



August 24, 2023

Mr. Steven Scharf, P.E.
Project Engineer, Division of Environmental Remediation
New York State Department of Environmental Conservation
Remedial Bureau A
625 Broadway, 12th Floor
Albany, New York 12233-7015

**RE: OU-2 Monitoring Well Installation and May 2023 Groundwater Monitoring Report
Former Friedrichsohn Cooperage Site
153-155 Saratoga Avenue, Waterford, New York
NYSDEC Site No. 546045
CHA Project Number: 060017.000**

Dear Mr. Scharf:

CHA Consulting Inc. (CHA) has prepared this letter report to summarize the activities associated with the installation of new groundwater monitoring wells and the findings of the initial groundwater monitoring event following remedial construction activities associated with the Former Friedrichsohn Cooperage Site in Waterford, New York (Site). Figure 1 depicts the general vicinity of the Site. The well installation and first groundwater monitoring event were completed in accordance with CHA's *Former Friedrichsohn Cooperage OU-2 Groundwater Monitoring Plan*, dated July 5, 2022, and approved by the New York State Department of Environmental Conservation (NYSDEC) in its letter dated July 12, 2022. CHA provided oversight of all drilling activities, which were completed by CHA's subcontractor, Cascade Remediation Services, LLC (Cascade).

WELL DECOMMISSIONING

During the remedial construction associated with OU-1 and OU-3, monitoring wells MW-8, MW-10, MW-14, and MW-15 that were part of the 2015-16 groundwater monitoring program as well as another monitoring well with an unknown well identification number were decommissioned per *CP-43: Groundwater Monitoring Well Decommissioning Policy* (CP-43). CHA and the remedial contractor completing the remediation for OU-1 and OU-3 could not locate existing monitoring wells MW-4, MW-5, MW-5S, MW-6, and MW-6S (see Figure 2) at the start of the remedial construction, so they were not decommissioned at that time.

These existing wells were subsequently discovered by the remedial contractor when they were removing loose material from the towpath along the canal in preparation for restoring the pathway. Upon discovery, some of these five wells were missing their protective casing covers and most were missing protective gripper plugs allowing site soils from the towpath to fill the risers near the ground surface. Given that the wells have been compromised by filling them in with surface soils, CHA had proposed to decommission these wells and install new wells

described below. However, when CHA mobilized to the Site in November 2022 with our drilling subcontractor, the wells were not located visually or by utilizing a Garrett Model 1139070 metal detector, and therefore, they were not decommissioned as planned. CHA believes the well-protective cover frames/manholes may have been removed by heavy equipment preparing the towpath subgrade and that the remnants of the wells were covered over by the contractor during the reconstruction of the towpath. If they are observed during future monitoring events, the locations will be marked, and a drilling subcontractor will be retained to properly decommission the well(s) at that time.

WELL INSTALLATION

A total of seven new groundwater monitoring wells were installed at the Site to reestablish the groundwater monitoring network and facilitate periodic groundwater sampling following the completion of remedial construction activities. The monitoring wells were installed during two field events, which occurred in November 2022 and April 2023.

Overburden Wells

During the period from November 14 through 17, 2022, four overburden monitoring wells were installed: two on the upland portion of the Site (wells MW-100 and MW-102), northwest of the canal and outside of the Source Area excavation where contaminated soil was removed to the depth of bedrock; and two along the southeast side of the canal (wells MW-103 and MW-104), adjacent to the towpath. During all drilling activities, air monitoring stations were set up upwind and downwind of the work areas to monitor airborne particulate and volatile organic vapors in accordance with the Community Air Monitoring Plan (CAMP). Particulate monitoring data collected throughout the drilling activities are included in Attachment 1. Note that volatile organic compound (VOC) data were not continuously logged by the photoionization detectors (PIDs) at each monitoring station; however, each PID was periodically checked and found to be registering 0.0 parts per million (ppm). In addition, a handheld PID was used by the CHA field representative at the well locations to monitor the presence of VOCs during drilling activities. No VOCs were detected at any of the well locations during drilling activities.

Monitoring well locations were identified in the field using handheld GPS instrumentation and are shown on Figure 3. At each well location, the soil boring was advanced via direct-push techniques using a track-mounted, Geoprobe® drilling rig. Soil samples were collected continuously using a MacroCore® sampler to evaluate soil conditions and depth to groundwater.

Soil borings at locations MW-101 and MW-104 were advanced to a depth of 20 feet below ground surface (bgs). Soil borings at locations MW-100 and MW-103 were advanced to depths of 17 and 16.5 feet bgs, respectively, at which refusal was encountered due to the presence of weathered shale. Soil descriptions and other field observations were recorded on soil boring logs, which are included in Attachment 2.

Upon completion of soil sampling activities, the drill rig was equipped with 4.25-inch inside diameter hollow-stem augers (HSAs) and advanced to the desired depth to serve as a temporary casing and facilitate monitoring well installation. At each well location, the augers were advanced to the termination depth and a monitoring well was installed. Each well was

constructed of 10 to 15 feet of two-inch diameter, machine-slotted, polyvinyl chloride (PVC) well screen (0.010-inch slot size), and riser pipe. A sandpack of graded silica sand (#0) was placed in the annulus around the well screen to at least one foot above the top of the screen. Bentonite pellets were then placed above the sandpack to a depth of approximately one-foot bgs and hydrated to create a seal. Each well was finished with an expandable gripper cap and a flush-to-grade, bolt-down curb box set in concrete. Detailed well construction logs are included in Attachment 2. Soil cuttings generated during drilling activities were containerized in a total of three, 55-gallon drums, which were staged within the secured, fenced area of the Site, pending waste characterization and disposal arrangements.

Following the completion of well installation activities, each well was developed via manual bailing and surging, using disposable polyethylene bailers. In accordance with the *Former Friedrichsohn Cooperage OU-2 Groundwater Monitoring Plan*, well development until turbidity was below 50 nephelometric turbidity units (NTUs) was attempted, but unable to be achieved. Therefore, development ceased after two hours. Development water was containerized in a total of three 55-gallon drums, which were staged within the secured, fenced area of the Site, pending waste characterization and disposal arrangements.

On December 1, 2022, CHA collected a composite water sample and a composite soil sample from the drummed investigation-derived waste (IDW). The samples were submitted to Alpha Analytical, Inc. (Alpha) of Westborough, Massachusetts for characterization analyses, pursuant to the *Former Friedrichsohn Cooperage OU-2 Groundwater Monitoring Plan*. The laboratory analytical report is included in Attachment 3. Based on the analytical results, the soil and groundwater were managed as non-hazardous waste. The laboratory analytical report was provided to Corbett Industrial Cleaning Services, Inc. (Corbett) for waste profiling and disposal arrangements. On January 19, 2023, the six drums of waste soil and groundwater (three of each) were picked up by Corbett and transported to Veolia ES Technical Solutions, LLC in Flanders, New Jersey for disposal. A copy of the non-hazardous waste manifest is included in Attachment 4.

Bedrock Wells

Although CHA had originally anticipated that Cascade would install the bedrock monitoring wells after completing the installation of the overburden wells, the installation of the bedrock wells was delayed due to the need to obtain a non-highway work permit from the New York State Department of Transportation (NYSDOT) to facilitate the loading and unloading of a drill rig adjacent to the project Site on Saratoga Avenue. During the period from April 24 through 27, 2023, three bedrock monitoring wells were installed: two on the upland portion of the Site (wells MW-101B and MW-102B); and one along the southeast side of the canal, adjacent to the towpath (well MW-103B). Wells MW-102B and MW-103B were installed adjacent to overburden wells MW-102 and MW-103, respectively. Well MW-101B was installed on the northeastern portion of the upland portion of the Site in the vicinity of the former well MW-10 and within the footprint of the in-situ soil stabilization (ISS) slurry wall installed during the 2021 remedial construction activities. The NYSDEC waived the requirement for CAMP monitoring during the bedrock drilling work based on the monitoring results collected during the installation of the overburden wells (no vapors and low particulate concentrations), and the planned use of wet drilling methods for the installation of the bedrock monitoring wells via email on April 19, 2023.

At each bedrock monitoring well location, Cascade utilized a track-mounted sonic drilling rig to advance a six-inch diameter steel casing through the overburden to bedrock, which was encountered at depths ranging from 16 to 20 feet bgs. The casing was then advanced an additional 1.5 to 2 feet into the top of the bedrock to seal off the overburden from the bedrock formation. A falling head test was performed at each location to verify that the casing was effectively sealed off from the overburden. The test was conducted by filling the casing with potable water and observing the water level inside the casing. At each well location, no drop in water level was observed during the falling head test indicating the overburden was isolated from bedrock formation. Cascade then advanced a 4.75-inch diameter steel casing into the bedrock to the termination depth of the borehole, which was determined based on drilling conditions and observation of likely water-bearing zones within the sample cores recovered from the borehole. Termination depths ranged from 42 to 51 feet bgs. Upon reaching the termination depth at each location, a monitoring well was installed. CHA notes that no boring logs were created for the bedrock wells since well MW-101B was installed in an area where the remedial contractor previously excavated to bedrock and backfilled with virgin, imported fill, and wells MW-102B and MW-103B were installed adjacent to previously installed overburden wells where the lithology was previously documented.

Each well was constructed of 15 to 20 feet of two-inch diameter, machine-slotted, PVC well screen (0.010 slot size), and riser pipe. A sandpack of graded silica sand (#0) was placed in the annulus around the well screen to at least one foot above the top of the screen. The steel casing was retracted as the sandpack was being placed. Bentonite chips were placed in the annulus extending two to five feet above the sandpack. The annulus was then sealed across the overburden/bedrock interface and up to approximately one-foot bgs with cement-bentonite grout utilizing tremie methods, and the six-inch diameter casing was removed. Each well was finished with an expandable gripper cap and a flush-to-grade, bolt-down curb box set in concrete. Well construction logs are included in Attachment 2. Soil/rock cuttings and water used/generated during drilling activities were containerized in 55-gallon drums, which were staged within the secured, fenced area of the Site, pending waste characterization and disposal arrangements.

Following a minimum of 24 hours after well installation, each well was developed via manual bailing and surging, using disposable polyethylene bailers. The monitoring wells went dry after approximately 5 to 10 gallons of water was removed from each well. Turbidity was unable to be reduced to less than 50 NTUs. CHA believes the highly weathered bedrock noted during the well installation is the cause for elevated turbidity in the monitoring wells. Development water was containerized in a total of one 55-gallon drum, which was staged within the secured, fenced area of the Site, along with the other drummed waste.

On May 25, 2023, CHA collected a composite water sample and a composite soil sample from the drummed waste. The samples were submitted to Alpha to be analyzed for the same waste disposal characterization analyses as the previous drummed waste. The laboratory analytical report is included in Attachment 3. Based on the analytical results, the soil and groundwater were managed as non-hazardous waste. The laboratory analytical report was provided to Corbett for waste profiling and disposal arrangements. On July 24, 2023, a total of 16 drums of waste soil and water (2 soil and 14 water drums) were picked up by Corbett and transported to Veolia ES Technical Solutions, LLC in Flanders, New Jersey for disposal. A copy of the non-hazardous waste manifest is included in Attachment 4.

GROUNDWATER SAMPLING METHODS

The current groundwater monitoring well network consists of seven newly installed monitoring wells and two previously installed monitoring wells (wells MW-2 and MW-2S) on the northwest side of Saratoga Avenue. CHA conducted the second quarter of 2023 groundwater sampling event on May 22 through 24, 2023. Before purging and sampling, depth to water was measured at each groundwater monitoring well to the nearest 0.01-foot with a Heron water level meter. Purging and sampling of the monitoring wells were conducted using a 1.75-inch diameter bladder pump capable of low-flow minimal drawdown purging and sampling. Field water quality parameters including depth to water, pH, temperature, turbidity, dissolved oxygen, specific conductance, and oxidation-reduction potential (ORP) were measured using a YSI Pro DSS water quality meter equipped with a flow-through cell and recorded on logs included in Attachment 5. After three consecutive readings where the water parameters were stable (except for turbidity), one sample was collected from dedicated tubing within each well. Monitoring well MW-2S was found to have insufficient water for the portable bladder pump to operate; therefore, a disposable bailer was utilized to collect the sample from this well. No field water quality parameters were collected from monitoring well MW-2S due to limited water extracted.

Following collection, the groundwater samples were packed into coolers with ice and transported to Alpha, which is certified under the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

Samples were submitted to the laboratory for the following analyses:

- Volatile Organic Compounds (VOCs) via Environmental Protection Agency (EPA) Method 8260C;
- Semivolatile Organic Compounds (SVOCs) via EPA Method 8270D;
- Polychlorinated Biphenyls (PCBs) via EPA Method 8082;
- Target Analyte List (TAL) Metals via EPA Methods 6010/7471;
- Total Organic Carbon (TOC) via EPA Method SM2320;
- Nitrate via EPA Method 353.2;
- Alkalinity via EPA Method 2320;
- Ammonia via EPA Method 350.1;
- Total Dissolved Iron via EPA Method 6010; and,
- Sulfate via EPA Method 9038.

For quality assurance purposes, one blind duplicate (CHA-1) was collected from monitoring well MW-100, and matrix spike/matrix spike duplicate (MS/MSD) samples were collected at monitoring well MW-103. One equipment blank (RINSE-20230522) was prepared in the field and analyzed for the same parameters as the monitoring wells. One trip blank was prepared by the laboratory and accompanied the sample containers throughout the sampling and transport processes for analysis of VOCs only. The laboratory analytical results from the groundwater sampling event are presented in Table 1 and summarized in the following section.

ANALYTICAL RESULTS

Groundwater monitoring results were compared to the Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards (AWQS) and Guidance Values and are presented in Table 1. The location of each monitoring well in addition to detected PCB, VOC, and SVOC parameters that exceed the AWQS are displayed on Figures 4 through 6, respectively. The full laboratory analytical reports are included in Attachment 6. The Site was previously monitored on a semiannual basis. The report from the most recent groundwater monitoring event conducted by GHD, dated September 1, 2017, is referenced in this report for a comparison of some parameters.

Upgradient Monitoring Wells

Two monitoring wells, MW-2 and MW-2S, are located across Saratoga Avenue and act as upgradient monitoring wells. No detections of PCBs were identified, and no detections of VOCs exceeded their respective AWQS in the upgradient monitoring wells. Both monitoring wells MW-2 and MW-2S were found to have concentrations of SVOCs in exceedance of their respective AWQS. Detections included (Note: “J” qualified data indicates that the result is an estimated value detected at a concentration above the method detection limit but below the reporting limit):

- Benzo(a)anthracene at 0.26 µg/L compared to an AWQS of 0.002 µg/L in monitoring well MW-2S.
- Benzo(a)pyrene at 0.92 and 0.02J µg/L compared to an AWQS of “non-detectable” in monitoring wells MW-2S and MW-2, respectively.
- Benzo(b)fluoranthene at 1.5 and 0.03J µg/L compared to an AWQS of 0.002 µg/L in monitoring wells MW-2S and MW-2, respectively.
- Benzo(k)fluoranthene at 0.47 and 0.01J µg/L compared to an AWQS of 0.002 µg/L in monitoring wells MW-2S and MW-2, respectively.
- Chrysene at 0.51 and 0.02J µg/L compared to an AWQS of 0.002 µg/L in monitoring wells MW-2S and MW-2, respectively.
- Hexachlorobenzene at 0.05J µg/L compared to an AWQS of 0.04 µg/L in monitoring well MW-2S.
- Indeno(1,2,3-cd)pyrene at 1.4 and 0.02J µg/L compared to an AWQS of 0.002 µg/L in monitoring wells MW-2S and MW-2, respectively.

Metals detected in exceedance of their respective AWQS in monitoring well MW-2S include iron, lead, manganese, and sodium and in monitoring well MW-2 include manganese and sodium. Detection of metals is typical for groundwater in urban environments and groundwater samples that are relatively turbid. These parameters are not considered Site contaminants of concern and were not targeted for remediation of OU-1 and OU-3. Dissolved iron was analyzed for future evaluation of the selected remedy effectiveness and is not discussed further in this report.

On-Site Monitoring Wells

The monitoring wells MW-100, MW-101B, MW-102, and MW-102B are on-Site monitoring wells. PCBs were not detected in the overburden wells MW-100 or MW-102. Detection of the PCB Aroclor 1242, one of the Site contaminants of concern, in exceedance of the AWQS was noted in the bedrock monitoring wells MW-101B and MW-102B at 0.134 and 0.099 µg/L, respectively, compared to an AWQS of 0.09 µg/L. In reviewing the June 2017 groundwater

monitoring data, old monitoring well MW-10 (since decommissioned) was in proximity to the current monitoring well MW-101B, and the detection of Aroclor 1242 as recently as the June 15, 2017, sampling event was 160 µg/L. Therefore, the Aroclor 1242 result from the second quarter of the 2023 monitoring event is three orders of magnitude lower following remedial construction.

VOCs were generally not detected in the on-Site overburden monitoring wells with the exception of an estimated concentration of 0.38 µg/L of trichloroethene in well MW-102, which is below the AWQS. Additionally, estimated concentrations (qualified with a “J”) of acetone and methylene chloride (common laboratory contaminants) were detected in bedrock well MW-101B. The VOCs cis-1,2-dichloroethene and vinyl chloride exceeded their respective AWQS at concentrations of 30 µg/L and 160 µg/L, compared to a AWQS of 5 µg/L and 2 µg/L, respectively, in bedrock monitoring well MW-102B. In a review of the June 2017 groundwater monitoring data, there were no monitoring wells in the vicinity of MW-102 and MW-102B to compare VOC concentrations. Generally, VOCs across the historical on-Site monitoring wells included benzene, toluene, ethylbenzene, and xylene (collectively BTEX) with lower concentrations of trichloroethene. Trichloroethene can reduce under natural conditions to daughter products including cis-1,2-dichloroethene and vinyl chloride. Generally, the results of the second quarter of the 2023 monitoring event having no detections of BTEX compounds and the presence of daughter products of trichloroethene suggests the remedy was successful and monitored natural attenuation is occurring at the Site. Again, VOCs were not detected in exceedance of AWQS in the other on-Site monitoring wells and the only exceedances were detected in one overburden well.

No SVOCs were detected at concentrations that exceed their respective AWQS in the on-Site monitoring wells.

Multiple metals were detected in exceedance of their respective AWQS in the on-Site monitoring wells. However, as noted previously, metals were not considered Site contaminants of concern.

Southeast Side of Canal Monitoring Wells

Three monitoring wells, MW-103, MW-103B, and MW-104, are located on the southeast side of the Old Champlain Canal. The PCB Aroclor 1242 was detected at concentrations of 1.11 µg/L, 0.22 µg/L, and 0.481 µg/L compared to the AWQS of 0.09 µg/L in monitoring wells MW-103, MW-103B, and MW-104, respectively.

The VOC benzene was identified at concentrations of 1.9 µg/L, 1.8 µg/L, and 7.7 µg/L compared to an AWQS of 1 µg/L, in monitoring wells MW-103, MW-103B, and MW-104, respectively. The VOCs chlorobenzene, cis-1,2-dichloroethene, and vinyl chloride exceeded their respective AWQS at concentrations of 15 µg/L, 320 µg/L, and 190 µg/L, compared to AWQS of 5 µg/L, 5 µg/L, and 2 µg/L, respectively, in monitoring well MW-104. Chlorinated VOCs were absent from wells MW-103 and MW-103B.

SVOC detections in exceedance of their respective AWQS included benzo(b)fluoranthene and benzo(k)fluoranthene were detected at 0.01J µg/L and 0.01J µg/L, respectively, compared to an AWQS of 0.002 µg/L in monitoring well MW-103. As indicated, these compound concentrations are flagged with a “J” qualifier because the results were detected at a concentration above the method detection limit but below the reporting limit.

Multiple metals were detected in exceedance of their respective AWQS in the monitoring wells on the southeast side of the Old Champlain Canal. However, as noted previously, metals were not considered Site contaminants of concern and were not targeted for remediation.

QA/QC Sampling

As previously noted, QA/QC sampling efforts included one blind duplicate (CHA-1), matrix spike and matrix spike duplicates (MS/MSD), an equipment blank sample (RINSE), and a trip blank accompanying the samples throughout the sampling and transport process. The following observations were made with regard to the QA/QC samples:

- The relative percent difference between the duplicate CHA-1 sample and the parent sample was generally found to be less than 20 percent with some exceptions notably in the metals parameters which can be skewed by the turbidity of the sample potentially changing during the sampling process.
- The MS/MSD samples were used by the laboratory to conduct their internal quality control sampling and, generally, the results were found to be within the percent recovery limits noted in the laboratory reports.
- The equipment blank sample was found to have minimal detections of metals significantly lower than the detections identified in samples from each monitoring well. The results generally confirm that CHA's protocols for decontamination of non-disposable field equipment were adequate.
- The laboratory-prepared trip blank was analyzed for VOCs and no parameters were detected.

Data Validation

A Data Usability Summary Report (DUSR) was prepared by a third-party data validator, Alpha Geoscience, and is included in Attachment 7. All data were considered usable with some alterations to the J, J+, or UJ-qualified data. These changes to the qualifier are associated with a higher level of quantitative uncertainty. Changes to the qualifiers by the data validator were incorporated into Table 1 and signified by *italicized* values. Generally, the data were found to be acceptable and usable by the data validator. One change to note was the change from low-level detections of chrysene in exceedance of the AWQS to non-detect values in samples from monitoring wells MW-103, MW-103B, and MW-104, according to Alpha Geoscience.

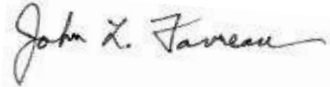
CONCLUSIONS AND RECOMMENDATIONS

CHA coordinated and oversaw the installation of seven new groundwater monitoring wells to re-establish the groundwater monitoring network at the Site. The seven new wells and two previously installed wells located upgradient of the Site were sampled in May 2023. The results of this sampling event indicate low levels of PCB, VOC, and SVOC compounds in the groundwater remain post-remediation. However, compared to pre-remediation sampling, the concentrations are generally lower and most of the exceedances were in the bedrock where active remediation was not performed. That said, the lower concentrations of the contaminants of concern in the bedrock water-bearing zone suggest that the remediation has had a positive impact on that water-bearing zone as well. CHA will continue to monitor the Site in accordance with the *Former Friedrichsohn Cooperage OU-2 Groundwater Monitoring Plan*.

