1 MS
Matrix: Water
Analysis Batch: 11914

Client Sample ID: MW-1R
Prep Type: Total/NA
Prep Batch: 11872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	0.00710		2.50	2.529		mg/L		101	75 - 125		
Cadmium	ND		2.50	2.455		mg/L		98	75 - 125		
Chromium	0.0158		2.50	2.468		mg/L		98	75 - 125		
Copper	0.0135		2.50	2.539		mg/L		101	75 - 125		
Iron	11.8		2.50	15.14	4	mg/L		134	75 - 125		
Lead	0.0104		2.50	2.341		mg/L		93	75 - 125		
Manganese	0.308		2.50	2.867		mg/L		102	75 - 125		
Nickel	0.0107		2.50	2.438		mg/L		97	75 - 125		
Sodium	3.64		12.5	17.34		mg/L		110	75 - 125		

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 620-5103-1 MS
Matrix: Water
Analysis Batch: 11914

Client Sample ID: MW-1R
Prep Type: Total/NA
Prep Batch: 11872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.0369		2.50	2.479		mg/L		98	75 - 125

Lab Sample ID: 620-5103-1 MSD
Matrix: Water
Analysis Batch: 11914

Client Sample ID: MW-1R
Prep Type: Total/NA
Prep Batch: 11872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.00710		2.50	2.468		mg/L		98	75 - 125	2	20
Cadmium	ND		2.50	2.394		mg/L		96	75 - 125	3	20
Chromium	0.0158		2.50	2.419		mg/L		96	75 - 125	2	20
Copper	0.0135		2.50	2.473		mg/L		98	75 - 125	3	20
Iron	11.8		2.50	14.60	4	mg/L		113	75 - 125	4	20
Lead	0.0104		2.50	2.281		mg/L		91	75 - 125	3	20
Manganese	0.308		2.50	2.790		mg/L		99	75 - 125	3	20
Nickel	0.0107		2.50	2.381		mg/L		95	75 - 125	2	20
Sodium	3.64		12.5	17.13		mg/L		108	75 - 125	1	20
Zinc	0.0369		2.50	2.413		mg/L		95	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 620-11923/1-A
Matrix: Water
Analysis Batch: 11951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11923

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200		mg/L		06/15/22 10:57	06/15/22 14:50	1

Lab Sample ID: LCS 620-11923/2-A
Matrix: Water
Analysis Batch: 11951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11923

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.00500	0.004642		mg/L		93	85 - 115

Lab Sample ID: LCSD 620-11923/3-A
Matrix: Water
Analysis Batch: 11951

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11923

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00500	0.004755		mg/L		95	85 - 115	2	20

Lab Sample ID: 620-5103-1 MS
Matrix: Water
Analysis Batch: 11951

Client Sample ID: MW-1R
Prep Type: Total/NA
Prep Batch: 11923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00500	0.004636		mg/L		93	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 620-5103-1 MSD
Matrix: Water
Analysis Batch: 11951

Client Sample ID: MW-1R
Prep Type: Total/NA
Prep Batch: 11923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.004721		mg/L		94	80 - 120	2	20

Lab Sample ID: 620-5103-1 DU
Matrix: Water
Analysis Batch: 11951

Client Sample ID: MW-1R
Prep Type: Total/NA
Prep Batch: 11923

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	ND			ND		mg/L				NC	20

Method: 410.4 - COD

Lab Sample ID: MB 410-266551/4
Matrix: Water
Analysis Batch: 266551

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75.0		mg/L			06/17/22 03:15	1

Lab Sample ID: LCS 410-266551/5
Matrix: Water
Analysis Batch: 266551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand			500	505.8		mg/L		101	94 - 110		

QC Association Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

GC/MS VOA

Analysis Batch: 11999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-13	Trip Blank	Total/NA	Water	8260C	
MB 620-11999/7	Method Blank	Total/NA	Water	8260C	
LCS 620-11999/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 620-11999/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 12053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-10	EB-060922	Total/NA	Water	8260C	
MB 620-12053/7	Method Blank	Total/NA	Water	8260C	
LCS 620-12053/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 620-12053/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 12054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	8260C	
620-5103-6	MW-4S	Total/NA	Water	8260C	
620-5103-7	MW-4D	Total/NA	Water	8260C	
620-5103-8	MW-4D-FD	Total/NA	Water	8260C	
620-5103-9	MW-3D	Total/NA	Water	8260C	
MB 620-12054/7	Method Blank	Total/NA	Water	8260C	
LCS 620-12054/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 620-12054/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 266165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-3	907 Bleecher-EFF	Total/NA	Drinking Water	524.2	
620-5103-4	907 Bleecher-MID	Total/NA	Drinking Water	524.2	
620-5103-5	907 Bleecher-INF	Total/NA	Drinking Water	524.2	
620-5103-12	56 Forest Edge	Total/NA	Drinking Water	524.2	
620-5103-14	907 Bleecher-FD	Total/NA	Drinking Water	524.2	
MB 410-266165/6	Method Blank	Total/NA	Drinking Water	524.2	
LCS 410-266165/4	Lab Control Sample	Total/NA	Drinking Water	524.2	