The next sampling event is scheduled to occur in the fourth quarter of 2023. A letter report summarizing the results will be submitted following receipt of the data and the DUSR. CHA will complete a more detailed evaluation of the water quality after completing three additional sampling events, with the fourth event being performed during the fourth quarter of 2024.

If you should have any questions or require additional information, please feel free to contact Scott Smith at (315) 257-7227.

Sincerely,



John L. Favreau, CHMM
Senior Scientist V



Scott Smith, P.E.
Vice President

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TABLE

Table 1 – May 2023 Analytical Results Detections Only

Table 1.
May 2023 Groundwater Monitoring Results - Detections Only
Former Friedrichsohn Cooperage
153-155 Saratoga Avenue
Waterford, New York

			2023-MAY							
LOCATION			MW-2S- 20230524		MW-2- 20230524		MW-100- 20230522		MW-101B- 20230523	
SAMPLING DATE			5/24/2023		5/24/2023		5/22/2023		5/23/2023	
LAB SAMPLE ID			L2329262-01		L2329262-02		L2328902-03		L2328902-04	
	NY- AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dissolved Metals										
Iron, Dissolved	300	µg/L	50	U	50	U	50	U	1,220	
General Chemistry										
Alkalinity, Total		mg CaCO3/L	104	J+	164	J+	386		349	
Nitrogen, Ammonia		µg/L	52	J	1810		770		2180	
Nitrogen, Nitrate	10,000	µg/L	6,000		25	J	47	J	150	
Sulfate	250,000	µg/L	26,000		44,000		89,000		21,000	
Total Organic Carbon		µg/L	740		460	J	5,400		1,400	
Volatile Organics by GC/MS										
Acetone	50	µg/L	5	U	5	U	5	U	4.1	J
Benzene	1	µg/L	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	µg/L	2.5	U	2.5	U	2.5	U	2.5	U
Chloroform	7	µg/L	1.7	J	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	5	µg/L	2.5	U	2.5	U	2.5	U	2.5	U
Methylene chloride	5	µg/L	2.5	U	2.5	U	2.5	U	1	J
Tetrachloroethene	5	µg/L	0.43	J	0.5	U	0.5	U	0.5	U
Trichloroethene	5	ug/l	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	ug/l	1	U	1	U	1	U	1	U
Semivolatile Organics by GC/MS										
4-Bromophenyl phenyl ether		µg/L	2	U	2	U	2.2	J	5	U
Caprolactam		µg/L	4.1	J	46	J	13	J	5	U
Diethyl phthalate	50	ug/l	5	U	5	U	2.2	J	5	U
p-Chloro-m-cresol		ug/l	2	U	2	U	13		10	U
Semivolatile Organics by GC/MS-SIM										
2-Methylnaphthalene		µg/L	0.1	U	0.1	U	0.06	U	0.1	U
Acenaphthene	20	µg/L	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene		µg/L	0.03	J	0.1	U	0.02	J	0.1	U
Anthracene	50	µg/L	0.03	J	0.1	U	0.1	U	0.1	U
Benzo(a)anthracene	0.002	µg/L	0.26		0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	0	µg/L	0.92		0.02	J	0.1	U	0.1	U
Benzo(b)fluoranthene	0.002	µg/L	1.5		0.03	J	0.1	U	0.1	U
Benzo(ghi)perylene		µg/L	1.6		0.02	J	0.1	U	0.1	U
Benzo(k)fluoranthene	0.002	µg/L	0.47		0.01	J	0.1	U	0.1	U
Chrysene	0.002	µg/L	0.51		0.02	J	0.1	U	0.1	U
Fluoranthene	50	µg/L	0.54		0.03	J	0.1	U	0.1	U
Hexachlorobenzene	0.04	µg/L	0.05	J	0.8	U	0.8	U	0.8	U
Indeno(1,2,3-cd)pyrene	0.002	µg/L	1.4		0.02	J	0.1	U	0.1	U
Naphthalene	10	µg/L	0.1	U	0.1	U	0.31		0.1	U
Pentachlorophenol	1	µg/L	0.8	U	0.8	U	0.8	U	0.8	U
Phenanthrene	50	µg/L	0.09	J	0.03	J	0.1	U	0.1	U
Pyrene	50	µg/L	0.51		0.03	J	0.1	U	0.1	U
Polychlorinated Biphenyls by GC										
Aroclor 1242	0.09	µg/L	0.071	U	0.071	U	0.071	U	0.134	
Total Metals										
Aluminum, Total		µg/L	3,600		160		2,340	J	69,700	
Antimony, Total	3	µg/L	4	U	0.5	J	4	U	3.58	J
Arsenic, Total	25	µg/L	3.28		5.15		1.87	J	95.24	
Barium, Total	1,000	µg/L	85.33		384.1		119.7		4,024	
Beryllium, Total	3	µg/L	0.24	J	0.5	U	0.13	J	4.47	
Cadmium, Total	5	µg/L	3.4		0.4		0.13	J	0.54	J
Calcium, Total		µg/L	37,000		68,200		153,000	J	82,800	J
Chromium, Total	50	µg/L	8.94		1.47		3.49	U	134	
Cobalt, Total		µg/L	5.57		0.34	J	4.55	J	129.4	
Copper, Total	200	µg/L	17.39		0.73	J	5.26	J	235	
Iron, Total	300	µg/L	9,400		147		4,640	J	193,000	
Lead, Total	25	µg/L	34.39		1.3		3.05	J	134	
Magnesium, Total	35,000	µg/L	10,700		24,500		22,500		53,200	
Manganese, Total	300	µg/L	598.5		731.1		9,520		14,650	
Mercury, Total	0.7	µg/L	0.17	J	0.2	U	0.2	U	0.43	
Nickel, Total	100	µg/L	10.1		4.68		6.59	U	184.6	
Potassium, Total		µg/L	4,620		8,370		11,100		21,700	
Selenium, Total	10	µg/L	2.87	J	5	U	5	U	15.2	J
Silver, Total	50	µg/L	1.26		0.4	U	0.4	U	2	U
Sodium, Total	20,000	µg/L	209,000		114,000		137,000		174,000	
Thallium, Total	0.5	µg/L	1	U	1	U	0.15	J	1.38	J
Vanadium, Total		µg/L	6.92		5	U	4.7	J	116.8	
Zinc, Total	2,000	µg/L	54.02		6.51	J	11.7	J	278.8	

Table 1.
May 2023 Groundwater Monitoring Results - Detections Only
Former Friedrichsohn Cooperage
153-155 Saratoga Avenue
Waterford, New York

			2023-MAY									
LOCATION			MW-102-20230522		MW-102B-20230522		MW-103-20230523		MW-103B-20230523		MW-104-20230523	
SAMPLING DATE			5/22/2023		5/22/2023		5/23/2023		5/23/2023		5/23/2023	
LAB SAMPLE ID			L2328902-01		L2328902-02		L2328902-06		L2328902-05		L2328902-07	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dissolved Metals												
	Iron, Dissolved	300 µg/L	25.5	J	97.7		74.3		3,150		28.3	J
General Chemistry												
	Alkalinity, Total	mg CaCO3/L	191		376		214		349		237	
	Nitrogen, Ammonia	µg/L	230		2690		488		861		1600	
	Nitrogen, Nitrate	10,000 µg/L	100	U	78	J	49	J	96	J	36	J
	Sulfate	250,000 µg/L	or		31,000		34,000		28,000		26,000	
	Total Organic Carbon	µg/L	3,000		3,300		4,700		7,000		5,400	
Volatile Organics by GC/MS												
	Acetone	50 µg/L	5	U	5	U	5	U	4.2	J	12	U
	Benzene	1 µg/L	0.5	U	0.5	U	1.9		1.8		7.7	
	Chlorobenzene	5 µg/L	2.5	U	2.5	U	2.1	J+	2.5	U	15	
	Chloroform	7 µg/L	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U
	cis-1,2-Dichloroethene	5 µg/L	2.5	U	30		2.5	U	2.5	U	320	
	Methylene chloride	5 µg/L	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U
	Tetrachloroethene	5 µg/L	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U
	Trichloroethene	5 ug/l	0.38	J	0.5	U	0.5	U	0.5	U	1.2	U
	Vinyl chloride	2 ug/l	1	U	160		1	U	0.13	J	190	
Semivolatile Organics by GC/MS												
	4-Bromophenyl phenyl ether	µg/L	5	U	5	U	5	U	1.5	J	5	U
	Caprolactam	µg/L	5	U	17	J	5	U	5	U	5	U
	Diethyl phthalate	50 ug/l	5	U	5	U	5	U	1.5	J	5	U
	p-Chloro-m-cresol	ug/l	10	U	17		10	U	10	U	10	U
Semivolatile Organics by GC/MS-SIM												
	2-Methylnaphthalene	µg/L	0.05	U	0.09	U	0.1	U	0.1	U	0.1	U
	Acenaphthene	20 µg/L	0.1	U	0.1	U	0.02	J	0.1	U	0.1	U
	Acenaphthylene	µg/L	0.1	U	0.05	J	0.01	J	0.1	U	0.1	U
	Anthracene	50 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Benzo(a)anthracene	0.002 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Benzo(a)pyrene	0 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Benzo(b)fluoranthene	0.002 µg/L	0.1	U	0.1	U	0.01	J	0.1	U	0.1	U
	Benzo(ghi)perylene	µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Benzo(k)fluoranthene	0.002 µg/L	0.1	U	0.1	U	0.01	J	0.1	U	0.1	U
	Chrysene	0.002 µg/L	0.1	U	0.1	U	0.04	U	0.05	U	0.03	U
	Fluoranthene	50 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Hexachlorobenzene	0.04 µg/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
	Indeno(1,2,3-cd)pyrene	0.002 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Naphthalene	10 µg/L	0.08	J	0.45		0.1	U	0.1	U	0.1	U
	Pentachlorophenol	1 µg/L	0.8	U	0.8	U	0.07	J	0.8	U	0.8	U
	Phenanthrene	50 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Pyrene	50 µg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Polychlorinated Biphenyls by GC												
	Aroclor 1242	0.09 µg/L	0.071	U	0.099		1.11		0.22		0.481	
Total Metals												
	Aluminum, Total	µg/L	139		16,100		794		50,100		2,670	
	Antimony, Total	3 µg/L	4	U	2.04	J	4	U	0.65	J	4	U
	Arsenic, Total	25 µg/L	4.43		20.41		6.28		25.32		6.74	
	Barium, Total	1,000 µg/L	53.32		2,128		69.08		1,258		168.5	
	Beryllium, Total	3 µg/L	0.5	U	0.68		0.5	U	1.87		0.14	J
	Cadmium, Total	5 µg/L	0.2	U	0.18	J	0.2	U	0.26		0.2	U
	Calcium, Total	µg/L	77,400	J	52,000	J	40,000	J	36,000	J	55,500	J
	Chromium, Total	50 µg/L	1.39	U	40.9		2	U	129.5		7.31	
	Cobalt, Total	µg/L	0.69		23.92		0.99		55.92		2.27	
	Copper, Total	200 µg/L	1.61		57.46		3.37		110		6.87	
	Iron, Total	300 µg/L	3,430		49,200		1,690		120,000		10,300	
	Lead, Total	25 µg/L	0.72	J	39.42		1.93		72.02		6.61	
	Magnesium, Total	35,000 µg/L	10,600		29,700		8,300		37,600		11,900	
	Manganese, Total	300 µg/L	918.4		1,860		884.2		3,514		3,809	
	Mercury, Total	0.7 µg/L	0.2	U	0.15	J	0.2	U	0.12	J	0.2	U
	Nickel, Total	100 µg/L	3.03	U	58.99		8.27	U	162.3		10.16	U
	Potassium, Total	µg/L	3,290		13,000		2,350		9,720		2,770	
	Selenium, Total	10 µg/L	5	U	4.13	J	2.24	J	7.72		5	U
	Silver, Total	50 µg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
	Sodium, Total	20,000 µg/L	22,500		115,000		114,000		192,000		162,000	
	Thallium, Total	0.5 µg/L	0.15	J	0.58	J	0.32	J	0.35	J	1	U
	Vanadium, Total	µg/L	5	U	36.27		2.12	J	98.58		5.37	
	Zinc, Total	2,000 µg/L	10	U	73.8		7.7	J	163.1		11.74	

Notes:

May 2023 samples collected by CHA Consulting, Inc. and analyzed by Alpha Analytical Laboratories (NYSDOH ELAP 11148)

Results in micrograms per liter (µg/L) unless otherwise noted.

Results compared to the Division of Water Technical and Operational Guidance Series (TOGS)
1.1.1 - Ambient Water Quality Standards (AWQS) and Guidance Values

Blue Shading and Bold- Result exceeds the NYSDEC AWQS.

Italicized Results and Qualifiers: The DUSR identified some issue with the data that required alteration of the qualifier. See the DUSR for additional information.

GC - Gas Chromatography

MS - Mass Spectrometry

SIM - Selective Ion Method

Data Qualifiers:

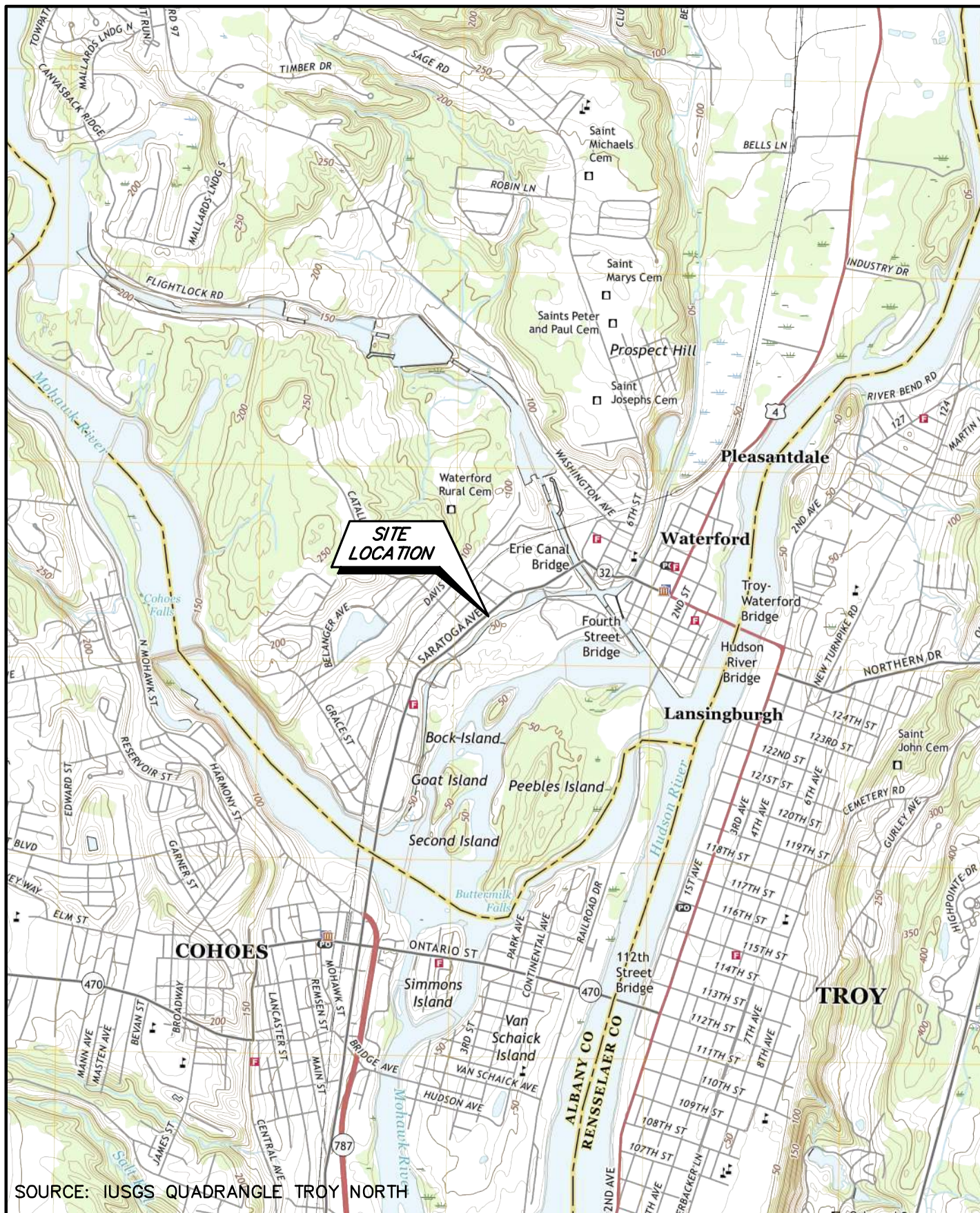
U - Indicates the compound was analyzed for but was not detected. Reporting Limit presented.

J - Indicates an estimate value detected at a concentration above the method detection limit but below the reporting limit.

J+ - Result is biased high.

FIGURES

- Figure 1 - Site Location Map
- Figure 2 – Monitoring Wells to Decommission
- Figure 3 – Monitoring Well Network
- Figure 4 – PCB Detections
- Figure 5 – VOC Detections
- Figure 6 – SVOC Detections



SOURCE: IUSGS QUADRANGLE TROY NORTH

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Albany, NY 12205-0269
518.453.4500 • www.chacompanies.com

SITE LOCATION MAP

FRIEDRICHSOHN COOPERATE SITE
WATERFORD, NEW YORK

PROJECT NO.
060017

DATE: 07/2023

FIGURE 1





LEGEND

⊗ BEDROCK

⊙ OVERBURDEN

NEWLY INSTALLED MONITORING WELLS MW-100, MW-101B, MW-102, MW-102B, MW-103, MW-103B, AND MW-104
INSTALLED BY CASCADE DRILLING WITH OVERSIGHT BY CHA.
MONITORING WELLS MW-2 AND MW-2S WERE PREVIOUSLY INSTALLED BY A SEPARATE CONTRACTOR.

SOURCE: IMAGE COURTESY OF THE NYS OFFICE OF INFORMATION TECHNOLOGY

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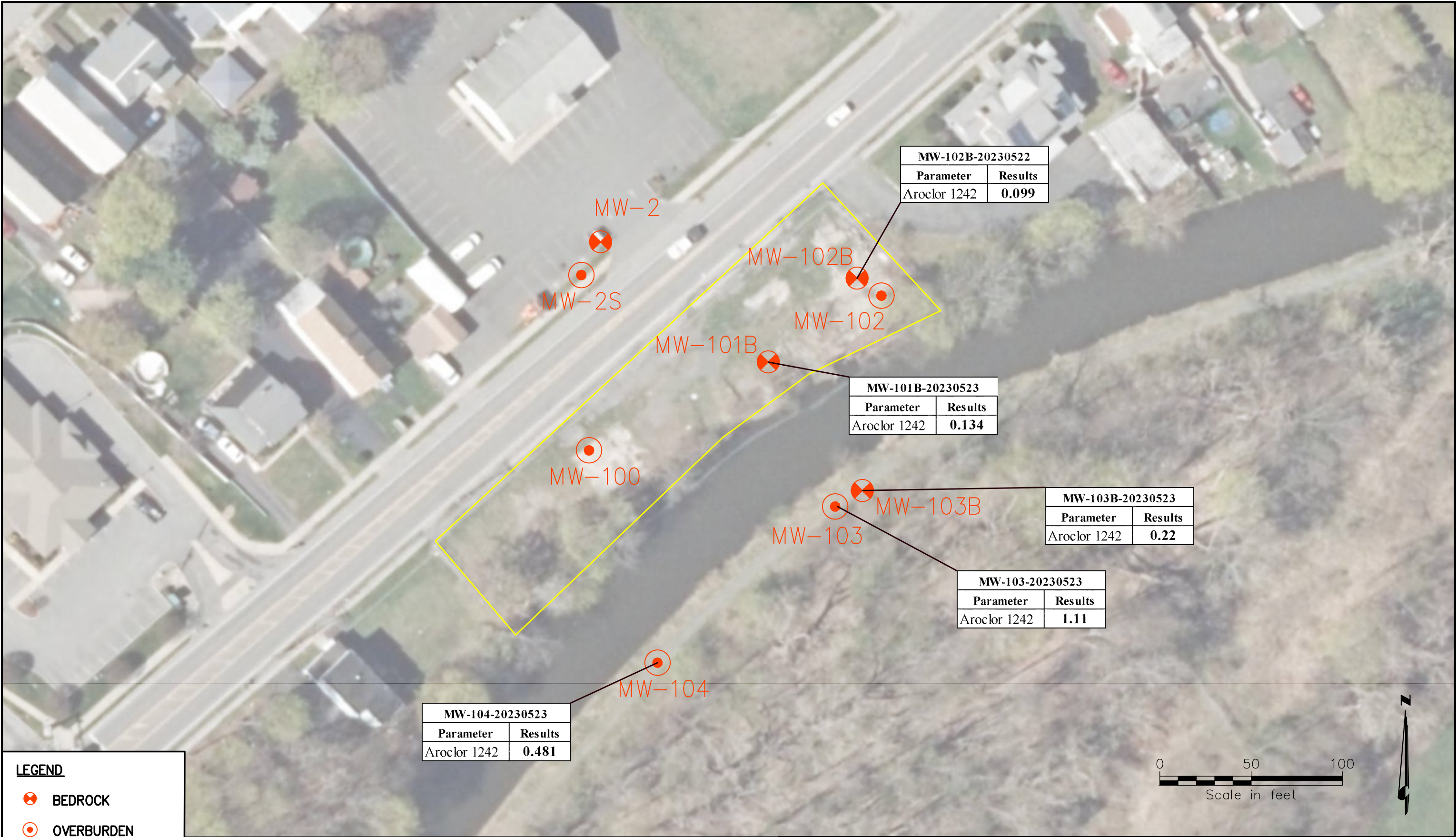
CHA

III Winners Circle, PO Box 5269
Albany, NY 12205-0269
518.453.4500 · www.chacompanies.com

OPERATIONAL UNIT 2
MONITORING WELL NETWORK
FORMER FRIEDRICHSOHN COOPERAGE
153-155 SARATOGA AVENUE
TOWN OF WATERFORD, NEW YORK