GC/MS Semi VOA

Analysis Batch: 11959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 620-11992/1-A	Method Blank	Total/NA	Water	8270D	11992
LCS 620-11992/2-A	Lab Control Sample	Total/NA	Water	8270D	11992
LCSD 620-11992/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	11992

Prep Batch: 11992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-11	PW-060922	Total/NA	Water	3510C	
MB 620-11992/1-A	Method Blank	Total/NA	Water	3510C	
LCS 620-11992/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 620-11992/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 12100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-11	PW-060922	Total/NA	Water	8270D	11992

GC Semi VOA

Analysis Batch: 11979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-11	PW-060922	Total/NA	Water	8082A	11993
MB 620-11993/1-A	Method Blank	Total/NA	Water	8082A	11993
LCS 620-11993/2-A	Lab Control Sample	Total/NA	Water	8082A	11993
LCSD 620-11993/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	11993

Prep Batch: 11993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-11	PW-060922	Total/NA	Water	3510C	
MB 620-11993/1-A	Method Blank	Total/NA	Water	3510C	
LCS 620-11993/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 620-11993/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

HPLC/IC

Analysis Batch: 270935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	EPA 300.0 R2.1	
MB 410-270935/5	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-270935/3	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-270935/4	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	
620-5103-1 MS	MW-1R	Total/NA	Water	EPA 300.0 R2.1	
620-5103-1 DU	MW-1R	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 270964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-6	MW-4S	Total/NA	Water	EPA 300.0 R2.1	
620-5103-7	MW-4D	Total/NA	Water	EPA 300.0 R2.1	
620-5103-9	MW-3D	Total/NA	Water	EPA 300.0 R2.1	
MB 410-270964/5	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-270964/3	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-270964/4	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	
620-5103-7 MS	MW-4D	Total/NA	Water	EPA 300.0 R2.1	
620-5103-7 DU	MW-4D	Total/NA	Water	EPA 300.0 R2.1	

LCMS

Prep Batch: 266745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-2	907 Bleecher-FB	Total/NA	Drinking Water	537.1 DW Prep	
620-5103-3	907 Bleecher-EFF	Total/NA	Drinking Water	537.1 DW Prep	
620-5103-4	907 Bleecher-MID	Total/NA	Drinking Water	537.1 DW Prep	
620-5103-5	907 Bleecher-INF	Total/NA	Drinking Water	537.1 DW Prep	
620-5103-14	907 Bleecher-FD	Total/NA	Drinking Water	537.1 DW Prep	
MB 410-266745/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW Prep	
LCS 410-266745/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW Prep	
LCSD 410-266745/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	537.1 DW Prep	

Prep Batch: 266861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	537 IDA	
620-5103-6	MW-4S	Total/NA	Water	537 IDA	
620-5103-7	MW-4D	Total/NA	Water	537 IDA	

LCMS (Continued)

Prep Batch: 266861 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-8	MW-4D-FD	Total/NA	Water	537 IDA	
MB 410-266861/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-266861/2-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-266861/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Prep Batch: 267221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-9	MW-3D	Total/NA	Water	537 IDA	
MB 410-267221/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-267221/2-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-267221/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Analysis Batch: 267638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-2	907 Bleecher-FB	Total/NA	Drinking Water	EPA 537.1	266745
620-5103-3	907 Bleecher-EFF	Total/NA	Drinking Water	EPA 537.1	266745
620-5103-4	907 Bleecher-MID	Total/NA	Drinking Water	EPA 537.1	266745
620-5103-5	907 Bleecher-INF	Total/NA	Drinking Water	EPA 537.1	266745
620-5103-14	907 Bleecher-FD	Total/NA	Drinking Water	EPA 537.1	266745
MB 410-266745/1-A	Method Blank	Total/NA	Drinking Water	EPA 537.1	266745
LCS 410-266745/2-A	Lab Control Sample	Total/NA	Drinking Water	EPA 537.1	266745
LCSD 410-266745/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	EPA 537.1	266745

Prep Batch: 267827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-12	56 Forest Edge	Total/NA	Drinking Water	537.1 DW Prep	
MB 410-267827/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW Prep	
LCS 410-267827/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW Prep	

Analysis Batch: 268222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	537 IDA	266861
620-5103-6	MW-4S	Total/NA	Water	537 IDA	266861
620-5103-7	MW-4D	Total/NA	Water	537 IDA	266861
620-5103-8	MW-4D-FD	Total/NA	Water	537 IDA	266861
MB 410-266861/1-A	Method Blank	Total/NA	Water	537 IDA	266861
LCS 410-266861/2-A	Lab Control Sample	Total/NA	Water	537 IDA	266861
LCSD 410-266861/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	266861

Prep Batch: 268456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-10	EB-060922	Total/NA	Water	537 IDA	
MB 410-268456/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-268456/3-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-268456/4-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Analysis Batch: 268501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-9	MW-3D	Total/NA	Water	537 IDA	267221
MB 410-267221/1-A	Method Blank	Total/NA	Water	537 IDA	267221
LCS 410-267221/2-A	Lab Control Sample	Total/NA	Water	537 IDA	267221

LCMS (Continued)

Analysis Batch: 268501 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 410-267221/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	267221

Analysis Batch: 268583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-12	56 Forest Edge	Total/NA	Drinking Water	EPA 537.1	267827
MB 410-267827/1-A	Method Blank	Total/NA	Drinking Water	EPA 537.1	267827
LCS 410-267827/2-A	Lab Control Sample	Total/NA	Drinking Water	EPA 537.1	267827

Prep Batch: 268968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-6 - RE	MW-4S	Total/NA	Water	537 IDA	
620-5103-9 - RE	MW-3D	Total/NA	Water	537 IDA	
MB 410-268968/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-268968/2-A	Lab Control Sample	Total/NA	Water	537 IDA	

Analysis Batch: 269114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-10	EB-060922	Total/NA	Water	537 IDA	268456
MB 410-268456/1-A	Method Blank	Total/NA	Water	537 IDA	268456
LCS 410-268456/3-A	Lab Control Sample	Total/NA	Water	537 IDA	268456
LCSD 410-268456/4-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	268456

Analysis Batch: 270423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-6 - RE	MW-4S	Total/NA	Water	537 IDA	268968
620-5103-9 - RE	MW-3D	Total/NA	Water	537 IDA	268968
MB 410-268968/1-A	Method Blank	Total/NA	Water	537 IDA	268968
LCS 410-268968/2-A	Lab Control Sample	Total/NA	Water	537 IDA	268968

Metals

Prep Batch: 11872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	3005A	
620-5103-6	MW-4S	Total/NA	Water	3005A	
620-5103-7	MW-4D	Total/NA	Water	3005A	
620-5103-8	MW-4D-FD	Total/NA	Water	3005A	
620-5103-9	MW-3D	Total/NA	Water	3005A	
620-5103-10	EB-060922	Total/NA	Water	3005A	
MB 620-11872/1-A	Method Blank	Total/NA	Water	3005A	
LCS 620-11872/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 620-11872/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	
620-5103-1 MS	MW-1R	Total/NA	Water	3005A	
620-5103-1 MSD	MW-1R	Total/NA	Water	3005A	

Analysis Batch: 11914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	6010D	11872
620-5103-6	MW-4S	Total/NA	Water	6010D	11872
620-5103-7	MW-4D	Total/NA	Water	6010D	11872
620-5103-8	MW-4D-FD	Total/NA	Water	6010D	11872

Metals (Continued)

Analysis Batch: 11914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-9	MW-3D	Total/NA	Water	6010D	11872
620-5103-10	EB-060922	Total/NA	Water	6010D	11872
MB 620-11872/1-A	Method Blank	Total/NA	Water	6010D	11872
LCS 620-11872/2-A	Lab Control Sample	Total/NA	Water	6010D	11872
LCSD 620-11872/3-A	Lab Control Sample Dup	Total/NA	Water	6010D	11872
620-5103-1 MS	MW-1R	Total/NA	Water	6010D	11872
620-5103-1 MSD	MW-1R	Total/NA	Water	6010D	11872

Prep Batch: 11923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	7470A	
620-5103-6	MW-4S	Total/NA	Water	7470A	
620-5103-7	MW-4D	Total/NA	Water	7470A	
620-5103-8	MW-4D-FD	Total/NA	Water	7470A	
620-5103-9	MW-3D	Total/NA	Water	7470A	
620-5103-10	EB-060922	Total/NA	Water	7470A	
MB 620-11923/1-A	Method Blank	Total/NA	Water	7470A	
LCS 620-11923/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 620-11923/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
620-5103-1 MS	MW-1R	Total/NA	Water	7470A	
620-5103-1 MSD	MW-1R	Total/NA	Water	7470A	
620-5103-1 DU	MW-1R	Total/NA	Water	7470A	