PROJECT NO. 060017.000
DATE: 07/2023
FIGURE 3

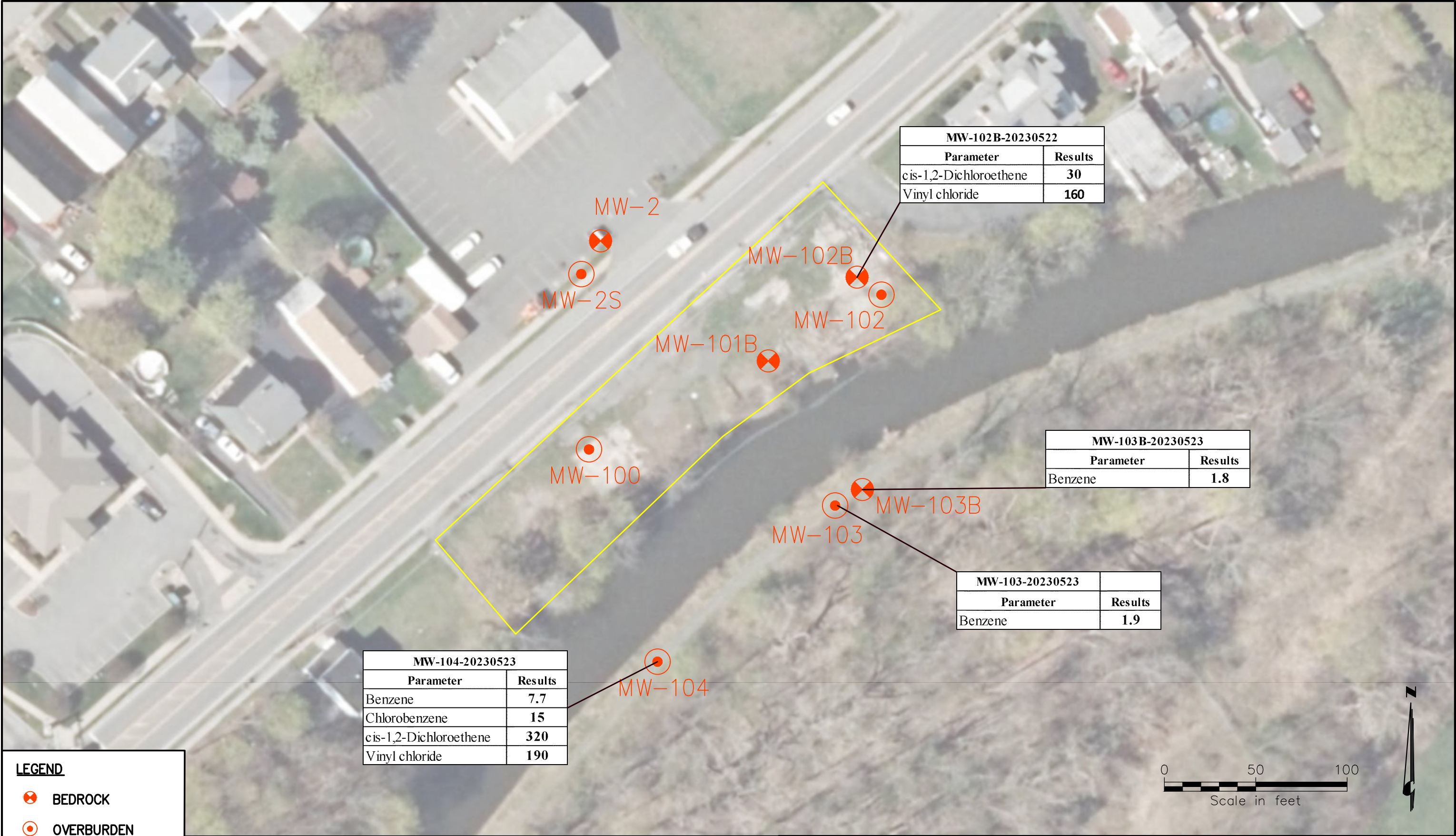
File: V:\PROJECTS\ANY\KS\060017.000\CADD\ENVP\GW_MONITORING\PROGRAM.DWG Saved: 8/17/2023 12:03:51 PM Plotted: 8/17/2023 12:05:38 PM Current User: Ehmann, Karyn LastSavedBy: 5768



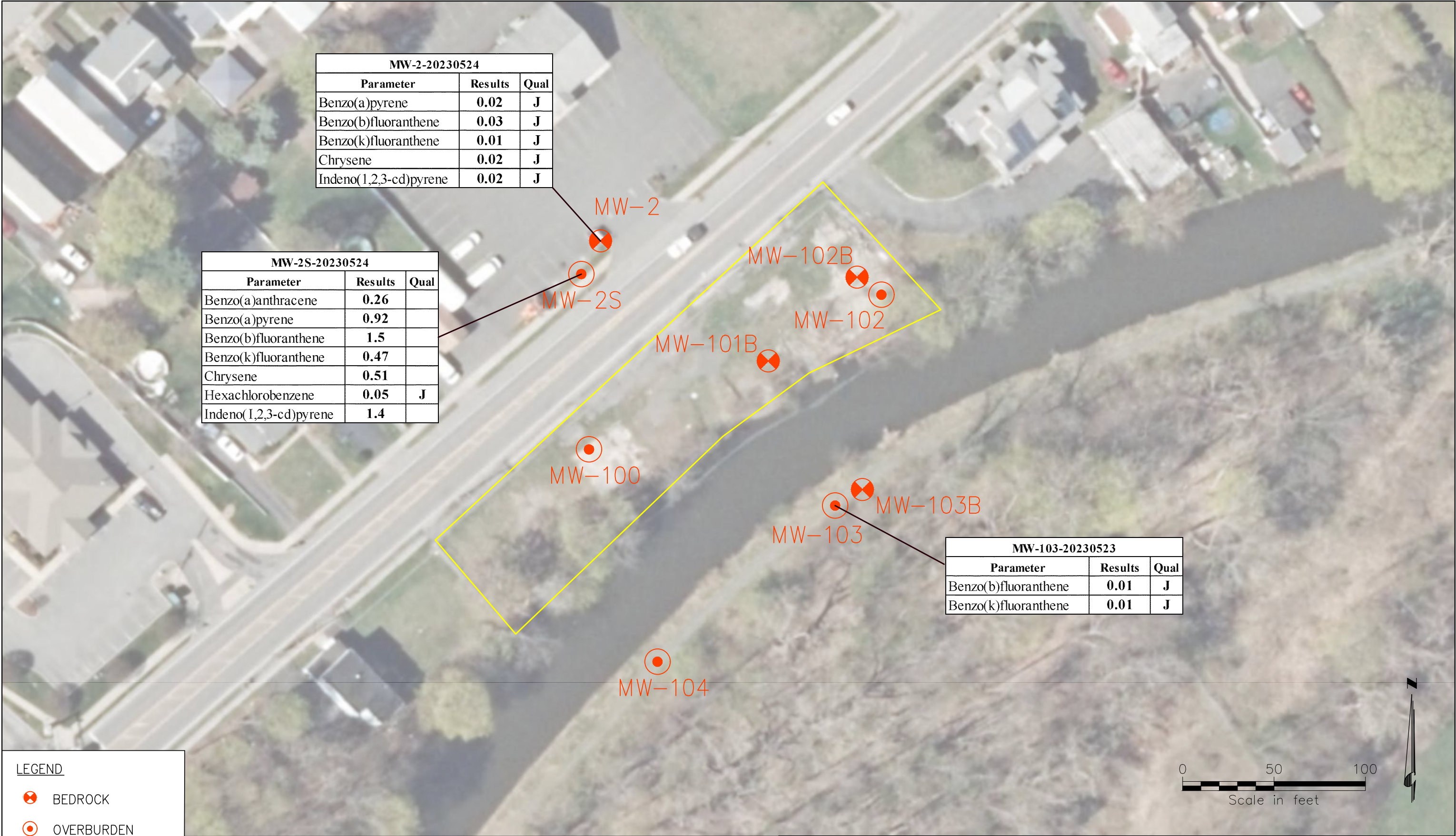
POLYCHLORINATED BIPHENYL RESULTS
FORMER FRIEDRICHSON COOPERAGE
153-155 SARATOGA AVENUE
TOWN OF WATERFORD, NEW YORK

PROJECT NO. 060017.000
DATE: 07/2023
FIGURE 4

File: V:\PROJECTS\ANY\K5\060017.000\CADD\ENVP\GW_MONITORING\PROGRAM.DWG Saved: 8/17/2023 12:06:17 PM Plotted: 8/17/2023 12:06:35 PM Current User: Ehmann, Karyn LastSavedBy: 5768



File: V:\PROJECTS\ANY\K5\060017.000\CADD\ENVP\GW_MONITORING_PROGRAM.DWG Saved: 8/17/2023 12:06:17 PM Plotted: 8/17/2023 12:07:29 PM Current User: Ehmann, Karyn LastSavedBy: 5768



DETECTIONS THAT EXCEED THE TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES PRESENTED.
RESULTS PRESENTED IN MICROGRAMS PER LITER (UG/L)
J QUALIFIER = COMPOUND DETECTED ABOVE THE METHOD DETECTION LIMIT BUT BELOW THE REPORTING LIMIT.
DETECTION IS ESTIMATED.

Drawing Copyright © 2023

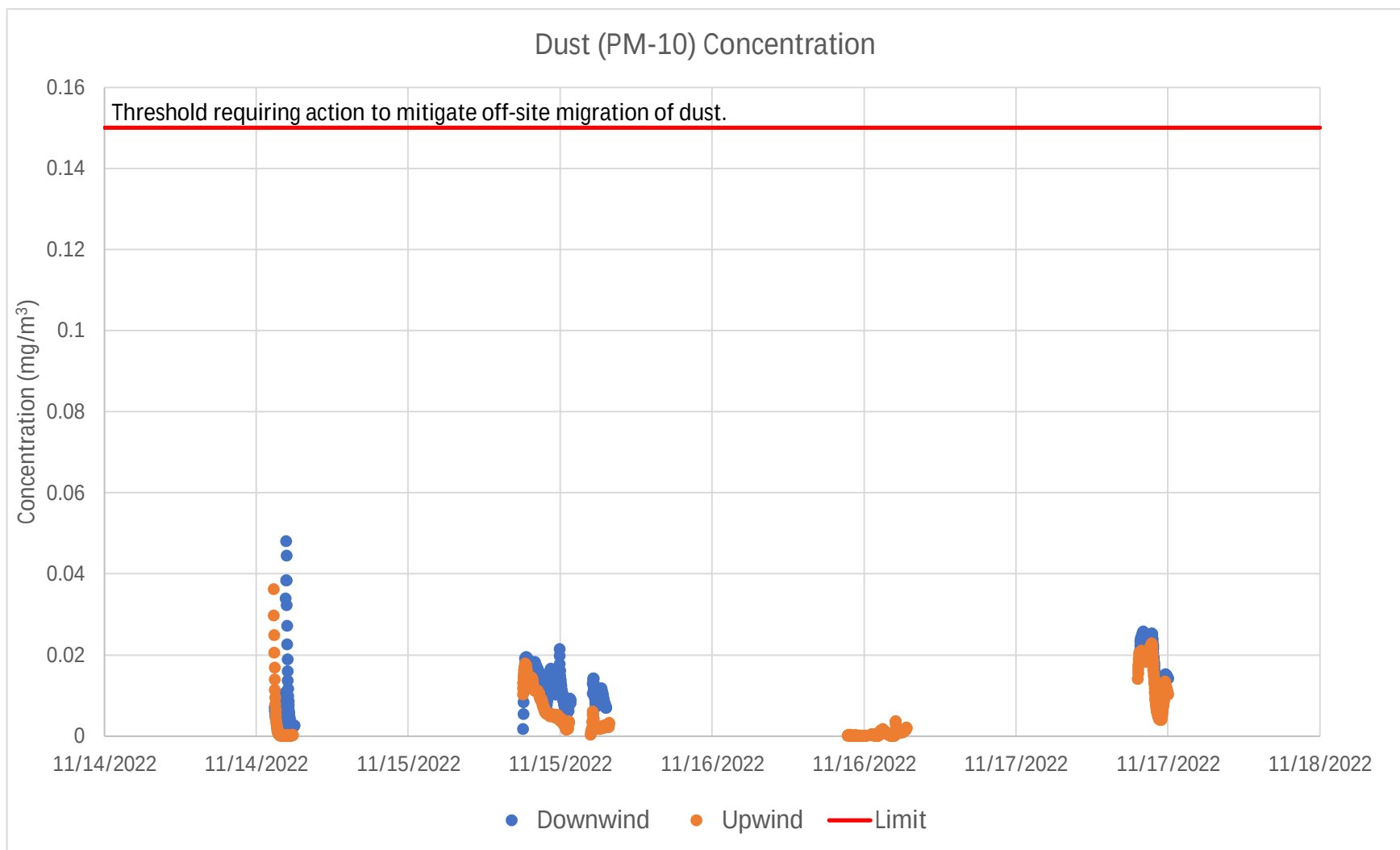
CHIA

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Albany, NY 12205-0269
518.453.4500 · www.chacompanies.com

SEMIVOLATILE ORGANIC COMPOUND RESULTS	PROJECT NO. 060017.000
FORMER FRIEDRICHSOHN COOPERAGE 153-155 SARATOGA AVENUE TOWN OF WATERFORD, NEW YORK	DATE: 07/2023
	FIGURE 6

Attachment 1

CAMP Data



Station ID	Date and Local Time	Reading Type	Result	Units
374 - Downwind	11/14/2022 13:27	Dust - 15 Minute Average	0.007222	mg/m3
374 - Downwind	11/14/2022 13:28	Dust - 15 Minute Average	0.006335	mg/m3
374 - Downwind	11/14/2022 13:29	Dust - 15 Minute Average	0.005645	mg/m3
374 - Downwind	11/14/2022 13:30	Dust - 15 Minute Average	0.00518	mg/m3
374 - Downwind	11/14/2022 13:31	Dust - 15 Minute Average	0.004796	mg/m3
374 - Downwind	11/14/2022 13:32	Dust - 15 Minute Average	0.004503	mg/m3
374 - Downwind	11/14/2022 13:33	Dust - 15 Minute Average	0.004238	mg/m3
374 - Downwind	11/14/2022 13:34	Dust - 15 Minute Average	0.00402	mg/m3
374 - Downwind	11/14/2022 13:35	Dust - 15 Minute Average	0.003841	mg/m3
374 - Downwind	11/14/2022 13:36	Dust - 15 Minute Average	0.003693	mg/m3
374 - Downwind	11/14/2022 13:37	Dust - 15 Minute Average	0.003571	mg/m3
374 - Downwind	11/14/2022 13:38	Dust - 15 Minute Average	0.003417	mg/m3
374 - Downwind	11/14/2022 13:39	Dust - 15 Minute Average	0.003848	mg/m3
374 - Downwind	11/14/2022 13:40	Dust - 15 Minute Average	0.003871	mg/m3
374 - Downwind	11/14/2022 13:41	Dust - 15 Minute Average	0.003729	mg/m3
374 - Downwind	11/14/2022 13:42	Dust - 15 Minute Average	0.003868	mg/m3
374 - Downwind	11/14/2022 13:43	Dust - 15 Minute Average	0.003865	mg/m3
374 - Downwind	11/14/2022 13:44	Dust - 15 Minute Average	0.004053	mg/m3
374 - Downwind	11/14/2022 13:45	Dust - 15 Minute Average	0.004055	mg/m3
374 - Downwind	11/14/2022 13:46	Dust - 15 Minute Average	0.003699	mg/m3
374 - Downwind	11/14/2022 13:47	Dust - 15 Minute Average	0.003417	mg/m3
374 - Downwind	11/14/2022 13:48	Dust - 15 Minute Average	0.003179	mg/m3
374 - Downwind	11/14/2022 13:49	Dust - 15 Minute Average	0.002968	mg/m3
374 - Downwind	11/14/2022 13:50	Dust - 15 Minute Average	0.002807	mg/m3
374 - Downwind	11/14/2022 13:51	Dust - 15 Minute Average	0.00266	mg/m3
374 - Downwind	11/14/2022 13:52	Dust - 15 Minute Average	0.002544	mg/m3
374 - Downwind	11/14/2022 13:53	Dust - 15 Minute Average	0.002442	mg/m3
374 - Downwind	11/14/2022 13:54	Dust - 15 Minute Average	0.002358	mg/m3
374 - Downwind	11/14/2022 13:55	Dust - 15 Minute Average	0.002294	mg/m3
374 - Downwind	11/14/2022 13:56	Dust - 15 Minute Average	0.002199	mg/m3
374 - Downwind	11/14/2022 13:57	Dust - 15 Minute Average	0.002164	mg/m3
374 - Downwind	11/14/2022 13:58	Dust - 15 Minute Average	0.002135	mg/m3
374 - Downwind	11/14/2022 13:59	Dust - 15 Minute Average	0.002111	mg/m3
374 - Downwind	11/14/2022 14:00	Dust - 15 Minute Average	0.002091	mg/m3
374 - Downwind	11/14/2022 14:01	Dust - 15 Minute Average	0.002216	mg/m3
374 - Downwind	11/14/2022 14:02	Dust - 15 Minute Average	0.002452	mg/m3
374 - Downwind	11/14/2022 14:03	Dust - 15 Minute Average	0.002403	mg/m3
374 - Downwind	11/14/2022 14:04	Dust - 15 Minute Average	0.00231	mg/m3
374 - Downwind	11/14/2022 14:05	Dust - 15 Minute Average	0.002254	mg/m3
374 - Downwind	11/14/2022 14:06	Dust - 15 Minute Average	0.002166	mg/m3
374 - Downwind	11/14/2022 14:07	Dust - 15 Minute Average	0.002226	mg/m3
374 - Downwind	11/14/2022 14:08	Dust - 15 Minute Average	0.002228	mg/m3
374 - Downwind	11/14/2022 14:09	Dust - 15 Minute Average	0.006757	mg/m3
374 - Downwind	11/14/2022 14:10	Dust - 15 Minute Average	0.008586	mg/m3
374 - Downwind	11/14/2022 14:11	Dust - 15 Minute Average	0.007408	mg/m3
374 - Downwind	11/14/2022 14:12	Dust - 15 Minute Average	0.006592	mg/m3

374 - Downwind	11/14/2022 14:13	Dust - 15 Minute Average	0.005852	mg/m3
374 - Downwind	11/14/2022 14:14	Dust - 15 Minute Average	0.005195	mg/m3
374 - Downwind	11/14/2022 14:15	Dust - 15 Minute Average	0.004639	mg/m3
374 - Downwind	11/14/2022 14:16	Dust - 15 Minute Average	0.006004	mg/m3
374 - Downwind	11/14/2022 14:17	Dust - 15 Minute Average	0.006861	mg/m3
374 - Downwind	11/14/2022 14:18	Dust - 15 Minute Average	0.010722	mg/m3
374 - Downwind	11/14/2022 14:19	Dust - 15 Minute Average	0.033921	mg/m3
374 - Downwind	11/14/2022 14:20	Dust - 15 Minute Average	0.038374	mg/m3
374 - Downwind	11/14/2022 14:21	Dust - 15 Minute Average	0.047952	mg/m3
374 - Downwind	11/14/2022 14:22	Dust - 15 Minute Average	0.04445	mg/m3
374 - Downwind	11/14/2022 14:23	Dust - 15 Minute Average	0.038345	mg/m3
374 - Downwind	11/14/2022 14:24	Dust - 15 Minute Average	0.032248	mg/m3
374 - Downwind	11/14/2022 14:25	Dust - 15 Minute Average	0.027098	mg/m3
374 - Downwind	11/14/2022 14:26	Dust - 15 Minute Average	0.022592	mg/m3
374 - Downwind	11/14/2022 14:27	Dust - 15 Minute Average	0.018927	mg/m3
374 - Downwind	11/14/2022 14:28	Dust - 15 Minute Average	0.0159	mg/m3
374 - Downwind	11/14/2022 14:29	Dust - 15 Minute Average	0.013617	mg/m3
374 - Downwind	11/14/2022 14:30	Dust - 15 Minute Average	0.011589	mg/m3
374 - Downwind	11/14/2022 14:31	Dust - 15 Minute Average	0.009849	mg/m3
374 - Downwind	11/14/2022 14:32	Dust - 15 Minute Average	0.008508	mg/m3
374 - Downwind	11/14/2022 14:33	Dust - 15 Minute Average	0.007494	mg/m3
374 - Downwind	11/14/2022 14:34	Dust - 15 Minute Average	0.006532	mg/m3
374 - Downwind	11/14/2022 14:35	Dust - 15 Minute Average	0.005734	mg/m3
374 - Downwind	11/14/2022 14:36	Dust - 15 Minute Average	0.005077	mg/m3
374 - Downwind	11/14/2022 14:37	Dust - 15 Minute Average	0.004535	mg/m3
374 - Downwind	11/14/2022 14:38	Dust - 15 Minute Average	0.004051	mg/m3
374 - Downwind	11/14/2022 14:39	Dust - 15 Minute Average	0.003684	mg/m3
374 - Downwind	11/14/2022 14:40	Dust - 15 Minute Average	0.003388	mg/m3
374 - Downwind	11/14/2022 14:41	Dust - 15 Minute Average	0.003104	mg/m3
374 - Downwind	11/14/2022 14:42	Dust - 15 Minute Average	0.002897	mg/m3
374 - Downwind	11/14/2022 14:43	Dust - 15 Minute Average	0.002907	mg/m3
374 - Downwind	11/14/2022 14:44	Dust - 15 Minute Average	0.002923	mg/m3
374 - Downwind	11/14/2022 14:45	Dust - 15 Minute Average	0.002843	mg/m3
374 - Downwind	11/14/2022 14:46	Dust - 15 Minute Average	0.00277	mg/m3
374 - Downwind	11/14/2022 14:47	Dust - 15 Minute Average	0.002634	mg/m3
374 - Downwind	11/14/2022 14:48	Dust - 15 Minute Average	0.0026	mg/m3
374 - Downwind	11/14/2022 14:49	Dust - 15 Minute Average	0.002632	mg/m3
374 - Downwind	11/14/2022 14:50	Dust - 15 Minute Average	0.002563	mg/m3
374 - Downwind	11/14/2022 14:51	Dust - 15 Minute Average	0.00259	mg/m3
374 - Downwind	11/14/2022 14:52	Dust - 15 Minute Average	0.002492	mg/m3
374 - Downwind	11/14/2022 14:53	Dust - 15 Minute Average	0.002533	mg/m3
374 - Downwind	11/14/2022 14:54	Dust - 15 Minute Average	0.002476	mg/m3
374 - Downwind	11/14/2022 14:55	Dust - 15 Minute Average	0.002391	mg/m3
374 - Downwind	11/14/2022 14:56	Dust - 15 Minute Average	0.002338	mg/m3
374 - Downwind	11/14/2022 14:57	Dust - 15 Minute Average	0.00237	mg/m3
374 - Downwind	11/14/2022 14:58	Dust - 15 Minute Average	0.002481	mg/m3
374 - Downwind	11/14/2022 14:59	Dust - 15 Minute Average	0.002572	mg/m3