Analysis Batch: 11951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	7470A	11923
620-5103-6	MW-4S	Total/NA	Water	7470A	11923
620-5103-7	MW-4D	Total/NA	Water	7470A	11923
620-5103-8	MW-4D-FD	Total/NA	Water	7470A	11923
620-5103-9	MW-3D	Total/NA	Water	7470A	11923
620-5103-10	EB-060922	Total/NA	Water	7470A	11923
MB 620-11923/1-A	Method Blank	Total/NA	Water	7470A	11923
LCS 620-11923/2-A	Lab Control Sample	Total/NA	Water	7470A	11923
LCSD 620-11923/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	11923
620-5103-1 MS	MW-1R	Total/NA	Water	7470A	11923
620-5103-1 MSD	MW-1R	Total/NA	Water	7470A	11923
620-5103-1 DU	MW-1R	Total/NA	Water	7470A	11923

General Chemistry

Analysis Batch: 266551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
620-5103-1	MW-1R	Total/NA	Water	410.4	
620-5103-6	MW-4S	Total/NA	Water	410.4	
620-5103-7	MW-4D	Total/NA	Water	410.4	
620-5103-8	MW-4D-FD	Total/NA	Water	410.4	
620-5103-9	MW-3D	Total/NA	Water	410.4	
620-5103-10	EB-060922	Total/NA	Water	410.4	
MB 410-266551/4	Method Blank	Total/NA	Water	410.4	
LCS 410-266551/5	Lab Control Sample	Total/NA	Water	410.4	

Lab Chronicle

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-1R
Lab Sample ID: 620-5103-1
Date Collected: 06/07/22 11:35
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	12054	06/17/22 20:37	CLR	ENE
Total/NA	Analysis	EPA 300.0 R2.1		5	270935	06/30/22 05:58	L4QM	ELLE
Total/NA	Prep	537 IDA			266861	06/17/22 15:17	JU9U	ELLE
Total/NA	Analysis	537 IDA		1	268222	06/23/22 06:50	QD9Y	ELLE
Total/NA	Prep	3005A			11872	06/14/22 14:16	CEV	ENE
Total/NA	Analysis	6010D		1	11914	06/15/22 17:36	CEV	ENE
Total/NA	Prep	7470A			11923	06/15/22 10:57	CAJ	ENE
Total/NA	Analysis	7470A		1	11951	06/15/22 14:55	CAJ	ENE
Total/NA	Analysis	410.4		1	266551	06/17/22 03:15	USAE	ELLE

Client Sample ID: 907 Bleecher-FB
Lab Sample ID: 620-5103-2
Date Collected: 06/07/22 14:28
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537.1 DW Prep			266745	06/17/22 10:29	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	267638	06/21/22 14:26	DCS9	ELLE

Client Sample ID: 907 Bleecher-EFF
Lab Sample ID: 620-5103-3
Date Collected: 06/07/22 14:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	266165	06/16/22 15:52	UJML	ELLE
Total/NA	Prep	537.1 DW Prep			266745	06/17/22 10:29	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	267638	06/21/22 14:38	DCS9	ELLE

Client Sample ID: 907 Bleecher-MID
Lab Sample ID: 620-5103-4
Date Collected: 06/07/22 14:34
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	266165	06/16/22 16:15	UJML	ELLE
Total/NA	Prep	537.1 DW Prep			266745	06/17/22 10:29	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	267638	06/21/22 14:49	DCS9	ELLE

Client Sample ID: 907 Bleecher-INF
Lab Sample ID: 620-5103-5
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	266165	06/16/22 16:37	UJML	ELLE
Total/NA	Prep	537.1 DW Prep			266745	06/17/22 10:29	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	267638	06/21/22 15:01	DCS9	ELLE

Client Sample ID: MW-4S
Lab Sample ID: 620-5103-6

Date Collected: 06/07/22 15:45
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	12054	06/17/22 21:04	CLR	ENE
Total/NA	Analysis	EPA 300.0 R2.1		5	270964	06/29/22 21:58	W5UX	ELLE
Total/NA	Prep	537 IDA			266861	06/17/22 15:17	JU9U	ELLE
Total/NA	Analysis	537 IDA		1	268222	06/23/22 07:02	QD9Y	ELLE
Total/NA	Prep	537 IDA	RE		268968	06/24/22 08:53	PMS9	ELLE
Total/NA	Analysis	537 IDA	RE	1	270423	06/29/22 00:08	MT26	ELLE
Total/NA	Prep	3005A			11872	06/14/22 14:16	CEV	ENE
Total/NA	Analysis	6010D		1	11914	06/15/22 17:58	CEV	ENE
Total/NA	Prep	7470A			11923	06/15/22 10:57	CAJ	ENE
Total/NA	Analysis	7470A		1	11951	06/15/22 15:09	CAJ	ENE
Total/NA	Analysis	410.4		1	266551	06/17/22 03:15	USAE	ELLE