374 - Downwind	11/14/2022 15:00	Dust - 15 Minute Average	0.002582	mg/m3
374 - Downwind	11/15/2022 9:04	Dust - 15 Minute Average	0.001739	mg/m3
374 - Downwind	11/15/2022 9:05	Dust - 15 Minute Average	0.005419	mg/m3
374 - Downwind	11/15/2022 9:06	Dust - 15 Minute Average	0.00837	mg/m3
374 - Downwind	11/15/2022 9:07	Dust - 15 Minute Average	0.010928	mg/m3
374 - Downwind	11/15/2022 9:08	Dust - 15 Minute Average	0.013283	mg/m3
374 - Downwind	11/15/2022 9:09	Dust - 15 Minute Average	0.015243	mg/m3
374 - Downwind	11/15/2022 9:10	Dust - 15 Minute Average	0.016341	mg/m3
374 - Downwind	11/15/2022 9:11	Dust - 15 Minute Average	0.017005	mg/m3
374 - Downwind	11/15/2022 9:12	Dust - 15 Minute Average	0.017994	mg/m3
374 - Downwind	11/15/2022 9:13	Dust - 15 Minute Average	0.018987	mg/m3
374 - Downwind	11/15/2022 9:14	Dust - 15 Minute Average	0.019191	mg/m3
374 - Downwind	11/15/2022 9:15	Dust - 15 Minute Average	0.019275	mg/m3
374 - Downwind	11/15/2022 9:16	Dust - 15 Minute Average	0.019226	mg/m3
374 - Downwind	11/15/2022 9:17	Dust - 15 Minute Average	0.019218	mg/m3
374 - Downwind	11/15/2022 9:18	Dust - 15 Minute Average	0.019371	mg/m3
374 - Downwind	11/15/2022 9:19	Dust - 15 Minute Average	0.019322	mg/m3
374 - Downwind	11/15/2022 9:20	Dust - 15 Minute Average	0.019134	mg/m3
374 - Downwind	11/15/2022 9:21	Dust - 15 Minute Average	0.019441	mg/m3
374 - Downwind	11/15/2022 9:22	Dust - 15 Minute Average	0.019308	mg/m3
374 - Downwind	11/15/2022 9:23	Dust - 15 Minute Average	0.01913	mg/m3
374 - Downwind	11/15/2022 9:24	Dust - 15 Minute Average	0.018784	mg/m3
374 - Downwind	11/15/2022 9:25	Dust - 15 Minute Average	0.01851	mg/m3
374 - Downwind	11/15/2022 9:26	Dust - 15 Minute Average	0.018395	mg/m3
374 - Downwind	11/15/2022 9:27	Dust - 15 Minute Average	0.018374	mg/m3
374 - Downwind	11/15/2022 9:28	Dust - 15 Minute Average	0.018344	mg/m3
374 - Downwind	11/15/2022 9:29	Dust - 15 Minute Average	0.018487	mg/m3
374 - Downwind	11/15/2022 9:30	Dust - 15 Minute Average	0.01847	mg/m3
374 - Downwind	11/15/2022 9:31	Dust - 15 Minute Average	0.018434	mg/m3
374 - Downwind	11/15/2022 9:32	Dust - 15 Minute Average	0.018355	mg/m3
374 - Downwind	11/15/2022 9:33	Dust - 15 Minute Average	0.018647	mg/m3
374 - Downwind	11/15/2022 9:34	Dust - 15 Minute Average	0.018543	mg/m3
374 - Downwind	11/15/2022 9:35	Dust - 15 Minute Average	0.018465	mg/m3
374 - Downwind	11/15/2022 9:36	Dust - 15 Minute Average	0.018386	mg/m3
374 - Downwind	11/15/2022 9:37	Dust - 15 Minute Average	0.01803	mg/m3
374 - Downwind	11/15/2022 9:38	Dust - 15 Minute Average	0.017734	mg/m3
374 - Downwind	11/15/2022 9:39	Dust - 15 Minute Average	0.017604	mg/m3
374 - Downwind	11/15/2022 9:40	Dust - 15 Minute Average	0.017597	mg/m3
374 - Downwind	11/15/2022 9:41	Dust - 15 Minute Average	0.017381	mg/m3
374 - Downwind	11/15/2022 9:42	Dust - 15 Minute Average	0.017114	mg/m3
374 - Downwind	11/15/2022 9:43	Dust - 15 Minute Average	0.016844	mg/m3
374 - Downwind	11/15/2022 9:44	Dust - 15 Minute Average	0.016692	mg/m3
374 - Downwind	11/15/2022 9:45	Dust - 15 Minute Average	0.016714	mg/m3
374 - Downwind	11/15/2022 9:46	Dust - 15 Minute Average	0.01703	mg/m3
374 - Downwind	11/15/2022 9:47	Dust - 15 Minute Average	0.017549	mg/m3
374 - Downwind	11/15/2022 9:48	Dust - 15 Minute Average	0.017692	mg/m3
374 - Downwind	11/15/2022 9:49	Dust - 15 Minute Average	0.017494	mg/m3

374 - Downwind	11/15/2022 9:50	Dust - 15 Minute Average	0.017222	mg/m3
374 - Downwind	11/15/2022 9:51	Dust - 15 Minute Average	0.016962	mg/m3
374 - Downwind	11/15/2022 9:52	Dust - 15 Minute Average	0.016972	mg/m3
374 - Downwind	11/15/2022 9:53	Dust - 15 Minute Average	0.017452	mg/m3
374 - Downwind	11/15/2022 9:54	Dust - 15 Minute Average	0.017184	mg/m3
374 - Downwind	11/15/2022 9:55	Dust - 15 Minute Average	0.016799	mg/m3
374 - Downwind	11/15/2022 9:56	Dust - 15 Minute Average	0.016743	mg/m3
374 - Downwind	11/15/2022 9:57	Dust - 15 Minute Average	0.017642	mg/m3
374 - Downwind	11/15/2022 9:58	Dust - 15 Minute Average	0.018137	mg/m3
374 - Downwind	11/15/2022 9:59	Dust - 15 Minute Average	0.018227	mg/m3
374 - Downwind	11/15/2022 10:00	Dust - 15 Minute Average	0.018149	mg/m3
374 - Downwind	11/15/2022 10:01	Dust - 15 Minute Average	0.017776	mg/m3
374 - Downwind	11/15/2022 10:02	Dust - 15 Minute Average	0.0177	mg/m3
374 - Downwind	11/15/2022 10:03	Dust - 15 Minute Average	0.017577	mg/m3
374 - Downwind	11/15/2022 10:04	Dust - 15 Minute Average	0.017339	mg/m3
374 - Downwind	11/15/2022 10:05	Dust - 15 Minute Average	0.017163	mg/m3
374 - Downwind	11/15/2022 10:06	Dust - 15 Minute Average	0.016998	mg/m3
374 - Downwind	11/15/2022 10:07	Dust - 15 Minute Average	0.016942	mg/m3
374 - Downwind	11/15/2022 10:08	Dust - 15 Minute Average	0.016784	mg/m3
374 - Downwind	11/15/2022 10:09	Dust - 15 Minute Average	0.016783	mg/m3
374 - Downwind	11/15/2022 10:10	Dust - 15 Minute Average	0.016848	mg/m3
374 - Downwind	11/15/2022 10:11	Dust - 15 Minute Average	0.016566	mg/m3
374 - Downwind	11/15/2022 10:12	Dust - 15 Minute Average	0.016432	mg/m3
374 - Downwind	11/15/2022 10:13	Dust - 15 Minute Average	0.016259	mg/m3
374 - Downwind	11/15/2022 10:14	Dust - 15 Minute Average	0.016102	mg/m3
374 - Downwind	11/15/2022 10:15	Dust - 15 Minute Average	0.015977	mg/m3
374 - Downwind	11/15/2022 10:16	Dust - 15 Minute Average	0.015805	mg/m3
374 - Downwind	11/15/2022 10:17	Dust - 15 Minute Average	0.015745	mg/m3
374 - Downwind	11/15/2022 10:18	Dust - 15 Minute Average	0.015742	mg/m3
374 - Downwind	11/15/2022 10:19	Dust - 15 Minute Average	0.015808	mg/m3
374 - Downwind	11/15/2022 10:20	Dust - 15 Minute Average	0.015663	mg/m3
374 - Downwind	11/15/2022 10:21	Dust - 15 Minute Average	0.015347	mg/m3
374 - Downwind	11/15/2022 10:22	Dust - 15 Minute Average	0.015125	mg/m3
374 - Downwind	11/15/2022 10:23	Dust - 15 Minute Average	0.014743	mg/m3
374 - Downwind	11/15/2022 10:24	Dust - 15 Minute Average	0.014584	mg/m3
374 - Downwind	11/15/2022 10:25	Dust - 15 Minute Average	0.0145	mg/m3
374 - Downwind	11/15/2022 10:26	Dust - 15 Minute Average	0.014382	mg/m3
374 - Downwind	11/15/2022 10:27	Dust - 15 Minute Average	0.01415	mg/m3
374 - Downwind	11/15/2022 10:28	Dust - 15 Minute Average	0.013799	mg/m3
374 - Downwind	11/15/2022 10:29	Dust - 15 Minute Average	0.013573	mg/m3
374 - Downwind	11/15/2022 10:30	Dust - 15 Minute Average	0.013376	mg/m3
374 - Downwind	11/15/2022 10:31	Dust - 15 Minute Average	0.01331	mg/m3
374 - Downwind	11/15/2022 10:32	Dust - 15 Minute Average	0.013454	mg/m3
374 - Downwind	11/15/2022 10:33	Dust - 15 Minute Average	0.013417	mg/m3
374 - Downwind	11/15/2022 10:34	Dust - 15 Minute Average	0.013193	mg/m3
374 - Downwind	11/15/2022 10:35	Dust - 15 Minute Average	0.012982	mg/m3
374 - Downwind	11/15/2022 10:36	Dust - 15 Minute Average	0.01284	mg/m3

374 - Downwind	11/15/2022 10:37	Dust - 15 Minute Average	0.012758	mg/m3
374 - Downwind	11/15/2022 10:38	Dust - 15 Minute Average	0.012621	mg/m3
374 - Downwind	11/15/2022 10:39	Dust - 15 Minute Average	0.01247	mg/m3
374 - Downwind	11/15/2022 10:40	Dust - 15 Minute Average	0.0124	mg/m3
374 - Downwind	11/15/2022 10:54	Dust - 15 Minute Average	0.006992	mg/m3
374 - Downwind	11/15/2022 10:55	Dust - 15 Minute Average	0.007662	mg/m3
374 - Downwind	11/15/2022 10:56	Dust - 15 Minute Average	0.008246	mg/m3
374 - Downwind	11/15/2022 10:57	Dust - 15 Minute Average	0.008731	mg/m3
374 - Downwind	11/15/2022 10:58	Dust - 15 Minute Average	0.009408	mg/m3
374 - Downwind	11/15/2022 10:59	Dust - 15 Minute Average	0.0101	mg/m3
374 - Downwind	11/15/2022 11:00	Dust - 15 Minute Average	0.010728	mg/m3
374 - Downwind	11/15/2022 11:01	Dust - 15 Minute Average	0.011316	mg/m3
374 - Downwind	11/15/2022 11:02	Dust - 15 Minute Average	0.01171	mg/m3
374 - Downwind	11/15/2022 11:03	Dust - 15 Minute Average	0.011663	mg/m3
374 - Downwind	11/15/2022 11:04	Dust - 15 Minute Average	0.011626	mg/m3
374 - Downwind	11/15/2022 11:05	Dust - 15 Minute Average	0.011517	mg/m3
374 - Downwind	11/15/2022 11:06	Dust - 15 Minute Average	0.011507	mg/m3
374 - Downwind	11/15/2022 11:07	Dust - 15 Minute Average	0.011421	mg/m3
374 - Downwind	11/15/2022 11:08	Dust - 15 Minute Average	0.011364	mg/m3
374 - Downwind	11/15/2022 11:09	Dust - 15 Minute Average	0.011212	mg/m3
374 - Downwind	11/15/2022 11:10	Dust - 15 Minute Average	0.011046	mg/m3
374 - Downwind	11/15/2022 11:11	Dust - 15 Minute Average	0.010843	mg/m3
374 - Downwind	11/15/2022 11:12	Dust - 15 Minute Average	0.010946	mg/m3
374 - Downwind	11/15/2022 11:13	Dust - 15 Minute Average	0.011275	mg/m3
374 - Downwind	11/15/2022 11:14	Dust - 15 Minute Average	0.016353	mg/m3
374 - Downwind	11/15/2022 11:15	Dust - 15 Minute Average	0.01657	mg/m3
374 - Downwind	11/15/2022 11:16	Dust - 15 Minute Average	0.015628	mg/m3
374 - Downwind	11/15/2022 11:17	Dust - 15 Minute Average	0.015163	mg/m3
374 - Downwind	11/15/2022 11:18	Dust - 15 Minute Average	0.014291	mg/m3
374 - Downwind	11/15/2022 11:19	Dust - 15 Minute Average	0.01371	mg/m3
374 - Downwind	11/15/2022 11:20	Dust - 15 Minute Average	0.013681	mg/m3
374 - Downwind	11/15/2022 11:21	Dust - 15 Minute Average	0.013034	mg/m3
374 - Downwind	11/15/2022 11:22	Dust - 15 Minute Average	0.0125	mg/m3
374 - Downwind	11/15/2022 11:23	Dust - 15 Minute Average	0.012059	mg/m3
374 - Downwind	11/15/2022 11:24	Dust - 15 Minute Average	0.011556	mg/m3
374 - Downwind	11/15/2022 11:25	Dust - 15 Minute Average	0.011116	mg/m3
374 - Downwind	11/15/2022 11:26	Dust - 15 Minute Average	0.010887	mg/m3
374 - Downwind	11/15/2022 11:27	Dust - 15 Minute Average	0.010676	mg/m3
374 - Downwind	11/15/2022 11:28	Dust - 15 Minute Average	0.010557	mg/m3
374 - Downwind	11/15/2022 11:29	Dust - 15 Minute Average	0.01044	mg/m3
374 - Downwind	11/15/2022 11:30	Dust - 15 Minute Average	0.010353	mg/m3
374 - Downwind	11/15/2022 11:31	Dust - 15 Minute Average	0.010371	mg/m3
374 - Downwind	11/15/2022 11:32	Dust - 15 Minute Average	0.010636	mg/m3
374 - Downwind	11/15/2022 11:33	Dust - 15 Minute Average	0.010641	mg/m3
374 - Downwind	11/15/2022 11:34	Dust - 15 Minute Average	0.010364	mg/m3
374 - Downwind	11/15/2022 11:35	Dust - 15 Minute Average	0.010529	mg/m3
374 - Downwind	11/15/2022 11:36	Dust - 15 Minute Average	0.010543	mg/m3

374 - Downwind	11/15/2022 11:37	Dust - 15 Minute Average	0.010274	mg/m3
374 - Downwind	11/15/2022 11:38	Dust - 15 Minute Average	0.010177	mg/m3
374 - Downwind	11/15/2022 11:39	Dust - 15 Minute Average	0.010709	mg/m3
374 - Downwind	11/15/2022 11:40	Dust - 15 Minute Average	0.010812	mg/m3
374 - Downwind	11/15/2022 11:41	Dust - 15 Minute Average	0.010665	mg/m3
374 - Downwind	11/15/2022 11:42	Dust - 15 Minute Average	0.011746	mg/m3
374 - Downwind	11/15/2022 11:43	Dust - 15 Minute Average	0.011803	mg/m3
374 - Downwind	11/15/2022 11:44	Dust - 15 Minute Average	0.011839	mg/m3
374 - Downwind	11/15/2022 11:45	Dust - 15 Minute Average	0.011501	mg/m3
374 - Downwind	11/15/2022 11:46	Dust - 15 Minute Average	0.011068	mg/m3
374 - Downwind	11/15/2022 11:47	Dust - 15 Minute Average	0.010809	mg/m3
374 - Downwind	11/15/2022 11:48	Dust - 15 Minute Average	0.010607	mg/m3
374 - Downwind	11/15/2022 11:49	Dust - 15 Minute Average	0.011924	mg/m3
374 - Downwind	11/15/2022 11:50	Dust - 15 Minute Average	0.012695	mg/m3
374 - Downwind	11/15/2022 11:51	Dust - 15 Minute Average	0.012748	mg/m3
374 - Downwind	11/15/2022 11:52	Dust - 15 Minute Average	0.012643	mg/m3
374 - Downwind	11/15/2022 11:53	Dust - 15 Minute Average	0.012175	mg/m3
374 - Downwind	11/15/2022 11:54	Dust - 15 Minute Average	0.012431	mg/m3
374 - Downwind	11/15/2022 11:55	Dust - 15 Minute Average	0.015471	mg/m3
374 - Downwind	11/15/2022 11:56	Dust - 15 Minute Average	0.021426	mg/m3
374 - Downwind	11/15/2022 11:57	Dust - 15 Minute Average	0.019764	mg/m3
374 - Downwind	11/15/2022 11:58	Dust - 15 Minute Average	0.01775	mg/m3
374 - Downwind	11/15/2022 11:59	Dust - 15 Minute Average	0.016055	mg/m3
374 - Downwind	11/15/2022 12:00	Dust - 15 Minute Average	0.014743	mg/m3
374 - Downwind	11/15/2022 12:01	Dust - 15 Minute Average	0.013824	mg/m3
374 - Downwind	11/15/2022 12:02	Dust - 15 Minute Average	0.013206	mg/m3
374 - Downwind	11/15/2022 12:03	Dust - 15 Minute Average	0.012542	mg/m3
374 - Downwind	11/15/2022 12:04	Dust - 15 Minute Average	0.011955	mg/m3
374 - Downwind	11/15/2022 12:05	Dust - 15 Minute Average	0.011543	mg/m3
374 - Downwind	11/15/2022 12:06	Dust - 15 Minute Average	0.011275	mg/m3
374 - Downwind	11/15/2022 12:07	Dust - 15 Minute Average	0.011069	mg/m3
374 - Downwind	11/15/2022 12:08	Dust - 15 Minute Average	0.010565	mg/m3
374 - Downwind	11/15/2022 12:09	Dust - 15 Minute Average	0.010432	mg/m3
374 - Downwind	11/15/2022 12:10	Dust - 15 Minute Average	0.01019	mg/m3
374 - Downwind	11/15/2022 12:11	Dust - 15 Minute Average	0.009812	mg/m3
374 - Downwind	11/15/2022 12:12	Dust - 15 Minute Average	0.009436	mg/m3
374 - Downwind	11/15/2022 12:13	Dust - 15 Minute Average	0.009149	mg/m3
374 - Downwind	11/15/2022 12:14	Dust - 15 Minute Average	0.008947	mg/m3
374 - Downwind	11/15/2022 12:15	Dust - 15 Minute Average	0.008685	mg/m3
374 - Downwind	11/15/2022 12:16	Dust - 15 Minute Average	0.008388	mg/m3
374 - Downwind	11/15/2022 12:17	Dust - 15 Minute Average	0.008144	mg/m3
374 - Downwind	11/15/2022 12:18	Dust - 15 Minute Average	0.007913	mg/m3
374 - Downwind	11/15/2022 12:19	Dust - 15 Minute Average	0.007697	mg/m3
374 - Downwind	11/15/2022 12:20	Dust - 15 Minute Average	0.007409	mg/m3
374 - Downwind	11/15/2022 12:21	Dust - 15 Minute Average	0.007194	mg/m3
374 - Downwind	11/15/2022 12:22	Dust - 15 Minute Average	0.007149	mg/m3
374 - Downwind	11/15/2022 12:23	Dust - 15 Minute Average	0.007038	mg/m3

374 - Downwind	11/15/2022 12:24	Dust - 15 Minute Average	0.006878	mg/m3
374 - Downwind	11/15/2022 12:25	Dust - 15 Minute Average	0.006678	mg/m3
374 - Downwind	11/15/2022 12:26	Dust - 15 Minute Average	0.006485	mg/m3
374 - Downwind	11/15/2022 12:27	Dust - 15 Minute Average	0.00647	mg/m3
374 - Downwind	11/15/2022 12:28	Dust - 15 Minute Average	0.006211	mg/m3
374 - Downwind	11/15/2022 12:29	Dust - 15 Minute Average	0.006163	mg/m3
374 - Downwind	11/15/2022 12:30	Dust - 15 Minute Average	0.006114	mg/m3
374 - Downwind	11/15/2022 12:31	Dust - 15 Minute Average	0.00599	mg/m3
374 - Downwind	11/15/2022 12:32	Dust - 15 Minute Average	0.005842	mg/m3
374 - Downwind	11/15/2022 12:33	Dust - 15 Minute Average	0.005862	mg/m3
374 - Downwind	11/15/2022 12:34	Dust - 15 Minute Average	0.00588	mg/m3
374 - Downwind	11/15/2022 12:35	Dust - 15 Minute Average	0.006026	mg/m3
374 - Downwind	11/15/2022 12:36	Dust - 15 Minute Average	0.006063	mg/m3
374 - Downwind	11/15/2022 12:37	Dust - 15 Minute Average	0.006052	mg/m3
374 - Downwind	11/15/2022 12:38	Dust - 15 Minute Average	0.006087	mg/m3
374 - Downwind	11/15/2022 12:39	Dust - 15 Minute Average	0.006298	mg/m3
374 - Downwind	11/15/2022 12:40	Dust - 15 Minute Average	0.007573	mg/m3
374 - Downwind	11/15/2022 12:41	Dust - 15 Minute Average	0.008193	mg/m3
374 - Downwind	11/15/2022 12:42	Dust - 15 Minute Average	0.00868	mg/m3
374 - Downwind	11/15/2022 12:43	Dust - 15 Minute Average	0.008991	mg/m3
374 - Downwind	11/15/2022 12:44	Dust - 15 Minute Average	0.009137	mg/m3
374 - Downwind	11/15/2022 12:45	Dust - 15 Minute Average	0.009254	mg/m3
374 - Downwind	11/15/2022 12:46	Dust - 15 Minute Average	0.009003	mg/m3
374 - Downwind	11/15/2022 12:47	Dust - 15 Minute Average	0.008892	mg/m3
374 - Downwind	11/15/2022 12:48	Dust - 15 Minute Average	0.008735	mg/m3
374 - Downwind	11/15/2022 12:49	Dust - 15 Minute Average	0.008	mg/m3
374 - Downwind	11/15/2022 14:33	Dust - 15 Minute Average	0.010441	mg/m3
374 - Downwind	11/15/2022 14:34	Dust - 15 Minute Average	0.012925	mg/m3
374 - Downwind	11/15/2022 14:35	Dust - 15 Minute Average	0.013724	mg/m3
374 - Downwind	11/15/2022 14:36	Dust - 15 Minute Average	0.014184	mg/m3
374 - Downwind	11/15/2022 14:37	Dust - 15 Minute Average	0.01419	mg/m3
374 - Downwind	11/15/2022 14:38	Dust - 15 Minute Average	0.013067	mg/m3
374 - Downwind	11/15/2022 14:39	Dust - 15 Minute Average	0.011787	mg/m3
374 - Downwind	11/15/2022 14:40	Dust - 15 Minute Average	0.010694	mg/m3
374 - Downwind	11/15/2022 14:41	Dust - 15 Minute Average	0.010274	mg/m3
374 - Downwind	11/15/2022 14:42	Dust - 15 Minute Average	0.010562	mg/m3
374 - Downwind	11/15/2022 14:43	Dust - 15 Minute Average	0.009876	mg/m3
374 - Downwind	11/15/2022 14:44	Dust - 15 Minute Average	0.00941	mg/m3
374 - Downwind	11/15/2022 14:45	Dust - 15 Minute Average	0.00881	mg/m3
374 - Downwind	11/15/2022 14:46	Dust - 15 Minute Average	0.008276	mg/m3
374 - Downwind	11/15/2022 14:47	Dust - 15 Minute Average	0.007838	mg/m3
374 - Downwind	11/15/2022 14:48	Dust - 15 Minute Average	0.007544	mg/m3
374 - Downwind	11/15/2022 14:49	Dust - 15 Minute Average	0.007279	mg/m3
374 - Downwind	11/15/2022 14:50	Dust - 15 Minute Average	0.007438	mg/m3
374 - Downwind	11/15/2022 14:51	Dust - 15 Minute Average	0.007591	mg/m3
374 - Downwind	11/15/2022 14:52	Dust - 15 Minute Average	0.007351	mg/m3
374 - Downwind	11/15/2022 14:53	Dust - 15 Minute Average	0.007945	mg/m3

374 - Downwind	11/15/2022 14:54	Dust - 15 Minute Average	0.009829	mg/m3
374 - Downwind	11/15/2022 14:55	Dust - 15 Minute Average	0.010657	mg/m3
374 - Downwind	11/15/2022 14:56	Dust - 15 Minute Average	0.010501	mg/m3
374 - Downwind	11/15/2022 14:57	Dust - 15 Minute Average	0.009763	mg/m3
374 - Downwind	11/15/2022 14:58	Dust - 15 Minute Average	0.009257	mg/m3
374 - Downwind	11/15/2022 14:59	Dust - 15 Minute Average	0.009058	mg/m3
374 - Downwind	11/15/2022 15:00	Dust - 15 Minute Average	0.008795	mg/m3
374 - Downwind	11/15/2022 15:01	Dust - 15 Minute Average	0.008493	mg/m3
374 - Downwind	11/15/2022 15:02	Dust - 15 Minute Average	0.00832	mg/m3
374 - Downwind	11/15/2022 15:03	Dust - 15 Minute Average	0.008156	mg/m3
374 - Downwind	11/15/2022 15:04	Dust - 15 Minute Average	0.007986	mg/m3
374 - Downwind	11/15/2022 15:05	Dust - 15 Minute Average	0.008199	mg/m3
374 - Downwind	11/15/2022 15:06	Dust - 15 Minute Average	0.009108	mg/m3
374 - Downwind	11/15/2022 15:07	Dust - 15 Minute Average	0.009104	mg/m3
374 - Downwind	11/15/2022 15:08	Dust - 15 Minute Average	0.009244	mg/m3
374 - Downwind	11/15/2022 15:09	Dust - 15 Minute Average	0.009395	mg/m3
374 - Downwind	11/15/2022 15:10	Dust - 15 Minute Average	0.010037	mg/m3
374 - Downwind	11/15/2022 15:11	Dust - 15 Minute Average	0.010703	mg/m3
374 - Downwind	11/15/2022 15:12	Dust - 15 Minute Average	0.010297	mg/m3
374 - Downwind	11/15/2022 15:13	Dust - 15 Minute Average	0.010209	mg/m3
374 - Downwind	11/15/2022 15:14	Dust - 15 Minute Average	0.010453	mg/m3
374 - Downwind	11/15/2022 15:15	Dust - 15 Minute Average	0.010947	mg/m3
374 - Downwind	11/15/2022 15:16	Dust - 15 Minute Average	0.011788	mg/m3
374 - Downwind	11/15/2022 15:17	Dust - 15 Minute Average	0.011072	mg/m3
374 - Downwind	11/15/2022 15:18	Dust - 15 Minute Average	0.01064	mg/m3
374 - Downwind	11/15/2022 15:19	Dust - 15 Minute Average	0.010439	mg/m3
374 - Downwind	11/15/2022 15:20	Dust - 15 Minute Average	0.010524	mg/m3
374 - Downwind	11/15/2022 15:21	Dust - 15 Minute Average	0.010229	mg/m3
374 - Downwind	11/15/2022 15:22	Dust - 15 Minute Average	0.009584	mg/m3
374 - Downwind	11/15/2022 15:23	Dust - 15 Minute Average	0.009705	mg/m3
374 - Downwind	11/15/2022 15:24	Dust - 15 Minute Average	0.009167	mg/m3
374 - Downwind	11/15/2022 15:25	Dust - 15 Minute Average	0.008785	mg/m3
374 - Downwind	11/15/2022 15:26	Dust - 15 Minute Average	0.008466	mg/m3
374 - Downwind	11/15/2022 15:27	Dust - 15 Minute Average	0.008228	mg/m3
374 - Downwind	11/15/2022 15:28	Dust - 15 Minute Average	0.008258	mg/m3
374 - Downwind	11/15/2022 15:29	Dust - 15 Minute Average	0.008078	mg/m3
374 - Downwind	11/15/2022 15:30	Dust - 15 Minute Average	0.007966	mg/m3
374 - Downwind	11/15/2022 15:31	Dust - 15 Minute Average	0.007854	mg/m3
374 - Downwind	11/15/2022 15:32	Dust - 15 Minute Average	0.007694	mg/m3
374 - Downwind	11/15/2022 15:33	Dust - 15 Minute Average	0.007409	mg/m3
374 - Downwind	11/15/2022 15:34	Dust - 15 Minute Average	0.007195	mg/m3
374 - Downwind	11/15/2022 15:35	Dust - 15 Minute Average	0.007098	mg/m3
374 - Downwind	11/15/2022 15:36	Dust - 15 Minute Average	0.007123	mg/m3
374 - Downwind	11/15/2022 15:37	Dust - 15 Minute Average	0.006856	mg/m3
374 - Downwind	11/15/2022 15:38	Dust - 15 Minute Average	0.006867	mg/m3
374 - Downwind	11/17/2022 9:45	Dust - 15 Minute Average	0.018582	mg/m3
374 - Downwind	11/17/2022 9:46	Dust - 15 Minute Average	0.020166	mg/m3

374 - Downwind	11/17/2022 9:47	Dust - 15 Minute Average	0.021265	mg/m3
374 - Downwind	11/17/2022 9:48	Dust - 15 Minute Average	0.022358	mg/m3
374 - Downwind	11/17/2022 9:49	Dust - 15 Minute Average	0.023336	mg/m3
374 - Downwind	11/17/2022 9:50	Dust - 15 Minute Average	0.023773	mg/m3
374 - Downwind	11/17/2022 9:51	Dust - 15 Minute Average	0.024114	mg/m3
374 - Downwind	11/17/2022 9:52	Dust - 15 Minute Average	0.02433	mg/m3
374 - Downwind	11/17/2022 9:53	Dust - 15 Minute Average	0.024356	mg/m3
374 - Downwind	11/17/2022 9:54	Dust - 15 Minute Average	0.024153	mg/m3
374 - Downwind	11/17/2022 9:55	Dust - 15 Minute Average	0.024227	mg/m3
374 - Downwind	11/17/2022 9:56	Dust - 15 Minute Average	0.02457	mg/m3
374 - Downwind	11/17/2022 9:57	Dust - 15 Minute Average	0.025007	mg/m3
374 - Downwind	11/17/2022 9:58	Dust - 15 Minute Average	0.025216	mg/m3
374 - Downwind	11/17/2022 9:59	Dust - 15 Minute Average	0.025365	mg/m3
374 - Downwind	11/17/2022 10:00	Dust - 15 Minute Average	0.025401	mg/m3
374 - Downwind	11/17/2022 10:01	Dust - 15 Minute Average	0.025577	mg/m3
374 - Downwind	11/17/2022 10:02	Dust - 15 Minute Average	0.025732	mg/m3
374 - Downwind	11/17/2022 10:03	Dust - 15 Minute Average	0.025645	mg/m3
374 - Downwind	11/17/2022 10:04	Dust - 15 Minute Average	0.025503	mg/m3
374 - Downwind	11/17/2022 10:05	Dust - 15 Minute Average	0.025303	mg/m3
374 - Downwind	11/17/2022 10:06	Dust - 15 Minute Average	0.025368	mg/m3
374 - Downwind	11/17/2022 10:07	Dust - 15 Minute Average	0.025138	mg/m3
374 - Downwind	11/17/2022 10:08	Dust - 15 Minute Average	0.024923	mg/m3
374 - Downwind	11/17/2022 10:09	Dust - 15 Minute Average	0.02476	mg/m3
374 - Downwind	11/17/2022 10:10	Dust - 15 Minute Average	0.024567	mg/m3
374 - Downwind	11/17/2022 10:11	Dust - 15 Minute Average	0.024342	mg/m3
374 - Downwind	11/17/2022 10:12	Dust - 15 Minute Average	0.024112	mg/m3
374 - Downwind	11/17/2022 10:13	Dust - 15 Minute Average	0.02399	mg/m3
374 - Downwind	11/17/2022 10:14	Dust - 15 Minute Average	0.024021	mg/m3
374 - Downwind	11/17/2022 10:15	Dust - 15 Minute Average	0.023724	mg/m3
374 - Downwind	11/17/2022 10:16	Dust - 15 Minute Average	0.023704	mg/m3
374 - Downwind	11/17/2022 10:17	Dust - 15 Minute Average	0.023726	mg/m3
374 - Downwind	11/17/2022 10:18	Dust - 15 Minute Average	0.023461	mg/m3
374 - Downwind	11/17/2022 10:19	Dust - 15 Minute Average	0.023204	mg/m3
374 - Downwind	11/17/2022 10:20	Dust - 15 Minute Average	0.023226	mg/m3
374 - Downwind	11/17/2022 10:21	Dust - 15 Minute Average	0.023278	mg/m3
374 - Downwind	11/17/2022 10:22	Dust - 15 Minute Average	0.023407	mg/m3
374 - Downwind	11/17/2022 10:23	Dust - 15 Minute Average	0.02357	mg/m3
374 - Downwind	11/17/2022 10:24	Dust - 15 Minute Average	0.023646	mg/m3
374 - Downwind	11/17/2022 10:25	Dust - 15 Minute Average	0.023698	mg/m3
374 - Downwind	11/17/2022 10:26	Dust - 15 Minute Average	0.023855	mg/m3
374 - Downwind	11/17/2022 10:27	Dust - 15 Minute Average	0.023952	mg/m3
374 - Downwind	11/17/2022 10:28	Dust - 15 Minute Average	0.023964	mg/m3
374 - Downwind	11/17/2022 10:29	Dust - 15 Minute Average	0.023973	mg/m3
374 - Downwind	11/17/2022 10:30	Dust - 15 Minute Average	0.024105	mg/m3
374 - Downwind	11/17/2022 10:31	Dust - 15 Minute Average	0.024154	mg/m3
374 - Downwind	11/17/2022 10:32	Dust - 15 Minute Average	0.02411	mg/m3
374 - Downwind	11/17/2022 10:33	Dust - 15 Minute Average	0.024091	mg/m3

374 - Downwind	11/17/2022 10:34	Dust - 15 Minute Average	0.024319	mg/m3
374 - Downwind	11/17/2022 10:35	Dust - 15 Minute Average	0.024816	mg/m3
374 - Downwind	11/17/2022 10:36	Dust - 15 Minute Average	0.024791	mg/m3
374 - Downwind	11/17/2022 10:37	Dust - 15 Minute Average	0.024722	mg/m3
374 - Downwind	11/17/2022 10:38	Dust - 15 Minute Average	0.024765	mg/m3
374 - Downwind	11/17/2022 10:39	Dust - 15 Minute Average	0.024764	mg/m3
374 - Downwind	11/17/2022 10:40	Dust - 15 Minute Average	0.024805	mg/m3
374 - Downwind	11/17/2022 10:41	Dust - 15 Minute Average	0.024982	mg/m3
374 - Downwind	11/17/2022 10:42	Dust - 15 Minute Average	0.025298	mg/m3
374 - Downwind	11/17/2022 10:43	Dust - 15 Minute Average	0.025258	mg/m3
374 - Downwind	11/17/2022 10:44	Dust - 15 Minute Average	0.025028	mg/m3
374 - Downwind	11/17/2022 10:45	Dust - 15 Minute Average	0.024526	mg/m3
374 - Downwind	11/17/2022 10:46	Dust - 15 Minute Average	0.023876	mg/m3
374 - Downwind	11/17/2022 10:47	Dust - 15 Minute Average	0.02297	mg/m3
374 - Downwind	11/17/2022 10:48	Dust - 15 Minute Average	0.02231	mg/m3
374 - Downwind	11/17/2022 10:49	Dust - 15 Minute Average	0.021582	mg/m3
374 - Downwind	11/17/2022 10:50	Dust - 15 Minute Average	0.020437	mg/m3
374 - Downwind	11/17/2022 10:51	Dust - 15 Minute Average	0.019381	mg/m3
374 - Downwind	11/17/2022 10:52	Dust - 15 Minute Average	0.01861	mg/m3
374 - Downwind	11/17/2022 10:53	Dust - 15 Minute Average	0.018072	mg/m3
374 - Downwind	11/17/2022 10:54	Dust - 15 Minute Average	0.017639	mg/m3
374 - Downwind	11/17/2022 10:55	Dust - 15 Minute Average	0.016962	mg/m3
374 - Downwind	11/17/2022 10:56	Dust - 15 Minute Average	0.015995	mg/m3
374 - Downwind	11/17/2022 10:57	Dust - 15 Minute Average	0.015285	mg/m3
374 - Downwind	11/17/2022 10:58	Dust - 15 Minute Average	0.014668	mg/m3
374 - Downwind	11/17/2022 10:59	Dust - 15 Minute Average	0.014194	mg/m3
374 - Downwind	11/17/2022 11:00	Dust - 15 Minute Average	0.013668	mg/m3
374 - Downwind	11/17/2022 11:01	Dust - 15 Minute Average	0.013139	mg/m3
374 - Downwind	11/17/2022 11:02	Dust - 15 Minute Average	0.012608	mg/m3
374 - Downwind	11/17/2022 11:03	Dust - 15 Minute Average	0.012149	mg/m3
374 - Downwind	11/17/2022 11:04	Dust - 15 Minute Average	0.011884	mg/m3
374 - Downwind	11/17/2022 11:05	Dust - 15 Minute Average	0.011645	mg/m3
374 - Downwind	11/17/2022 11:06	Dust - 15 Minute Average	0.011439	mg/m3
374 - Downwind	11/17/2022 11:07	Dust - 15 Minute Average	0.0113	mg/m3
374 - Downwind	11/17/2022 11:08	Dust - 15 Minute Average	0.011093	mg/m3
374 - Downwind	11/17/2022 11:09	Dust - 15 Minute Average	0.010903	mg/m3
374 - Downwind	11/17/2022 11:10	Dust - 15 Minute Average	0.010735	mg/m3
374 - Downwind	11/17/2022 11:11	Dust - 15 Minute Average	0.010605	mg/m3
374 - Downwind	11/17/2022 11:12	Dust - 15 Minute Average	0.010457	mg/m3
374 - Downwind	11/17/2022 11:13	Dust - 15 Minute Average	0.010233	mg/m3
374 - Downwind	11/17/2022 11:14	Dust - 15 Minute Average	0.010011	mg/m3
374 - Downwind	11/17/2022 11:15	Dust - 15 Minute Average	0.009833	mg/m3
374 - Downwind	11/17/2022 11:16	Dust - 15 Minute Average	0.009636	mg/m3
374 - Downwind	11/17/2022 11:17	Dust - 15 Minute Average	0.009497	mg/m3
374 - Downwind	11/17/2022 11:18	Dust - 15 Minute Average	0.009351	mg/m3
374 - Downwind	11/17/2022 11:19	Dust - 15 Minute Average	0.009287	mg/m3
374 - Downwind	11/17/2022 11:20	Dust - 15 Minute Average	0.009417	mg/m3

374 - Downwind	11/17/2022 11:21	Dust - 15 Minute Average	0.009241	mg/m3
374 - Downwind	11/17/2022 11:22	Dust - 15 Minute Average	0.009196	mg/m3
374 - Downwind	11/17/2022 11:23	Dust - 15 Minute Average	0.009176	mg/m3
374 - Downwind	11/17/2022 11:24	Dust - 15 Minute Average	0.009475	mg/m3
374 - Downwind	11/17/2022 11:25	Dust - 15 Minute Average	0.009598	mg/m3
374 - Downwind	11/17/2022 11:26	Dust - 15 Minute Average	0.009509	mg/m3
374 - Downwind	11/17/2022 11:27	Dust - 15 Minute Average	0.009381	mg/m3
374 - Downwind	11/17/2022 11:28	Dust - 15 Minute Average	0.009855	mg/m3
374 - Downwind	11/17/2022 11:29	Dust - 15 Minute Average	0.009786	mg/m3
374 - Downwind	11/17/2022 11:30	Dust - 15 Minute Average	0.010237	mg/m3
374 - Downwind	11/17/2022 11:31	Dust - 15 Minute Average	0.010822	mg/m3
374 - Downwind	11/17/2022 11:32	Dust - 15 Minute Average	0.011445	mg/m3
374 - Downwind	11/17/2022 11:33	Dust - 15 Minute Average	0.01193	mg/m3
374 - Downwind	11/17/2022 11:34	Dust - 15 Minute Average	0.012242	mg/m3
374 - Downwind	11/17/2022 11:35	Dust - 15 Minute Average	0.012402	mg/m3
374 - Downwind	11/17/2022 11:36	Dust - 15 Minute Average	0.012895	mg/m3
374 - Downwind	11/17/2022 11:37	Dust - 15 Minute Average	0.01344	mg/m3
374 - Downwind	11/17/2022 11:38	Dust - 15 Minute Average	0.013919	mg/m3
374 - Downwind	11/17/2022 11:39	Dust - 15 Minute Average	0.014208	mg/m3
374 - Downwind	11/17/2022 11:40	Dust - 15 Minute Average	0.014351	mg/m3
374 - Downwind	11/17/2022 11:41	Dust - 15 Minute Average	0.014594	mg/m3
374 - Downwind	11/17/2022 11:42	Dust - 15 Minute Average	0.014703	mg/m3
374 - Downwind	11/17/2022 11:43	Dust - 15 Minute Average	0.014577	mg/m3
374 - Downwind	11/17/2022 11:44	Dust - 15 Minute Average	0.014719	mg/m3
374 - Downwind	11/17/2022 11:45	Dust - 15 Minute Average	0.014786	mg/m3
374 - Downwind	11/17/2022 11:46	Dust - 15 Minute Average	0.014755	mg/m3
374 - Downwind	11/17/2022 11:47	Dust - 15 Minute Average	0.014994	mg/m3
374 - Downwind	11/17/2022 11:48	Dust - 15 Minute Average	0.01516	mg/m3
374 - Downwind	11/17/2022 11:49	Dust - 15 Minute Average	0.015131	mg/m3
374 - Downwind	11/17/2022 11:50	Dust - 15 Minute Average	0.015087	mg/m3
374 - Downwind	11/17/2022 11:51	Dust - 15 Minute Average	0.014925	mg/m3
374 - Downwind	11/17/2022 11:52	Dust - 15 Minute Average	0.014906	mg/m3
374 - Downwind	11/17/2022 11:53	Dust - 15 Minute Average	0.014746	mg/m3
374 - Downwind	11/17/2022 11:54	Dust - 15 Minute Average	0.014638	mg/m3
374 - Downwind	11/17/2022 11:55	Dust - 15 Minute Average	0.014494	mg/m3
374 - Downwind	11/17/2022 11:56	Dust - 15 Minute Average	0.014407	mg/m3
374 - Downwind	11/17/2022 11:57	Dust - 15 Minute Average	0.014288	mg/m3
374 - Downwind	11/17/2022 11:58	Dust - 15 Minute Average	0.014268	mg/m3
374 - Downwind	11/17/2022 11:59	Dust - 15 Minute Average	0.014221	mg/m3
563 - Updwind	11/14/2022 13:22	Dust - 15 Minute Average	0.036143	mg/m3
563 - Updwind	11/14/2022 13:23	Dust - 15 Minute Average	0.029681	mg/m3
563 - Updwind	11/14/2022 13:24	Dust - 15 Minute Average	0.024837	mg/m3
563 - Updwind	11/14/2022 13:25	Dust - 15 Minute Average	0.020491	mg/m3
563 - Updwind	11/14/2022 13:26	Dust - 15 Minute Average	0.016836	mg/m3
563 - Updwind	11/14/2022 13:27	Dust - 15 Minute Average	0.013908	mg/m3
563 - Updwind	11/14/2022 13:28	Dust - 15 Minute Average	0.011421	mg/m3
563 - Updwind	11/14/2022 13:29	Dust - 15 Minute Average	0.00941	mg/m3