Client Sample ID: MW-4D
Lab Sample ID: 620-5103-7

Date Collected: 06/07/22 17:25
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	12054	06/17/22 21:31	CLR	ENE
Total/NA	Analysis	EPA 300.0 R2.1		5	270964	06/29/22 22:06	W5UX	ELLE
Total/NA	Prep	537 IDA			266861	06/17/22 15:17	JU9U	ELLE
Total/NA	Analysis	537 IDA		1	268222	06/23/22 07:13	QD9Y	ELLE
Total/NA	Prep	3005A			11872	06/14/22 14:16	CEV	ENE
Total/NA	Analysis	6010D		1	11914	06/15/22 18:20	CEV	ENE
Total/NA	Prep	7470A			11923	06/15/22 10:57	CAJ	ENE
Total/NA	Analysis	7470A		1	11951	06/15/22 15:10	CAJ	ENE
Total/NA	Analysis	410.4		2.5	266551	06/17/22 03:15	USAE	ELLE

Client Sample ID: MW-4D-FD
Lab Sample ID: 620-5103-8

Date Collected: 06/07/22 17:25
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	12054	06/17/22 21:57	CLR	ENE
Total/NA	Prep	537 IDA			266861	06/17/22 15:17	JU9U	ELLE
Total/NA	Analysis	537 IDA		1	268222	06/23/22 07:24	QD9Y	ELLE
Total/NA	Prep	3005A			11872	06/14/22 14:16	CEV	ENE
Total/NA	Analysis	6010D		1	11914	06/15/22 18:27	CEV	ENE
Total/NA	Prep	7470A			11923	06/15/22 10:57	CAJ	ENE
Total/NA	Analysis	7470A		1	11951	06/15/22 15:12	CAJ	ENE
Total/NA	Analysis	410.4		2.5	266551	06/17/22 03:15	USAE	ELLE

Lab Chronicle

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: MW-3D
Lab Sample ID: 620-5103-9
Date Collected: 06/09/22 16:20
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	12054	06/17/22 22:24	CLR	ENE
Total/NA	Analysis	EPA 300.0 R2.1		50	270964	06/29/22 21:33	W5UX	ELLE
Total/NA	Prep	537 IDA			267221	06/20/22 08:46	PMS9	ELLE
Total/NA	Analysis	537 IDA		1	268501	06/23/22 19:18	PY4D	ELLE
Total/NA	Prep	537 IDA	RE		268968	06/24/22 08:53	PMS9	ELLE
Total/NA	Analysis	537 IDA	RE	1	270423	06/29/22 00:19	MT26	ELLE
Total/NA	Prep	3005A			11872	06/14/22 14:16	CEV	ENE
Total/NA	Analysis	6010D		1	11914	06/15/22 18:34	CEV	ENE
Total/NA	Prep	7470A			11923	06/15/22 10:57	CAJ	ENE
Total/NA	Analysis	7470A		1	11951	06/15/22 15:14	CAJ	ENE
Total/NA	Analysis	410.4		1	266551	06/17/22 03:15	USAE	ELLE

Client Sample ID: EB-060922
Lab Sample ID: 620-5103-10
Date Collected: 06/09/22 17:30
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	12053	06/18/22 00:03	CLR	ENE
Total/NA	Prep	537 IDA			268456	06/23/22 08:08	S7AC	ELLE
Total/NA	Analysis	537 IDA		1	269114	06/25/22 12:09	MT26	ELLE
Total/NA	Prep	3005A			11872	06/14/22 14:16	CEV	ENE
Total/NA	Analysis	6010D		1	11914	06/15/22 18:42	CEV	ENE
Total/NA	Prep	7470A			11923	06/15/22 10:57	CAJ	ENE
Total/NA	Analysis	7470A		1	11951	06/15/22 15:16	CAJ	ENE
Total/NA	Analysis	410.4		1	266551	06/17/22 03:15	USAE	ELLE

Client Sample ID: PW-060922
Lab Sample ID: 620-5103-11
Date Collected: 06/09/22 17:50
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			11992	06/16/22 13:28	PRB	ENE
Total/NA	Analysis	8270D		1	12100	06/20/22 15:02	JS	ENE
Total/NA	Prep	3510C			11993	06/16/22 13:46	PRB	ENE
Total/NA	Analysis	8082A		1	11979	06/16/22 19:14	SFL	ENE

Client Sample ID: 56 Forest Edge
Lab Sample ID: 620-5103-12
Date Collected: 06/09/22 18:30
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	266165	06/16/22 16:59	UJML	ELLE
Total/NA	Prep	537.1 DW Prep			267827	06/21/22 16:53	QLP7	ELLE
Total/NA	Analysis	EPA 537.1		1	268583	06/23/22 11:56	DCS9	ELLE

Lab Chronicle

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Client Sample ID: Trip Blank
Lab Sample ID: 620-5103-13
Date Collected: 06/07/22 08:00
Matrix: Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	11999	06/16/22 20:41	CLR	ENE

Client Sample ID: 907 Bleecher-FD
Lab Sample ID: 620-5103-14
Date Collected: 06/07/22 14:38
Matrix: Drinking Water
Date Received: 06/14/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	266165	06/16/22 17:21	UJML	ELLE
Total/NA	Prep	537.1 DW Prep			266745	06/17/22 10:29	HQ8B	ELLE
Total/NA	Analysis	EPA 537.1		1	267638	06/21/22 15:12	DCS9	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Accreditation/Certification Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Laboratory: Eurofins New England

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	<cert No.>	02-28-23
Connecticut	State	PH-0722	06-30-22
Maine	State	RI00100	04-17-23
Massachusetts	State	M-RI907	06-30-22
New Hampshire	NELAP	2240	08-03-22
New Jersey	NELAP	RI008	06-30-22
New York	NELAP	11393	04-01-23
Rhode Island	State	LAI00368	12-30-22
USDA	US Federal Programs	P330-20-00109	04-15-23

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Vermont	State	VT - 36037	10-28-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
410.4		Water	Chemical Oxygen Demand
524.2		Drinking Water	1,2-Dibromo-3-Chloropropane
524.2		Drinking Water	1,2-Dibromoethane
524.2		Drinking Water	2-Butanone
524.2		Drinking Water	2-Hexanone
524.2		Drinking Water	4-Methyl-2-pentanone
524.2		Drinking Water	Acetone
524.2		Drinking Water	Acrylonitrile
524.2		Drinking Water	Carbon disulfide
524.2		Drinking Water	di-Isopropyl ether
524.2		Drinking Water	Ethyl ether
524.2		Drinking Water	Ethyl t-butyl ether
524.2		Drinking Water	Freon 113
524.2		Drinking Water	m&p-Xylene
524.2		Drinking Water	o-Xylene
524.2		Drinking Water	t-Amyl methyl ether
524.2		Drinking Water	t-Butyl alcohol
524.2		Drinking Water	Tetrahydrofuran
537 IDA	537 IDA	Water	4:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	6:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	8:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	NEtFOSAA
537 IDA	537 IDA	Water	NMeFOSAA
537 IDA	537 IDA	Water	Perfluorobutanesulfonic acid
537 IDA	537 IDA	Water	Perfluorobutanoic acid
537 IDA	537 IDA	Water	Perfluorodecanesulfonic acid
537 IDA	537 IDA	Water	Perfluorodecanoic acid
537 IDA	537 IDA	Water	Perfluorododecanoic acid
537 IDA	537 IDA	Water	Perfluoroheptanesulfonic acid
537 IDA	537 IDA	Water	Perfluoroheptanoic acid
537 IDA	537 IDA	Water	Perfluorohexanesulfonic acid
537 IDA	537 IDA	Water	Perfluorohexanoic acid

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 IDA	537 IDA	Water	Perfluorononanesulfonic acid
537 IDA	537 IDA	Water	Perfluorononanoic acid
537 IDA	537 IDA	Water	Perfluorooctanesulfonamide
537 IDA	537 IDA	Water	Perfluorooctanesulfonic acid
537 IDA	537 IDA	Water	Perfluorooctanoic acid
537 IDA	537 IDA	Water	Perfluoropentanesulfonic acid
537 IDA	537 IDA	Water	Perfluoropentanoic acid
537 IDA	537 IDA	Water	Perfluorotetradecanoic acid
537 IDA	537 IDA	Water	Perfluorotridecanoic acid
537 IDA	537 IDA	Water	Perfluoroundecanoic acid

Method Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	ELLE
8260C	Volatile Organic Compounds by GC/MS	SW846	ENE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ENE
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ENE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
EPA 537.1	EPA 537.1, Ver 1.0 Nov 2018	EPA	ELLE
6010D	Metals (ICP)	SW846	ENE
7470A	Mercury (CVAA)	SW846	ENE
410.4	COD	MCAWW	ELLE
3005A	Preparation, Total Metals	SW846	ENE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ENE
5030C	Purge and Trap	SW846	ENE
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
537.1 DW Prep	Extraction of Perfluorinated Alkyl Acids	EPA	ELLE
7470A	Preparation, Mercury	SW846	ENE

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

ENE = Eurofins New England, 646 Camp Ave, North Kingstown, RI 02852, TEL (413)789-9018

Sample Summary

Client: Stone Environmental
Job ID: 620-5103-1
Project/Site: Town of Hinesburg Landfill - Hinesburg,