563 - Updwind	11/14/2022 13:30	Dust - 15 Minute Average	0.007763	mg/m3
563 - Updwind	11/14/2022 13:31	Dust - 15 Minute Average	0.006399	mg/m3
563 - Updwind	11/14/2022 13:32	Dust - 15 Minute Average	0.005273	mg/m3
563 - Updwind	11/14/2022 13:33	Dust - 15 Minute Average	0.004368	mg/m3
563 - Updwind	11/14/2022 13:34	Dust - 15 Minute Average	0.003615	mg/m3
563 - Updwind	11/14/2022 13:35	Dust - 15 Minute Average	0.003137	mg/m3
563 - Updwind	11/14/2022 13:36	Dust - 15 Minute Average	0.00258	mg/m3
563 - Updwind	11/14/2022 13:37	Dust - 15 Minute Average	0.002154	mg/m3
563 - Updwind	11/14/2022 13:38	Dust - 15 Minute Average	0.001784	mg/m3
563 - Updwind	11/14/2022 13:39	Dust - 15 Minute Average	0.00147	mg/m3
563 - Updwind	11/14/2022 13:40	Dust - 15 Minute Average	0.001227	mg/m3
563 - Updwind	11/14/2022 13:41	Dust - 15 Minute Average	0.001041	mg/m3
563 - Updwind	11/14/2022 13:42	Dust - 15 Minute Average	0.000858	mg/m3
563 - Updwind	11/14/2022 13:43	Dust - 15 Minute Average	0.000722	mg/m3
563 - Updwind	11/14/2022 13:44	Dust - 15 Minute Average	0.000595	mg/m3
563 - Updwind	11/14/2022 13:45	Dust - 15 Minute Average	0.000488	mg/m3
563 - Updwind	11/14/2022 13:46	Dust - 15 Minute Average	0.000404	mg/m3
563 - Updwind	11/14/2022 13:47	Dust - 15 Minute Average	0.000407	mg/m3
563 - Updwind	11/14/2022 13:48	Dust - 15 Minute Average	0.000345	mg/m3
563 - Updwind	11/14/2022 13:49	Dust - 15 Minute Average	0.000285	mg/m3
563 - Updwind	11/14/2022 13:50	Dust - 15 Minute Average	0.000237	mg/m3
563 - Updwind	11/14/2022 13:51	Dust - 15 Minute Average	0.000194	mg/m3
563 - Updwind	11/14/2022 13:52	Dust - 15 Minute Average	0.00016	mg/m3
563 - Updwind	11/14/2022 13:53	Dust - 15 Minute Average	0.000132	mg/m3
563 - Updwind	11/14/2022 13:54	Dust - 15 Minute Average	0.000109	mg/m3
563 - Updwind	11/14/2022 13:55	Dust - 15 Minute Average	8.96E-05	mg/m3
563 - Updwind	11/14/2022 13:56	Dust - 15 Minute Average	7.33E-05	mg/m3
563 - Updwind	11/14/2022 13:57	Dust - 15 Minute Average	6.04E-05	mg/m3
563 - Updwind	11/14/2022 13:58	Dust - 15 Minute Average	4.98E-05	mg/m3
563 - Updwind	11/14/2022 13:59	Dust - 15 Minute Average	4.10E-05	mg/m3
563 - Updwind	11/14/2022 14:00	Dust - 15 Minute Average	5.25E-05	mg/m3
563 - Updwind	11/14/2022 14:01	Dust - 15 Minute Average	4.32E-05	mg/m3
563 - Updwind	11/14/2022 14:02	Dust - 15 Minute Average	6.31E-05	mg/m3
563 - Updwind	11/14/2022 14:03	Dust - 15 Minute Average	5.20E-05	mg/m3
563 - Updwind	11/14/2022 14:04	Dust - 15 Minute Average	0.000249	mg/m3
563 - Updwind	11/14/2022 14:05	Dust - 15 Minute Average	0.000205	mg/m3
563 - Updwind	11/14/2022 14:06	Dust - 15 Minute Average	0.000262	mg/m3
563 - Updwind	11/14/2022 14:07	Dust - 15 Minute Average	0.000222	mg/m3
563 - Updwind	11/14/2022 14:08	Dust - 15 Minute Average	0.000209	mg/m3
563 - Updwind	11/14/2022 14:09	Dust - 15 Minute Average	0.000172	mg/m3
563 - Updwind	11/14/2022 14:10	Dust - 15 Minute Average	0.000145	mg/m3
563 - Updwind	11/14/2022 14:11	Dust - 15 Minute Average	0.000119	mg/m3
563 - Updwind	11/14/2022 14:12	Dust - 15 Minute Average	9.51E-05	mg/m3
563 - Updwind	11/14/2022 14:13	Dust - 15 Minute Average	7.80E-05	mg/m3
563 - Updwind	11/14/2022 14:14	Dust - 15 Minute Average	7.09E-05	mg/m3
563 - Updwind	11/14/2022 14:15	Dust - 15 Minute Average	5.84E-05	mg/m3
563 - Updwind	11/14/2022 14:16	Dust - 15 Minute Average	6.32E-05	mg/m3

563 - Updwind	11/14/2022 14:17	Dust - 15 MInute Average	4.27E-05	mg/m3
563 - Updwind	11/14/2022 14:18	Dust - 15 MInute Average	4.98E-05	mg/m3
563 - Updwind	11/14/2022 14:19	Dust - 15 MInute Average	7.14E-05	mg/m3
563 - Updwind	11/14/2022 14:20	Dust - 15 MInute Average	5.88E-05	mg/m3
563 - Updwind	11/14/2022 14:21	Dust - 15 MInute Average	4.81E-05	mg/m3
563 - Updwind	11/14/2022 14:22	Dust - 15 MInute Average	0.000225	mg/m3
563 - Updwind	11/14/2022 14:23	Dust - 15 MInute Average	0.000186	mg/m3
563 - Updwind	11/14/2022 14:24	Dust - 15 MInute Average	0.000153	mg/m3
563 - Updwind	11/14/2022 14:25	Dust - 15 MInute Average	0.000126	mg/m3
563 - Updwind	11/14/2022 14:26	Dust - 15 MInute Average	0.000107	mg/m3
563 - Updwind	11/14/2022 14:27	Dust - 15 MInute Average	9.10E-05	mg/m3
563 - Updwind	11/14/2022 14:28	Dust - 15 MInute Average	7.50E-05	mg/m3
563 - Updwind	11/14/2022 14:29	Dust - 15 MInute Average	6.16E-05	mg/m3
563 - Updwind	11/14/2022 14:30	Dust - 15 MInute Average	5.07E-05	mg/m3
563 - Updwind	11/14/2022 14:31	Dust - 15 MInute Average	4.19E-05	mg/m3
563 - Updwind	11/14/2022 14:32	Dust - 15 MInute Average	3.78E-05	mg/m3
563 - Updwind	11/14/2022 14:33	Dust - 15 MInute Average	3.12E-05	mg/m3
563 - Updwind	11/14/2022 14:34	Dust - 15 MInute Average	9.24E-05	mg/m3
563 - Updwind	11/14/2022 14:35	Dust - 15 MInute Average	7.62E-05	mg/m3
563 - Updwind	11/14/2022 14:36	Dust - 15 MInute Average	6.28E-05	mg/m3
563 - Updwind	11/14/2022 14:37	Dust - 15 MInute Average	5.46E-05	mg/m3
563 - Updwind	11/14/2022 14:38	Dust - 15 MInute Average	4.50E-05	mg/m3
563 - Updwind	11/14/2022 14:39	Dust - 15 MInute Average	3.71E-05	mg/m3
563 - Updwind	11/14/2022 14:40	Dust - 15 MInute Average	3.98E-05	mg/m3
563 - Updwind	11/14/2022 14:41	Dust - 15 MInute Average	0.00012	mg/m3
563 - Updwind	11/14/2022 14:42	Dust - 15 MInute Average	0.000105	mg/m3
563 - Updwind	11/14/2022 14:43	Dust - 15 MInute Average	8.64E-05	mg/m3
563 - Updwind	11/14/2022 14:44	Dust - 15 MInute Average	7.12E-05	mg/m3
563 - Updwind	11/14/2022 14:45	Dust - 15 MInute Average	0.00021	mg/m3
563 - Updwind	11/14/2022 14:46	Dust - 15 MInute Average	0.000173	mg/m3
563 - Updwind	11/14/2022 14:47	Dust - 15 MInute Average	0.00014	mg/m3
563 - Updwind	11/14/2022 14:48	Dust - 15 MInute Average	0.000115	mg/m3
563 - Updwind	11/14/2022 14:49	Dust - 15 MInute Average	0.000167	mg/m3
563 - Updwind	11/14/2022 14:50	Dust - 15 MInute Average	0.000173	mg/m3
563 - Updwind	11/14/2022 14:51	Dust - 15 MInute Average	0.000154	mg/m3
563 - Updwind	11/14/2022 14:52	Dust - 15 MInute Average	0.000254	mg/m3
563 - Updwind	11/14/2022 14:53	Dust - 15 MInute Average	0.000209	mg/m3
563 - Updwind	11/15/2022 9:02	Dust - 15 MInute Average	0.01024	mg/m3
563 - Updwind	11/15/2022 9:03	Dust - 15 MInute Average	0.011774	mg/m3
563 - Updwind	11/15/2022 9:04	Dust - 15 MInute Average	0.01307	mg/m3
563 - Updwind	11/15/2022 9:05	Dust - 15 MInute Average	0.013938	mg/m3
563 - Updwind	11/15/2022 9:06	Dust - 15 MInute Average	0.01459	mg/m3
563 - Updwind	11/15/2022 9:07	Dust - 15 MInute Average	0.015332	mg/m3
563 - Updwind	11/15/2022 9:08	Dust - 15 MInute Average	0.015825	mg/m3
563 - Updwind	11/15/2022 9:09	Dust - 15 MInute Average	0.016292	mg/m3
563 - Updwind	11/15/2022 9:10	Dust - 15 MInute Average	0.016451	mg/m3
563 - Updwind	11/15/2022 9:11	Dust - 15 MInute Average	0.016923	mg/m3

563 - Updwind	11/15/2022 9:12	Dust - 15 Minute Average	0.017814	mg/m3
563 - Updwind	11/15/2022 9:13	Dust - 15 Minute Average	0.017679	mg/m3
563 - Updwind	11/15/2022 9:14	Dust - 15 Minute Average	0.017401	mg/m3
563 - Updwind	11/15/2022 9:15	Dust - 15 Minute Average	0.017066	mg/m3
563 - Updwind	11/15/2022 9:16	Dust - 15 Minute Average	0.016971	mg/m3
563 - Updwind	11/15/2022 9:17	Dust - 15 Minute Average	0.016868	mg/m3
563 - Updwind	11/15/2022 9:18	Dust - 15 Minute Average	0.017444	mg/m3
563 - Updwind	11/15/2022 9:19	Dust - 15 Minute Average	0.017039	mg/m3
563 - Updwind	11/15/2022 9:20	Dust - 15 Minute Average	0.016455	mg/m3
563 - Updwind	11/15/2022 9:21	Dust - 15 Minute Average	0.015868	mg/m3
563 - Updwind	11/15/2022 9:22	Dust - 15 Minute Average	0.015538	mg/m3
563 - Updwind	11/15/2022 9:23	Dust - 15 Minute Average	0.015246	mg/m3
563 - Updwind	11/15/2022 9:24	Dust - 15 Minute Average	0.014986	mg/m3
563 - Updwind	11/15/2022 9:25	Dust - 15 Minute Average	0.014634	mg/m3
563 - Updwind	11/15/2022 9:26	Dust - 15 Minute Average	0.014559	mg/m3
563 - Updwind	11/15/2022 9:27	Dust - 15 Minute Average	0.014238	mg/m3
563 - Updwind	11/15/2022 9:28	Dust - 15 Minute Average	0.014122	mg/m3
563 - Updwind	11/15/2022 9:29	Dust - 15 Minute Average	0.014054	mg/m3
563 - Updwind	11/15/2022 9:30	Dust - 15 Minute Average	0.014176	mg/m3
563 - Updwind	11/15/2022 9:31	Dust - 15 Minute Average	0.014093	mg/m3
563 - Updwind	11/15/2022 9:32	Dust - 15 Minute Average	0.014024	mg/m3
563 - Updwind	11/15/2022 9:33	Dust - 15 Minute Average	0.01401	mg/m3
563 - Updwind	11/15/2022 9:34	Dust - 15 Minute Average	0.013838	mg/m3
563 - Updwind	11/15/2022 9:35	Dust - 15 Minute Average	0.014	mg/m3
563 - Updwind	11/15/2022 9:36	Dust - 15 Minute Average	0.01387	mg/m3
563 - Updwind	11/15/2022 9:37	Dust - 15 Minute Average	0.013952	mg/m3
563 - Updwind	11/15/2022 9:38	Dust - 15 Minute Average	0.013929	mg/m3
563 - Updwind	11/15/2022 9:39	Dust - 15 Minute Average	0.013757	mg/m3
563 - Updwind	11/15/2022 9:40	Dust - 15 Minute Average	0.013422	mg/m3
563 - Updwind	11/15/2022 9:41	Dust - 15 Minute Average	0.0131	mg/m3
563 - Updwind	11/15/2022 9:42	Dust - 15 Minute Average	0.01279	mg/m3
563 - Updwind	11/15/2022 9:43	Dust - 15 Minute Average	0.012586	mg/m3
563 - Updwind	11/15/2022 9:44	Dust - 15 Minute Average	0.014371	mg/m3
563 - Updwind	11/15/2022 9:45	Dust - 15 Minute Average	0.014255	mg/m3
563 - Updwind	11/15/2022 9:46	Dust - 15 Minute Average	0.01399	mg/m3
563 - Updwind	11/15/2022 9:47	Dust - 15 Minute Average	0.014063	mg/m3
563 - Updwind	11/15/2022 9:48	Dust - 15 Minute Average	0.013684	mg/m3
563 - Updwind	11/15/2022 9:49	Dust - 15 Minute Average	0.013101	mg/m3
563 - Updwind	11/15/2022 9:50	Dust - 15 Minute Average	0.01259	mg/m3
563 - Updwind	11/15/2022 9:51	Dust - 15 Minute Average	0.012238	mg/m3
563 - Updwind	11/15/2022 9:52	Dust - 15 Minute Average	0.011902	mg/m3
563 - Updwind	11/15/2022 9:53	Dust - 15 Minute Average	0.011691	mg/m3
563 - Updwind	11/15/2022 9:54	Dust - 15 Minute Average	0.01153	mg/m3
563 - Updwind	11/15/2022 9:55	Dust - 15 Minute Average	0.011648	mg/m3
563 - Updwind	11/15/2022 9:56	Dust - 15 Minute Average	0.01155	mg/m3
563 - Updwind	11/15/2022 9:57	Dust - 15 Minute Average	0.011466	mg/m3
563 - Updwind	11/15/2022 9:58	Dust - 15 Minute Average	0.011295	mg/m3

563 - Updwind	11/15/2022 9:59	Dust - 15 Minute Average	0.011232	mg/m3
563 - Updwind	11/15/2022 10:00	Dust - 15 Minute Average	0.011254	mg/m3
563 - Updwind	11/15/2022 10:01	Dust - 15 Minute Average	0.011207	mg/m3
563 - Updwind	11/15/2022 10:02	Dust - 15 Minute Average	0.011151	mg/m3
563 - Updwind	11/15/2022 10:03	Dust - 15 Minute Average	0.011135	mg/m3
563 - Updwind	11/15/2022 10:04	Dust - 15 Minute Average	0.011277	mg/m3
563 - Updwind	11/15/2022 10:05	Dust - 15 Minute Average	0.011415	mg/m3
563 - Updwind	11/15/2022 10:06	Dust - 15 Minute Average	0.011402	mg/m3
563 - Updwind	11/15/2022 10:07	Dust - 15 Minute Average	0.011294	mg/m3
563 - Updwind	11/15/2022 10:08	Dust - 15 Minute Average	0.011207	mg/m3
563 - Updwind	11/15/2022 10:09	Dust - 15 Minute Average	0.011165	mg/m3
563 - Updwind	11/15/2022 10:10	Dust - 15 Minute Average	0.011157	mg/m3
563 - Updwind	11/15/2022 10:11	Dust - 15 Minute Average	0.011148	mg/m3
563 - Updwind	11/15/2022 10:12	Dust - 15 Minute Average	0.011129	mg/m3
563 - Updwind	11/15/2022 10:13	Dust - 15 Minute Average	0.010996	mg/m3
563 - Updwind	11/15/2022 10:14	Dust - 15 Minute Average	0.010838	mg/m3
563 - Updwind	11/15/2022 10:15	Dust - 15 Minute Average	0.010812	mg/m3
563 - Updwind	11/15/2022 10:16	Dust - 15 Minute Average	0.010659	mg/m3
563 - Updwind	11/15/2022 10:17	Dust - 15 Minute Average	0.010506	mg/m3
563 - Updwind	11/15/2022 10:18	Dust - 15 Minute Average	0.010551	mg/m3
563 - Updwind	11/15/2022 10:19	Dust - 15 Minute Average	0.010428	mg/m3
563 - Updwind	11/15/2022 10:20	Dust - 15 Minute Average	0.010272	mg/m3
563 - Updwind	11/15/2022 10:21	Dust - 15 Minute Average	0.01003	mg/m3
563 - Updwind	11/15/2022 10:22	Dust - 15 Minute Average	0.009745	mg/m3
563 - Updwind	11/15/2022 10:23	Dust - 15 Minute Average	0.009486	mg/m3
563 - Updwind	11/15/2022 10:24	Dust - 15 Minute Average	0.00931	mg/m3
563 - Updwind	11/15/2022 10:25	Dust - 15 Minute Average	0.009228	mg/m3
563 - Updwind	11/15/2022 10:26	Dust - 15 Minute Average	0.009069	mg/m3
563 - Updwind	11/15/2022 10:27	Dust - 15 Minute Average	0.008934	mg/m3
563 - Updwind	11/15/2022 10:28	Dust - 15 Minute Average	0.00892	mg/m3
563 - Updwind	11/15/2022 10:29	Dust - 15 Minute Average	0.009173	mg/m3
563 - Updwind	11/15/2022 10:30	Dust - 15 Minute Average	0.009082	mg/m3
563 - Updwind	11/15/2022 10:31	Dust - 15 Minute Average	0.008917	mg/m3
563 - Updwind	11/15/2022 10:32	Dust - 15 Minute Average	0.008714	mg/m3
563 - Updwind	11/15/2022 10:33	Dust - 15 Minute Average	0.00857	mg/m3
563 - Updwind	11/15/2022 10:34	Dust - 15 Minute Average	0.008288	mg/m3
563 - Updwind	11/15/2022 10:35	Dust - 15 Minute Average	0.008034	mg/m3
563 - Updwind	11/15/2022 10:36	Dust - 15 Minute Average	0.007813	mg/m3
563 - Updwind	11/15/2022 10:37	Dust - 15 Minute Average	0.00756	mg/m3
563 - Updwind	11/15/2022 10:38	Dust - 15 Minute Average	0.007402	mg/m3
563 - Updwind	11/15/2022 10:39	Dust - 15 Minute Average	0.007377	mg/m3
563 - Updwind	11/15/2022 10:40	Dust - 15 Minute Average	0.007159	mg/m3
563 - Updwind	11/15/2022 10:41	Dust - 15 Minute Average	0.006946	mg/m3
563 - Updwind	11/15/2022 10:42	Dust - 15 Minute Average	0.006814	mg/m3
563 - Updwind	11/15/2022 10:43	Dust - 15 Minute Average	0.006849	mg/m3
563 - Updwind	11/15/2022 10:44	Dust - 15 Minute Average	0.006967	mg/m3
563 - Updwind	11/15/2022 10:45	Dust - 15 Minute Average	0.006569	mg/m3

563 - Updwind	11/15/2022 10:46	Dust - 15 Minute Average	0.006306	mg/m3
563 - Updwind	11/15/2022 10:47	Dust - 15 Minute Average	0.006057	mg/m3
563 - Updwind	11/15/2022 10:48	Dust - 15 Minute Average	0.006108	mg/m3
563 - Updwind	11/15/2022 10:49	Dust - 15 Minute Average	0.006021	mg/m3
563 - Updwind	11/15/2022 10:50	Dust - 15 Minute Average	0.005845	mg/m3
563 - Updwind	11/15/2022 10:51	Dust - 15 Minute Average	0.005662	mg/m3
563 - Updwind	11/15/2022 10:52	Dust - 15 Minute Average	0.005599	mg/m3
563 - Updwind	11/15/2022 10:53	Dust - 15 Minute Average	0.005619	mg/m3
563 - Updwind	11/15/2022 10:54	Dust - 15 Minute Average	0.005702	mg/m3
563 - Updwind	11/15/2022 10:55	Dust - 15 Minute Average	0.005648	mg/m3
563 - Updwind	11/15/2022 10:56	Dust - 15 Minute Average	0.00556	mg/m3
563 - Updwind	11/15/2022 10:57	Dust - 15 Minute Average	0.005421	mg/m3
563 - Updwind	11/15/2022 10:58	Dust - 15 Minute Average	0.00536	mg/m3
563 - Updwind	11/15/2022 10:59	Dust - 15 Minute Average	0.005399	mg/m3
563 - Updwind	11/15/2022 11:00	Dust - 15 Minute Average	0.005476	mg/m3
563 - Updwind	11/15/2022 11:01	Dust - 15 Minute Average	0.005651	mg/m3
563 - Updwind	11/15/2022 11:02	Dust - 15 Minute Average	0.005527	mg/m3
563 - Updwind	11/15/2022 11:03	Dust - 15 Minute Average	0.005497	mg/m3
563 - Updwind	11/15/2022 11:04	Dust - 15 Minute Average	0.005496	mg/m3
563 - Updwind	11/15/2022 11:05	Dust - 15 Minute Average	0.005453	mg/m3
563 - Updwind	11/15/2022 11:06	Dust - 15 Minute Average	0.005434	mg/m3
563 - Updwind	11/15/2022 11:07	Dust - 15 Minute Average	0.005243	mg/m3
563 - Updwind	11/15/2022 11:08	Dust - 15 Minute Average	0.0051	mg/m3
563 - Updwind	11/15/2022 11:09	Dust - 15 Minute Average	0.005013	mg/m3
563 - Updwind	11/15/2022 11:10	Dust - 15 Minute Average	0.004949	mg/m3
563 - Updwind	11/15/2022 11:11	Dust - 15 Minute Average	0.004926	mg/m3
563 - Updwind	11/15/2022 11:12	Dust - 15 Minute Average	0.004859	mg/m3
563 - Updwind	11/15/2022 11:13	Dust - 15 Minute Average	0.004932	mg/m3
563 - Updwind	11/15/2022 11:14	Dust - 15 Minute Average	0.005032	mg/m3
563 - Updwind	11/15/2022 11:15	Dust - 15 Minute Average	0.005025	mg/m3
563 - Updwind	11/15/2022 11:16	Dust - 15 Minute Average	0.004998	mg/m3
563 - Updwind	11/15/2022 11:17	Dust - 15 Minute Average	0.005356	mg/m3
563 - Updwind	11/15/2022 11:18	Dust - 15 Minute Average	0.005306	mg/m3
563 - Updwind	11/15/2022 11:19	Dust - 15 Minute Average	0.005232	mg/m3
563 - Updwind	11/15/2022 11:20	Dust - 15 Minute Average	0.005223	mg/m3
563 - Updwind	11/15/2022 11:21	Dust - 15 Minute Average	0.00523	mg/m3
563 - Updwind	11/15/2022 11:22	Dust - 15 Minute Average	0.005223	mg/m3
563 - Updwind	11/15/2022 11:23	Dust - 15 Minute Average	0.005168	mg/m3
563 - Updwind	11/15/2022 11:24	Dust - 15 Minute Average	0.005188	mg/m3
563 - Updwind	11/15/2022 11:25	Dust - 15 Minute Average	0.005138	mg/m3
563 - Updwind	11/15/2022 11:26	Dust - 15 Minute Average	0.005061	mg/m3
563 - Updwind	11/15/2022 11:27	Dust - 15 Minute Average	0.004986	mg/m3
563 - Updwind	11/15/2022 11:28	Dust - 15 Minute Average	0.00499	mg/m3
563 - Updwind	11/15/2022 11:29	Dust - 15 Minute Average	0.004938	mg/m3
563 - Updwind	11/15/2022 11:30	Dust - 15 Minute Average	0.004874	mg/m3
563 - Updwind	11/15/2022 11:31	Dust - 15 Minute Average	0.005108	mg/m3
563 - Updwind	11/15/2022 11:32	Dust - 15 Minute Average	0.005243	mg/m3

563 - Updwind	11/15/2022 11:33	Dust - 15 Minute Average	0.005041	mg/m3
563 - Updwind	11/15/2022 11:34	Dust - 15 Minute Average	0.004857	mg/m3
563 - Updwind	11/15/2022 11:35	Dust - 15 Minute Average	0.004728	mg/m3
563 - Updwind	11/15/2022 11:36	Dust - 15 Minute Average	0.004683	mg/m3
563 - Updwind	11/15/2022 11:37	Dust - 15 Minute Average	0.0046	mg/m3
563 - Updwind	11/15/2022 11:38	Dust - 15 Minute Average	0.004527	mg/m3
563 - Updwind	11/15/2022 11:39	Dust - 15 Minute Average	0.004476	mg/m3
563 - Updwind	11/15/2022 11:40	Dust - 15 Minute Average	0.004498	mg/m3
563 - Updwind	11/15/2022 11:41	Dust - 15 Minute Average	0.00447	mg/m3
563 - Updwind	11/15/2022 11:42	Dust - 15 Minute Average	0.004471	mg/m3
563 - Updwind	11/15/2022 11:43	Dust - 15 Minute Average	0.004762	mg/m3
563 - Updwind	11/15/2022 11:44	Dust - 15 Minute Average	0.004715	mg/m3
563 - Updwind	11/15/2022 11:45	Dust - 15 Minute Average	0.004886	mg/m3
563 - Updwind	11/15/2022 11:46	Dust - 15 Minute Average	0.005133	mg/m3
563 - Updwind	11/15/2022 11:47	Dust - 15 Minute Average	0.005127	mg/m3
563 - Updwind	11/15/2022 11:48	Dust - 15 Minute Average	0.005087	mg/m3
563 - Updwind	11/15/2022 11:49	Dust - 15 Minute Average	0.004964	mg/m3
563 - Updwind	11/15/2022 11:50	Dust - 15 Minute Average	0.004813	mg/m3
563 - Updwind	11/15/2022 11:51	Dust - 15 Minute Average	0.004692	mg/m3
563 - Updwind	11/15/2022 11:52	Dust - 15 Minute Average	0.004604	mg/m3
563 - Updwind	11/15/2022 11:53	Dust - 15 Minute Average	0.004508	mg/m3
563 - Updwind	11/15/2022 11:54	Dust - 15 Minute Average	0.004399	mg/m3
563 - Updwind	11/15/2022 11:55	Dust - 15 Minute Average	0.004282	mg/m3
563 - Updwind	11/15/2022 11:56	Dust - 15 Minute Average	0.004336	mg/m3
563 - Updwind	11/15/2022 11:57	Dust - 15 Minute Average	0.004237	mg/m3
563 - Updwind	11/15/2022 11:58	Dust - 15 Minute Average	0.004064	mg/m3
563 - Updwind	11/15/2022 11:59	Dust - 15 Minute Average	0.003894	mg/m3
563 - Updwind	11/15/2022 12:00	Dust - 15 Minute Average	0.00373	mg/m3
563 - Updwind	11/15/2022 12:01	Dust - 15 Minute Average	0.003686	mg/m3
563 - Updwind	11/15/2022 12:02	Dust - 15 Minute Average	0.003751	mg/m3
563 - Updwind	11/15/2022 12:03	Dust - 15 Minute Average	0.003801	mg/m3
563 - Updwind	11/15/2022 12:04	Dust - 15 Minute Average	0.003816	mg/m3
563 - Updwind	11/15/2022 12:05	Dust - 15 Minute Average	0.003866	mg/m3
563 - Updwind	11/15/2022 12:06	Dust - 15 Minute Average	0.003764	mg/m3
563 - Updwind	11/15/2022 12:07	Dust - 15 Minute Average	0.003913	mg/m3
563 - Updwind	11/15/2022 12:08	Dust - 15 Minute Average	0.004053	mg/m3
563 - Updwind	11/15/2022 12:09	Dust - 15 Minute Average	0.003964	mg/m3
563 - Updwind	11/15/2022 12:10	Dust - 15 Minute Average	0.003837	mg/m3
563 - Updwind	11/15/2022 12:11	Dust - 15 Minute Average	0.003665	mg/m3
563 - Updwind	11/15/2022 12:12	Dust - 15 Minute Average	0.003478	mg/m3
563 - Updwind	11/15/2022 12:13	Dust - 15 Minute Average	0.003386	mg/m3
563 - Updwind	11/15/2022 12:14	Dust - 15 Minute Average	0.003139	mg/m3
563 - Updwind	11/15/2022 12:15	Dust - 15 Minute Average	0.00292	mg/m3
563 - Updwind	11/15/2022 12:16	Dust - 15 Minute Average	0.003004	mg/m3
563 - Updwind	11/15/2022 12:17	Dust - 15 Minute Average	0.003202	mg/m3
563 - Updwind	11/15/2022 12:18	Dust - 15 Minute Average	0.002982	mg/m3
563 - Updwind	11/15/2022 12:19	Dust - 15 Minute Average	0.002752	mg/m3

563 - Updwind	11/15/2022 12:20	Dust - 15 Minute Average	0.002674	mg/m3
563 - Updwind	11/15/2022 12:21	Dust - 15 Minute Average	0.002638	mg/m3
563 - Updwind	11/15/2022 12:22	Dust - 15 Minute Average	0.002666	mg/m3
563 - Updwind	11/15/2022 12:23	Dust - 15 Minute Average	0.002473	mg/m3
563 - Updwind	11/15/2022 12:24	Dust - 15 Minute Average	0.002197	mg/m3
563 - Updwind	11/15/2022 12:25	Dust - 15 Minute Average	0.001957	mg/m3
563 - Updwind	11/15/2022 12:26	Dust - 15 Minute Average	0.001817	mg/m3
563 - Updwind	11/15/2022 12:27	Dust - 15 Minute Average	0.001648	mg/m3
563 - Updwind	11/15/2022 12:28	Dust - 15 Minute Average	0.00159	mg/m3
563 - Updwind	11/15/2022 12:29	Dust - 15 Minute Average	0.001528	mg/m3
563 - Updwind	11/15/2022 12:30	Dust - 15 Minute Average	0.001789	mg/m3
563 - Updwind	11/15/2022 12:31	Dust - 15 Minute Average	0.00211	mg/m3
563 - Updwind	11/15/2022 12:32	Dust - 15 Minute Average	0.002085	mg/m3
563 - Updwind	11/15/2022 12:33	Dust - 15 Minute Average	0.001936	mg/m3
563 - Updwind	11/15/2022 12:34	Dust - 15 Minute Average	0.001813	mg/m3
563 - Updwind	11/15/2022 12:35	Dust - 15 Minute Average	0.001729	mg/m3
563 - Updwind	11/15/2022 12:36	Dust - 15 Minute Average	0.001801	mg/m3
563 - Updwind	11/15/2022 12:37	Dust - 15 Minute Average	0.001947	mg/m3
563 - Updwind	11/15/2022 12:38	Dust - 15 Minute Average	0.002786	mg/m3
563 - Updwind	11/15/2022 12:39	Dust - 15 Minute Average	0.00306	mg/m3
563 - Updwind	11/15/2022 12:40	Dust - 15 Minute Average	0.003181	mg/m3
563 - Updwind	11/15/2022 12:41	Dust - 15 Minute Average	0.003388	mg/m3
563 - Updwind	11/15/2022 12:42	Dust - 15 Minute Average	0.003592	mg/m3
563 - Updwind	11/15/2022 14:24	Dust - 15 Minute Average	0.000319	mg/m3
563 - Updwind	11/15/2022 14:25	Dust - 15 Minute Average	0.000719	mg/m3
563 - Updwind	11/15/2022 14:26	Dust - 15 Minute Average	0.000966	mg/m3
563 - Updwind	11/15/2022 14:27	Dust - 15 Minute Average	0.001213	mg/m3
563 - Updwind	11/15/2022 14:28	Dust - 15 Minute Average	0.001277	mg/m3
563 - Updwind	11/15/2022 14:29	Dust - 15 Minute Average	0.001566	mg/m3
563 - Updwind	11/15/2022 14:30	Dust - 15 Minute Average	0.001905	mg/m3
563 - Updwind	11/15/2022 14:31	Dust - 15 Minute Average	0.001909	mg/m3
563 - Updwind	11/15/2022 14:32	Dust - 15 Minute Average	0.003479	mg/m3
563 - Updwind	11/15/2022 14:33	Dust - 15 Minute Average	0.005317	mg/m3
563 - Updwind	11/15/2022 14:34	Dust - 15 Minute Average	0.005961	mg/m3
563 - Updwind	11/15/2022 14:35	Dust - 15 Minute Average	0.005325	mg/m3
563 - Updwind	11/15/2022 14:36	Dust - 15 Minute Average	0.004802	mg/m3
563 - Updwind	11/15/2022 14:37	Dust - 15 Minute Average	0.004186	mg/m3
563 - Updwind	11/15/2022 14:38	Dust - 15 Minute Average	0.003647	mg/m3
563 - Updwind	11/15/2022 14:39	Dust - 15 Minute Average	0.003204	mg/m3
563 - Updwind	11/15/2022 14:40	Dust - 15 Minute Average	0.002947	mg/m3
563 - Updwind	11/15/2022 14:41	Dust - 15 Minute Average	0.002746	mg/m3
563 - Updwind	11/15/2022 14:42	Dust - 15 Minute Average	0.002484	mg/m3
563 - Updwind	11/15/2022 14:43	Dust - 15 Minute Average	0.002301	mg/m3
563 - Updwind	11/15/2022 14:44	Dust - 15 Minute Average	0.002242	mg/m3
563 - Updwind	11/15/2022 14:45	Dust - 15 Minute Average	0.002096	mg/m3
563 - Updwind	11/15/2022 14:46	Dust - 15 Minute Average	0.002045	mg/m3
563 - Updwind	11/15/2022 14:47	Dust - 15 Minute Average	0.00199	mg/m3

563 - Updwind	11/15/2022 14:48	Dust - 15 Minute Average	0.0021	mg/m3
563 - Updwind	11/15/2022 14:49	Dust - 15 Minute Average	0.002272	mg/m3
563 - Updwind	11/15/2022 14:50	Dust - 15 Minute Average	0.00219	mg/m3
563 - Updwind	11/15/2022 14:51	Dust - 15 Minute Average	0.002088	mg/m3
563 - Updwind	11/15/2022 14:52	Dust - 15 Minute Average	0.001998	mg/m3
563 - Updwind	11/15/2022 14:53	Dust - 15 Minute Average	0.001961	mg/m3
563 - Updwind	11/15/2022 14:54	Dust - 15 Minute Average	0.001869	mg/m3
563 - Updwind	11/15/2022 14:55	Dust - 15 Minute Average	0.001851	mg/m3
563 - Updwind	11/15/2022 14:56	Dust - 15 Minute Average	0.001974	mg/m3
563 - Updwind	11/15/2022 14:57	Dust - 15 Minute Average	0.001987	mg/m3
563 - Updwind	11/15/2022 14:58	Dust - 15 Minute Average	0.001979	mg/m3
563 - Updwind	11/15/2022 14:59	Dust - 15 Minute Average	0.00208	mg/m3
563 - Updwind	11/15/2022 15:00	Dust - 15 Minute Average	0.002065	mg/m3
563 - Updwind	11/15/2022 15:01	Dust - 15 Minute Average	0.00197	mg/m3
563 - Updwind	11/15/2022 15:02	Dust - 15 Minute Average	0.001904	mg/m3
563 - Updwind	11/15/2022 15:03	Dust - 15 Minute Average	0.001931	mg/m3
563 - Updwind	11/15/2022 15:04	Dust - 15 Minute Average	0.001858	mg/m3
563 - Updwind	11/15/2022 15:05	Dust - 15 Minute Average	0.001961	mg/m3
563 - Updwind	11/15/2022 15:06	Dust - 15 Minute Average	0.001928	mg/m3
563 - Updwind	11/15/2022 15:07	Dust - 15 Minute Average	0.001847	mg/m3
563 - Updwind	11/15/2022 15:08	Dust - 15 Minute Average	0.001738	mg/m3
563 - Updwind	11/15/2022 15:09	Dust - 15 Minute Average	0.001786	mg/m3
563 - Updwind	11/15/2022 15:10	Dust - 15 Minute Average	0.00177	mg/m3
563 - Updwind	11/15/2022 15:11	Dust - 15 Minute Average	0.001813	mg/m3
563 - Updwind	11/15/2022 15:12	Dust - 15 Minute Average	0.001841	mg/m3
563 - Updwind	11/15/2022 15:13	Dust - 15 Minute Average	0.001831	mg/m3
563 - Updwind	11/15/2022 15:14	Dust - 15 Minute Average	0.002047	mg/m3
563 - Updwind	11/15/2022 15:15	Dust - 15 Minute Average	0.002221	mg/m3
563 - Updwind	11/15/2022 15:16	Dust - 15 Minute Average	0.002297	mg/m3
563 - Updwind	11/15/2022 15:17	Dust - 15 Minute Average	0.002215	mg/m3
563 - Updwind	11/15/2022 15:18	Dust - 15 Minute Average	0.002292	mg/m3
563 - Updwind	11/15/2022 15:19	Dust - 15 Minute Average	0.002284	mg/m3
563 - Updwind	11/15/2022 15:20	Dust - 15 Minute Average	0.002203	mg/m3
563 - Updwind	11/15/2022 15:21	Dust - 15 Minute Average	0.002082	mg/m3
563 - Updwind	11/15/2022 15:22	Dust - 15 Minute Average	0.002024	mg/m3
563 - Updwind	11/15/2022 15:23	Dust - 15 Minute Average	0.001987	mg/m3
563 - Updwind	11/15/2022 15:24	Dust - 15 Minute Average	0.002011	mg/m3
563 - Updwind	11/15/2022 15:25	Dust - 15 Minute Average	0.002034	mg/m3
563 - Updwind	11/15/2022 15:26	Dust - 15 Minute Average	0.00226	mg/m3
563 - Updwind	11/15/2022 15:27	Dust - 15 Minute Average	0.002298	mg/m3
563 - Updwind	11/15/2022 15:28	Dust - 15 Minute Average	0.002395	mg/m3
563 - Updwind	11/15/2022 15:29	Dust - 15 Minute Average	0.002389	mg/m3
563 - Updwind	11/15/2022 15:30	Dust - 15 Minute Average	0.002371	mg/m3
563 - Updwind	11/15/2022 15:31	Dust - 15 Minute Average	0.002303	mg/m3
563 - Updwind	11/15/2022 15:32	Dust - 15 Minute Average	0.002345	mg/m3
563 - Updwind	11/15/2022 15:33	Dust - 15 Minute Average	0.002547	mg/m3
563 - Updwind	11/15/2022 15:34	Dust - 15 Minute Average	0.002668	mg/m3

563 - Updwind	11/15/2022 15:35	Dust - 15 Minute Average	0.002627	mg/m3
563 - Updwind	11/15/2022 15:36	Dust - 15 Minute Average	0.002529	mg/m3
563 - Updwind	11/15/2022 15:37	Dust - 15 Minute Average	0.002452	mg/m3
563 - Updwind	11/15/2022 15:38	Dust - 15 Minute Average	0.002437	mg/m3
563 - Updwind	11/15/2022 15:39	Dust - 15 Minute Average	0.002414	mg/m3
563 - Updwind	11/15/2022 15:40	Dust - 15 Minute Average	0.002382	mg/m3
563 - Updwind	11/15/2022 15:41	Dust - 15 Minute Average	0.002334	mg/m3
563 - Updwind	11/15/2022 15:42	Dust - 15 Minute Average	0.002275	mg/m3
563 - Updwind	11/15/2022 15:43	Dust - 15 Minute Average	0.002299	mg/m3
563 - Updwind	11/15/2022 15:44	Dust - 15 Minute Average	0.002278	mg/m3
563 - Updwind	11/15/2022 15:45	Dust - 15 Minute Average	0.002232	mg/m3
563 - Updwind	11/15/2022 15:46	Dust - 15 Minute Average	0.002187	mg/m3
563 - Updwind	11/15/2022 15:47	Dust - 15 Minute Average	0.002247	mg/m3
563 - Updwind	11/15/2022 15:48	Dust - 15 Minute Average	0.002252	mg/m3
563 - Updwind	11/15/2022 15:49	Dust - 15 Minute Average	0.002249	mg/m3
563 - Updwind	11/15/2022 15:50	Dust - 15 Minute Average	0.00236	mg/m3
563 - Updwind	11/15/2022 15:51	Dust - 15 Minute Average	0.002944	mg/m3
563 - Updwind	11/15/2022 15:52	Dust - 15 Minute Average	0.003242	mg/m3
563 - Updwind	11/16/2022 10:42	Dust - 15 Minute Average	1.32E-05	mg/m3
563 - Updwind	11/16/2022 10:43	Dust - 15 Minute Average	0.000229	mg/m3
563 - Updwind	11/16/2022 10:44	Dust - 15 Minute Average	0.000188	mg/m3
563 - Updwind	11/16/2022 10:45	Dust - 15 Minute Average	0.000155	mg/m3
563 - Updwind	11/16/2022 10:46	Dust - 15 Minute Average	0.000133	mg/m3
563 - Updwind	11/16/2022 10:47	Dust - 15 Minute Average	0.00011	mg/m3
563 - Updwind	11/16/2022 10:48	Dust - 15 Minute Average	9.03E-05	mg/m3
563 - Updwind	11/16/2022 10:49	Dust - 15 Minute Average	7.44E-05	mg/m3
563 - Updwind	11/16/2022 10:50	Dust - 15 Minute Average	6.11E-05	mg/m3
563 - Updwind	11/16/2022 10:51	Dust - 15 Minute Average	5.01E-05	mg/m3
563 - Updwind	11/16/2022 10:52	Dust - 15 Minute Average	0.000257	mg/m3
563 - Updwind	11/16/2022 10:53	Dust - 15 Minute Average	0.000212	mg/m3
563 - Updwind	11/16/2022 10:54	Dust - 15 Minute Average	0.000175	mg/m3
563 - Updwind	11/16/2022 10:55	Dust - 15 Minute Average	0.000143	mg/m3
563 - Updwind	11/16/2022 10:56	Dust - 15 Minute Average	0.000118	mg/m3
563 - Updwind	11/16/2022 10:57	Dust - 15 Minute Average	9.76E-05	mg/m3
563 - Updwind	11/16/2022 10:58	Dust - 15 Minute Average	8.04E-05	mg/m3
563 - Updwind	11/16/2022 10:59	Dust - 15 Minute Average	6.63E-05	mg/m3
563 - Updwind	11/16/2022 11:00	Dust - 15 Minute Average	5.46E-05	mg/m3
563 - Updwind	11/16/2022 11:01	Dust - 15 Minute Average	4.48E-05	mg/m3
563 - Updwind	11/16/2022 11:02	Dust - 15 Minute Average	3.69E-05	mg/m3
563 - Updwind	11/16/2022 11:03	Dust - 15 Minute Average	3.04E-05	mg/m3
563 - Updwind	11/16/2022 11:04	Dust - 15 Minute Average	3.95E-05	mg/m3
563 - Updwind	11/16/2022 11:05	Dust - 15 Minute Average	3.26E-05	mg/m3
563 - Updwind	11/16/2022 11:06	Dust - 15 Minute Average	5.16E-05	mg/m3
563 - Updwind	11/16/2022 11:07	Dust - 15 Minute Average	4.25E-05	mg/m3
563 - Updwind	11/16/2022 11:08	Dust - 15 Minute Average	0.000101	mg/m3
563 - Updwind	11/16/2022 11:09	Dust - 15 Minute Average	8.05E-05	mg/m3
563 - Updwind	11/16/2022 11:10	Dust - 15 Minute Average	6.63E-05	mg/m3