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
620-5103-1	MW-1R	Water	06/07/22 11:35	06/14/22 10:20
620-5103-2	907 Bleecher-FB	Drinking Water	06/07/22 14:28	06/14/22 10:20
620-5103-3	907 Bleecher-EFF	Drinking Water	06/07/22 14:30	06/14/22 10:20
620-5103-4	907 Bleecher-MID	Drinking Water	06/07/22 14:34	06/14/22 10:20
620-5103-5	907 Bleecher-INF	Drinking Water	06/07/22 14:38	06/14/22 10:20
620-5103-6	MW-4S	Water	06/07/22 15:45	06/14/22 10:20
620-5103-7	MW-4D	Water	06/07/22 17:25	06/14/22 10:20
620-5103-8	MW-4D-FD	Water	06/07/22 17:25	06/14/22 10:20
620-5103-9	MW-3D	Water	06/09/22 16:20	06/14/22 10:20
620-5103-10	EB-060922	Water	06/09/22 17:30	06/14/22 10:20
620-5103-11	PW-060922	Water	06/09/22 17:50	06/14/22 10:20
620-5103-12	56 Forest Edge	Drinking Water	06/09/22 18:30	06/14/22 10:20
620-5103-13	Trip Blank	Water	06/07/22 08:00	06/14/22 10:20
620-5103-14	907 Bleecher-FD	Drinking Water	06/07/22 14:38	06/14/22 10:20

5103

620-5103 Chain of Custody

nment Testing
New England

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602
Telephone #: 802.229.6434
Project Mgr: Katrina Mattice

Invoice To: Stone accounting

PO No. 2021205 Quote #: _____

Project No: 2021205
Site Name: Hinesburg LF
Location: Hinesburg, VT State: VT
Sampler(s): KJM

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=Trizma 12=NONE

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: List Preservative Code below: 2 / 11 / 4 / 3 / 12 / 2 / 11	Check if chlorinated
										VOCs 8260 / PFAS 537.1D / Metals 6010/7471 / COD / Chloride Sodium / VOC 524.2 / PFAS 537.1 MOD	
01	MW-1R	6/7/22	1135	G	GW	3			5	X X X X X	
02	907Beecher-FB		1428	G	DW				1	X	
03	907Beecher-EFF		1430	G		3			2	X X	
04	907Beecher-MID		1434	G		3			2	X X	
05	907Beecher-INF		1438	G		3			2	X X	
06	MW-4S		1545	G	GW	3			5	X X X X X	
07	MW-4D		1725	G		3			5	X X X X X	
08	MW-4D-FD		1725	G		3			4	X X X X	
09	MW-3D	6/9/22	1620	G		3			5	X X X X X	
10	EB-060922		1730	G		3			5	X X X X X	

Relinquished by:	Received by:	Date:	Time:	Temp °C
K Mattice	Vital delivery	6/10/22	1038	Observed 0.6
TABUR1	Fed Ex			Correction Factor 0.4
Fed Ex	Nicole Adams	6/14/22	10.20	Corrected 1.0
				IR ID # 6

- [X] EDD format: Equis EZ
- [X] E-mail to: kmattice@stone-env.com

Condition upon receipt: Custody Seals: [X] Present [ ] Intact [ ] Broken
[ ] Ambient [X] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other _____
State-specific reporting standards.

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7/6/2022

eurofins | Environment Testing New England

CHAIN OF CUSTODY RECORD

Special Handling:
- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed. _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Stone Environmental, 535 Stone Cutters Way, Montpelier VT 05602
Telephone #: 802.229.6435
Project Mgr: Katrina Mattice

Invoice To: Stone accounting

PO No: 20211205 Quote #: _____

Project No: 20211205
Site Name: Hinesburg LF
Location: Hinesburg State: VT
Sampler(s): KSM

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	PCBs 8082	SVOC 8270 SIM	VOC 524.2	PFAS 537.1 MOD	VOC 8260	Check if chlorinated
11	PW-060922	6/9/22	1750	G	GW		4			X	X				
12	56 Forest Edge	"	1830	G	DW	3			2			X	X		
13	Tr. p Blank	6/7/22	0800	G	GW	2								X	

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? Yes No
CT DPH RCP Report? Yes No
Standard No QC DQA*
ASP A* ASP B*
NJ Reduced* NJ Full*
Tier II* Tier IV*
Other _____
State-specific reporting standards.

Relinquished by:	Received by:	Date:	Time:	Temp °C
Katrina Mattice	Vital delivery	6/10/22	1030	Observed 0.6
DABurt	Fed Ex			Correction Factor 0.4
Fed Ex	Northstate	6/14/22	10:20	Corrected 1.0
				IR ID # 6

EDD format: Equis Ez
E-mail to. kmattice@stone-env.com

Condition upon receipt: Custody Seals: [x] Present [ ] Intact [ ] Broken
[ ] Ambient [x] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Sample Shipping Address: 126 Myron Street • West Springfield, MA 01089 • 413-789-9018
Lab Address: 646 Camp Ave • North Kingstown, RI 02852
www.EurofinsUS.com/Spectrum


Part # 159469-434 MTW EXP 12/22 **
Part # 159469-434 MTW EXP 12/22 *
ORIGIN ID:BTVA (802) 660-1990
SAMPLE RECEIVING
TEST AMERICA
30 COMMUNITY DRIVE
SUITE 11
BURLINGTON, VT 05401
UNITED STATES US
SHIP DATE: 13JUN22
ACTWGT: 38.00 LB MAN
CAD: 000890364/CAFE3512
DIMS: 24x14x16 IN
BILL RECIPIENT
TO SAMPLE RECEIVING
EUROFINS NEW ENGLAND
646 CAMP AVE
NORTH KINGSTOWN RI 02852
REF:
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 0201 5849 1881 8463
TUE - 14 JUN 10:30A
PRIORITY OVERNIGHT
MASTER
XE NCOA
02852-
RI-US PVD


Part # 158469-04 MRW EXP 12/22
ORIGIN ID:BTVA (802) 660-1990
SAMPLE RECEIVING
TEST AMERICA
30 COMMUNITY DRIVE
SUITE 11
BURLINGTON, VT 05401
UNITED STATES US
SHIP DATE: 13JUN22
ACTWGT: 38.00 LB MAN
CAD: 000890364/CAFE3512
DIMS: 24x14x16 IN
BILL RECIPIENT
TO SAMPLE RECEIVING
EUROFINS NEW ENGLAND
646 CAMP AVE
NORTH KINGSTOWN RI 02852
REF:
INV:
PO:
DEPT:
FedEx
Express
2 of 2
MPS# 0263 5849 1881 8474
Mstr# 5849 1881 8463
0201
TUE - 14 JUN 10:30A
PRIORITY OVERNIGHT
XE NCOA
02852
RI-US PVD

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4589.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Vermont	Page: Page 1 of 2
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Vermont		Job #: 620-5103-1
Address: 2425 New Holland Pike,	Due Date Requested: 6/22/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Town of Hinesburg Landfill - Hinesburg,	Project #: 62000809			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_PFC PFAS list of 24	410.4	300_ORGFM_28D/ (MOD) Copy Analytes	537.1_DW/537.1_DW_Prep DW EPA 537.1 List of 18	524.2_Preserved/ (MOD) Regulated + THM's	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
MW-1R (620-5103-1)	6/7/22	11:35 Eastern		Water			X	X	X			4	
907 Bleecher-FB (620-5103-2)	6/7/22	14:28 Eastern		Drinking Wate						X		1	VT VGES/MCL
907 Bleecher-EFF (620-5103-3)	6/7/22	14:30 Eastern		Drinking Wate						X	X	2	, VT VGES/MCL
907 Bleecher-MID (620-5103-4)	6/7/22	14:34 Eastern		Drinking Wate						X	X	2	, VT VGES/MCL
907 Bleecher-INF (620-5103-5)	6/7/22	14:38 Eastern		Drinking Wate						X	X	2	, VT VGES/MCL
MW-4S (620-5103-6)	6/7/22	15:45 Eastern		Water			X	X	X			4	
MW-4D (620-5103-7)	6/7/22	17:25 Eastern		Water			X	X	X			4	
MW-4D-FD (620-5103-8)	6/7/22	17:25 Eastern		Water			X	X				3	
MW-3D (620-5103-9)	6/9/22	16:20 Eastern		Water			X	X	X			4	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		18:16 6/14/22				
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6/15/22 1035	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.4

Ver: 06/08/2017

Eurofins New England
646 Camp Ave
North Kingstown, RI 02852
Phone: 413-789-9018

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Huntley, Agnes R	Carrier Tracking No(s):	COC No: 620-4589.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Agnes.Huntley@et.eurofinsus.com	State of Origin: Vermont	Page: Page 2 of 2
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Vermont		Job #: 620-5103-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/22/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Town of Hinesburg Landfill - Hinesburg,	Project #: 62000809			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_PFC PFAS list of 24	410.4	300_ORGFM_28D/ (MOD) Copy Analytes	537.1_DW/537.1_DW_Prep DW EPA 537.1 List of 18	524.2_Preserved/ (MOD) Regulated + THM's	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
EB-060922 (620-5103-10)	6/9/22	17:30 Eastern		Water			X	X	X			4	
56 Forest Edge (620-5103-12)	6/9/22	18:30 Eastern		Drinking Wate						X	X	1	VT VGES/MCL
907 Bleecher-FD (620-5103-14)	6/7/22	14:38 Eastern		Drinking Wate						X	X	2	VT VGES/MCL

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	6/14/22 18:16	CCE			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				6/17/22 1039	

Custody Seals Intact: ▲ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		0.4

Ver: 06/08/2022

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 620-5103-1

Login Number: 5103
List Number: 1
Creator: Makhoul, Elie

List Source: Eurofins New England

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 620-5103-1

Login Number: 5103
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 06/15/22 12:44 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	Refer to Job Narrative for details.
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	