563 - Updwind	11/16/2022 11:11	Dust - 15 Minute Average	5.45E-05	mg/m3
563 - Updwind	11/16/2022 11:12	Dust - 15 Minute Average	4.49E-05	mg/m3
563 - Updwind	11/16/2022 11:13	Dust - 15 Minute Average	3.70E-05	mg/m3
563 - Updwind	11/16/2022 11:14	Dust - 15 Minute Average	3.05E-05	mg/m3
563 - Updwind	11/16/2022 11:15	Dust - 15 Minute Average	4.07E-05	mg/m3
563 - Updwind	11/16/2022 11:16	Dust - 15 Minute Average	0.00016	mg/m3
563 - Updwind	11/16/2022 11:17	Dust - 15 Minute Average	0.000132	mg/m3
563 - Updwind	11/16/2022 11:18	Dust - 15 Minute Average	0.000108	mg/m3
563 - Updwind	11/16/2022 11:19	Dust - 15 Minute Average	8.94E-05	mg/m3
563 - Updwind	11/16/2022 11:20	Dust - 15 Minute Average	7.37E-05	mg/m3
563 - Updwind	11/16/2022 11:21	Dust - 15 Minute Average	6.05E-05	mg/m3
563 - Updwind	11/16/2022 11:22	Dust - 15 Minute Average	4.98E-05	mg/m3
563 - Updwind	11/16/2022 11:23	Dust - 15 Minute Average	4.38E-05	mg/m3
563 - Updwind	11/16/2022 11:24	Dust - 15 Minute Average	3.61E-05	mg/m3
563 - Updwind	11/16/2022 11:25	Dust - 15 Minute Average	2.97E-05	mg/m3
563 - Updwind	11/16/2022 11:26	Dust - 15 Minute Average	2.47E-05	mg/m3
563 - Updwind	11/16/2022 11:27	Dust - 15 Minute Average	2.03E-05	mg/m3
563 - Updwind	11/16/2022 11:28	Dust - 15 Minute Average	1.67E-05	mg/m3
563 - Updwind	11/16/2022 11:29	Dust - 15 Minute Average	1.38E-05	mg/m3
563 - Updwind	11/16/2022 11:30	Dust - 15 Minute Average	1.13E-05	mg/m3
563 - Updwind	11/16/2022 11:31	Dust - 15 Minute Average	9.27E-06	mg/m3
563 - Updwind	11/16/2022 11:32	Dust - 15 Minute Average	7.64E-06	mg/m3
563 - Updwind	11/16/2022 11:33	Dust - 15 Minute Average	6.30E-06	mg/m3
563 - Updwind	11/16/2022 11:34	Dust - 15 Minute Average	3.49E-05	mg/m3
563 - Updwind	11/16/2022 11:35	Dust - 15 Minute Average	2.87E-05	mg/m3
563 - Updwind	11/16/2022 11:36	Dust - 15 Minute Average	2.04E-05	mg/m3
563 - Updwind	11/16/2022 11:37	Dust - 15 Minute Average	1.68E-05	mg/m3
563 - Updwind	11/16/2022 11:38	Dust - 15 Minute Average	1.38E-05	mg/m3
563 - Updwind	11/16/2022 11:39	Dust - 15 Minute Average	1.14E-05	mg/m3
563 - Updwind	11/16/2022 11:40	Dust - 15 Minute Average	9.35E-06	mg/m3
563 - Updwind	11/16/2022 11:41	Dust - 15 Minute Average	7.76E-06	mg/m3
563 - Updwind	11/16/2022 11:42	Dust - 15 Minute Average	-3.36E-06	mg/m3
563 - Updwind	11/16/2022 11:43	Dust - 15 Minute Average	-5.94E-06	mg/m3
563 - Updwind	11/16/2022 11:44	Dust - 15 Minute Average	-7.92E-06	mg/m3
563 - Updwind	11/16/2022 11:45	Dust - 15 Minute Average	-6.53E-06	mg/m3
563 - Updwind	11/16/2022 11:46	Dust - 15 Minute Average	-5.34E-06	mg/m3
563 - Updwind	11/16/2022 11:47	Dust - 15 Minute Average	9.74E-05	mg/m3
563 - Updwind	11/16/2022 11:48	Dust - 15 Minute Average	7.40E-05	mg/m3
563 - Updwind	11/16/2022 11:49	Dust - 15 Minute Average	6.09E-05	mg/m3
563 - Updwind	11/16/2022 11:50	Dust - 15 Minute Average	4.03E-05	mg/m3
563 - Updwind	11/16/2022 11:51	Dust - 15 Minute Average	-6.76E-06	mg/m3
563 - Updwind	11/16/2022 11:52	Dust - 15 Minute Average	-2.62E-05	mg/m3
563 - Updwind	11/16/2022 11:53	Dust - 15 Minute Average	-2.16E-05	mg/m3
563 - Updwind	11/16/2022 11:54	Dust - 15 Minute Average	-1.78E-05	mg/m3
563 - Updwind	11/16/2022 11:55	Dust - 15 Minute Average	-1.74E-05	mg/m3
563 - Updwind	11/16/2022 11:56	Dust - 15 Minute Average	-1.43E-05	mg/m3
563 - Updwind	11/16/2022 11:57	Dust - 15 Minute Average	-1.18E-05	mg/m3

563 - Updwind	11/16/2022 11:58	Dust - 15 MInute Average	-9.68E-06	mg/m3
563 - Updwind	11/16/2022 11:59	Dust - 15 MInute Average	-7.98E-06	mg/m3
563 - Updwind	11/16/2022 12:00	Dust - 15 MInute Average	-6.57E-06	mg/m3
563 - Updwind	11/16/2022 12:01	Dust - 15 MInute Average	-5.53E-06	mg/m3
563 - Updwind	11/16/2022 12:02	Dust - 15 MInute Average	-4.55E-06	mg/m3
563 - Updwind	11/16/2022 12:03	Dust - 15 MInute Average	-3.75E-06	mg/m3
563 - Updwind	11/16/2022 12:04	Dust - 15 MInute Average	5.26E-05	mg/m3
563 - Updwind	11/16/2022 12:05	Dust - 15 MInute Average	4.33E-05	mg/m3
563 - Updwind	11/16/2022 12:06	Dust - 15 MInute Average	3.50E-05	mg/m3
563 - Updwind	11/16/2022 12:07	Dust - 15 MInute Average	2.87E-05	mg/m3
563 - Updwind	11/16/2022 12:08	Dust - 15 MInute Average	2.37E-05	mg/m3
563 - Updwind	11/16/2022 12:09	Dust - 15 MInute Average	1.95E-05	mg/m3
563 - Updwind	11/16/2022 12:10	Dust - 15 MInute Average	1.61E-05	mg/m3
563 - Updwind	11/16/2022 12:11	Dust - 15 MInute Average	1.32E-05	mg/m3
563 - Updwind	11/16/2022 12:12	Dust - 15 MInute Average	-2.06E-06	mg/m3
563 - Updwind	11/16/2022 12:13	Dust - 15 MInute Average	-1.70E-06	mg/m3
563 - Updwind	11/16/2022 12:14	Dust - 15 MInute Average	-1.40E-05	mg/m3
563 - Updwind	11/16/2022 12:15	Dust - 15 MInute Average	-2.89E-05	mg/m3
563 - Updwind	11/16/2022 12:16	Dust - 15 MInute Average	-2.69E-05	mg/m3
563 - Updwind	11/16/2022 12:17	Dust - 15 MInute Average	-1.24E-05	mg/m3
563 - Updwind	11/16/2022 12:18	Dust - 15 MInute Average	-2.83E-05	mg/m3
563 - Updwind	11/16/2022 12:19	Dust - 15 MInute Average	-2.33E-05	mg/m3
563 - Updwind	11/16/2022 12:20	Dust - 15 MInute Average	-2.53E-05	mg/m3
563 - Updwind	11/16/2022 12:21	Dust - 15 MInute Average	-2.99E-05	mg/m3
563 - Updwind	11/16/2022 12:22	Dust - 15 MInute Average	-2.77E-05	mg/m3
563 - Updwind	11/16/2022 12:23	Dust - 15 MInute Average	-2.27E-05	mg/m3
563 - Updwind	11/16/2022 12:24	Dust - 15 MInute Average	-1.87E-05	mg/m3
563 - Updwind	11/16/2022 12:25	Dust - 15 MInute Average	-1.54E-05	mg/m3
563 - Updwind	11/16/2022 12:26	Dust - 15 MInute Average	-1.27E-05	mg/m3
563 - Updwind	11/16/2022 12:27	Dust - 15 MInute Average	-1.05E-05	mg/m3
563 - Updwind	11/16/2022 12:28	Dust - 15 MInute Average	-8.63E-06	mg/m3
563 - Updwind	11/16/2022 12:29	Dust - 15 MInute Average	-1.02E-05	mg/m3
563 - Updwind	11/16/2022 12:30	Dust - 15 MInute Average	-8.42E-06	mg/m3
563 - Updwind	11/16/2022 12:31	Dust - 15 MInute Average	-6.99E-06	mg/m3
563 - Updwind	11/16/2022 12:32	Dust - 15 MInute Average	-5.76E-06	mg/m3
563 - Updwind	11/16/2022 12:33	Dust - 15 MInute Average	-4.74E-06	mg/m3
563 - Updwind	11/16/2022 12:34	Dust - 15 MInute Average	-3.90E-06	mg/m3
563 - Updwind	11/16/2022 12:35	Dust - 15 MInute Average	0.000202	mg/m3
563 - Updwind	11/16/2022 12:36	Dust - 15 MInute Average	0.000454	mg/m3
563 - Updwind	11/16/2022 12:37	Dust - 15 MInute Average	0.000374	mg/m3
563 - Updwind	11/16/2022 12:38	Dust - 15 MInute Average	0.000345	mg/m3
563 - Updwind	11/16/2022 12:39	Dust - 15 MInute Average	0.000289	mg/m3
563 - Updwind	11/16/2022 12:40	Dust - 15 MInute Average	0.000361	mg/m3
563 - Updwind	11/16/2022 12:41	Dust - 15 MInute Average	0.000297	mg/m3
563 - Updwind	11/16/2022 12:42	Dust - 15 MInute Average	0.000273	mg/m3
563 - Updwind	11/16/2022 12:43	Dust - 15 MInute Average	0.000228	mg/m3
563 - Updwind	11/16/2022 12:44	Dust - 15 MInute Average	0.000259	mg/m3

563 - Updwind	11/16/2022 12:45	Dust - 15 Minute Average	0.000212	mg/m3
563 - Updwind	11/16/2022 12:46	Dust - 15 Minute Average	0.000175	mg/m3
563 - Updwind	11/16/2022 12:47	Dust - 15 Minute Average	0.000141	mg/m3
563 - Updwind	11/16/2022 12:48	Dust - 15 Minute Average	0.00012	mg/m3
563 - Updwind	11/16/2022 12:49	Dust - 15 Minute Average	9.85E-05	mg/m3
563 - Updwind	11/16/2022 12:50	Dust - 15 Minute Average	8.12E-05	mg/m3
563 - Updwind	11/16/2022 12:51	Dust - 15 Minute Average	8.43E-05	mg/m3
563 - Updwind	11/16/2022 12:52	Dust - 15 Minute Average	8.44E-05	mg/m3
563 - Updwind	11/16/2022 12:53	Dust - 15 Minute Average	6.95E-05	mg/m3
563 - Updwind	11/16/2022 12:54	Dust - 15 Minute Average	6.36E-05	mg/m3
563 - Updwind	11/16/2022 12:55	Dust - 15 Minute Average	5.24E-05	mg/m3
563 - Updwind	11/16/2022 12:56	Dust - 15 Minute Average	4.29E-05	mg/m3
563 - Updwind	11/16/2022 12:57	Dust - 15 Minute Average	3.53E-05	mg/m3
563 - Updwind	11/16/2022 12:58	Dust - 15 Minute Average	4.96E-05	mg/m3
563 - Updwind	11/16/2022 12:59	Dust - 15 Minute Average	4.09E-05	mg/m3
563 - Updwind	11/16/2022 13:00	Dust - 15 Minute Average	3.37E-05	mg/m3
563 - Updwind	11/16/2022 13:01	Dust - 15 Minute Average	2.77E-05	mg/m3
563 - Updwind	11/16/2022 13:02	Dust - 15 Minute Average	2.29E-05	mg/m3
563 - Updwind	11/16/2022 13:03	Dust - 15 Minute Average	1.88E-05	mg/m3
563 - Updwind	11/16/2022 13:04	Dust - 15 Minute Average	1.55E-05	mg/m3
563 - Updwind	11/16/2022 13:05	Dust - 15 Minute Average	1.28E-05	mg/m3
563 - Updwind	11/16/2022 13:06	Dust - 15 Minute Average	1.64E-05	mg/m3
563 - Updwind	11/16/2022 13:07	Dust - 15 Minute Average	4.84E-05	mg/m3
563 - Updwind	11/16/2022 13:08	Dust - 15 Minute Average	0.000108	mg/m3
563 - Updwind	11/16/2022 13:09	Dust - 15 Minute Average	0.000158	mg/m3
563 - Updwind	11/16/2022 13:10	Dust - 15 Minute Average	0.000257	mg/m3
563 - Updwind	11/16/2022 13:11	Dust - 15 Minute Average	0.000456	mg/m3
563 - Updwind	11/16/2022 13:12	Dust - 15 Minute Average	0.000835	mg/m3
563 - Updwind	11/16/2022 13:13	Dust - 15 Minute Average	0.00089	mg/m3
563 - Updwind	11/16/2022 13:14	Dust - 15 Minute Average	0.000806	mg/m3
563 - Updwind	11/16/2022 13:15	Dust - 15 Minute Average	0.000927	mg/m3
563 - Updwind	11/16/2022 13:16	Dust - 15 Minute Average	0.001016	mg/m3
563 - Updwind	11/16/2022 13:17	Dust - 15 Minute Average	0.001222	mg/m3
563 - Updwind	11/16/2022 13:18	Dust - 15 Minute Average	0.001368	mg/m3
563 - Updwind	11/16/2022 13:19	Dust - 15 Minute Average	0.001353	mg/m3
563 - Updwind	11/16/2022 13:20	Dust - 15 Minute Average	0.001276	mg/m3
563 - Updwind	11/16/2022 13:21	Dust - 15 Minute Average	0.001205	mg/m3
563 - Updwind	11/16/2022 13:22	Dust - 15 Minute Average	0.001154	mg/m3
563 - Updwind	11/16/2022 13:23	Dust - 15 Minute Average	0.001087	mg/m3
563 - Updwind	11/16/2022 13:24	Dust - 15 Minute Average	0.001033	mg/m3
563 - Updwind	11/16/2022 13:25	Dust - 15 Minute Average	0.000974	mg/m3
563 - Updwind	11/16/2022 13:26	Dust - 15 Minute Average	0.001477	mg/m3
563 - Updwind	11/16/2022 13:27	Dust - 15 Minute Average	0.001612	mg/m3
563 - Updwind	11/16/2022 13:28	Dust - 15 Minute Average	0.001653	mg/m3
563 - Updwind	11/16/2022 13:29	Dust - 15 Minute Average	0.001582	mg/m3
563 - Updwind	11/16/2022 13:30	Dust - 15 Minute Average	0.001391	mg/m3
563 - Updwind	11/16/2022 13:31	Dust - 15 Minute Average	0.001209	mg/m3

563 - Updwind	11/16/2022 13:32	Dust - 15 MInute Average	0.001045	mg/m3
563 - Updwind	11/16/2022 13:33	Dust - 15 MInute Average	0.000886	mg/m3
563 - Updwind	11/16/2022 13:34	Dust - 15 MInute Average	0.000783	mg/m3
563 - Updwind	11/16/2022 13:35	Dust - 15 MInute Average	0.000792	mg/m3
563 - Updwind	11/16/2022 13:36	Dust - 15 MInute Average	0.00085	mg/m3
563 - Updwind	11/16/2022 13:37	Dust - 15 MInute Average	0.00094	mg/m3
563 - Updwind	11/16/2022 13:38	Dust - 15 MInute Average	0.000956	mg/m3
563 - Updwind	11/16/2022 13:39	Dust - 15 MInute Average	0.001052	mg/m3
563 - Updwind	11/16/2022 13:40	Dust - 15 MInute Average	0.001116	mg/m3
563 - Updwind	11/16/2022 13:41	Dust - 15 MInute Average	0.001061	mg/m3
563 - Updwind	11/16/2022 13:42	Dust - 15 MInute Average	0.000928	mg/m3
563 - Updwind	11/16/2022 13:43	Dust - 15 MInute Average	0.000789	mg/m3
563 - Updwind	11/16/2022 13:44	Dust - 15 MInute Average	0.000696	mg/m3
563 - Updwind	11/16/2022 13:45	Dust - 15 MInute Average	0.000619	mg/m3
563 - Updwind	11/16/2022 13:46	Dust - 15 MInute Average	0.00057	mg/m3
563 - Updwind	11/16/2022 13:47	Dust - 15 MInute Average	0.000526	mg/m3
563 - Updwind	11/16/2022 13:48	Dust - 15 MInute Average	0.000581	mg/m3
563 - Updwind	11/16/2022 13:49	Dust - 15 MInute Average	0.000649	mg/m3
563 - Updwind	11/16/2022 13:50	Dust - 15 MInute Average	0.000623	mg/m3
563 - Updwind	11/16/2022 13:51	Dust - 15 MInute Average	0.000597	mg/m3
563 - Updwind	11/16/2022 13:52	Dust - 15 MInute Average	0.000525	mg/m3
563 - Updwind	11/16/2022 13:53	Dust - 15 MInute Average	0.000463	mg/m3
563 - Updwind	11/16/2022 13:54	Dust - 15 MInute Average	0.000444	mg/m3
563 - Updwind	11/16/2022 13:55	Dust - 15 MInute Average	0.000412	mg/m3
563 - Updwind	11/16/2022 13:56	Dust - 15 MInute Average	0.000365	mg/m3
563 - Updwind	11/16/2022 13:57	Dust - 15 MInute Average	0.000307	mg/m3
563 - Updwind	11/16/2022 13:58	Dust - 15 MInute Average	0.000265	mg/m3
563 - Updwind	11/16/2022 13:59	Dust - 15 MInute Average	0.000218	mg/m3
563 - Updwind	11/16/2022 14:00	Dust - 15 MInute Average	0.00018	mg/m3
563 - Updwind	11/16/2022 14:01	Dust - 15 MInute Average	0.000156	mg/m3
563 - Updwind	11/16/2022 14:02	Dust - 15 MInute Average	0.000131	mg/m3
563 - Updwind	11/16/2022 14:03	Dust - 15 MInute Average	0.000111	mg/m3
563 - Updwind	11/16/2022 14:04	Dust - 15 MInute Average	0.000101	mg/m3
563 - Updwind	11/16/2022 14:05	Dust - 15 MInute Average	9.21E-05	mg/m3
563 - Updwind	11/16/2022 14:06	Dust - 15 MInute Average	7.56E-05	mg/m3
563 - Updwind	11/16/2022 14:07	Dust - 15 MInute Average	6.23E-05	mg/m3
563 - Updwind	11/16/2022 14:08	Dust - 15 MInute Average	5.76E-05	mg/m3
563 - Updwind	11/16/2022 14:09	Dust - 15 MInute Average	4.74E-05	mg/m3
563 - Updwind	11/16/2022 14:10	Dust - 15 MInute Average	5.37E-05	mg/m3
563 - Updwind	11/16/2022 14:11	Dust - 15 MInute Average	4.41E-05	mg/m3
563 - Updwind	11/16/2022 14:12	Dust - 15 MInute Average	4.24E-05	mg/m3
563 - Updwind	11/16/2022 14:13	Dust - 15 MInute Average	3.77E-05	mg/m3
563 - Updwind	11/16/2022 14:14	Dust - 15 MInute Average	3.11E-05	mg/m3
563 - Updwind	11/16/2022 14:15	Dust - 15 MInute Average	2.56E-05	mg/m3
563 - Updwind	11/16/2022 14:16	Dust - 15 MInute Average	2.13E-05	mg/m3
563 - Updwind	11/16/2022 14:17	Dust - 15 MInute Average	1.76E-05	mg/m3
563 - Updwind	11/16/2022 14:18	Dust - 15 MInute Average	1.44E-05	mg/m3

563 - Updwind	11/16/2022 14:19	Dust - 15 MInute Average	1.19E-05	mg/m3
563 - Updwind	11/16/2022 14:20	Dust - 15 MInute Average	1.89E-05	mg/m3
563 - Updwind	11/16/2022 14:21	Dust - 15 MInute Average	2.17E-05	mg/m3
563 - Updwind	11/16/2022 14:22	Dust - 15 MInute Average	2.66E-05	mg/m3
563 - Updwind	11/16/2022 14:23	Dust - 15 MInute Average	6.89E-05	mg/m3
563 - Updwind	11/16/2022 14:24	Dust - 15 MInute Average	0.000156	mg/m3
563 - Updwind	11/16/2022 14:25	Dust - 15 MInute Average	0.000401	mg/m3
563 - Updwind	11/16/2022 14:26	Dust - 15 MInute Average	0.000497	mg/m3
563 - Updwind	11/16/2022 14:27	Dust - 15 MInute Average	0.000412	mg/m3
563 - Updwind	11/16/2022 14:28	Dust - 15 MInute Average	0.003615	mg/m3
563 - Updwind	11/16/2022 14:29	Dust - 15 MInute Average	0.003546	mg/m3
563 - Updwind	11/16/2022 14:30	Dust - 15 MInute Average	0.002935	mg/m3
563 - Updwind	11/16/2022 14:31	Dust - 15 MInute Average	0.002418	mg/m3
563 - Updwind	11/16/2022 14:32	Dust - 15 MInute Average	0.002007	mg/m3
563 - Updwind	11/16/2022 14:33	Dust - 15 MInute Average	0.001945	mg/m3
563 - Updwind	11/16/2022 14:34	Dust - 15 MInute Average	0.00164	mg/m3
563 - Updwind	11/16/2022 14:35	Dust - 15 MInute Average	0.001361	mg/m3
563 - Updwind	11/16/2022 14:36	Dust - 15 MInute Average	0.001184	mg/m3
563 - Updwind	11/16/2022 14:37	Dust - 15 MInute Average	0.001074	mg/m3
563 - Updwind	11/16/2022 14:38	Dust - 15 MInute Average	0.000922	mg/m3
563 - Updwind	11/16/2022 14:39	Dust - 15 MInute Average	0.000825	mg/m3
563 - Updwind	11/16/2022 14:40	Dust - 15 MInute Average	0.00084	mg/m3
563 - Updwind	11/16/2022 14:41	Dust - 15 MInute Average	0.000785	mg/m3
563 - Updwind	11/16/2022 14:42	Dust - 15 MInute Average	0.000723	mg/m3
563 - Updwind	11/16/2022 14:43	Dust - 15 MInute Average	0.000789	mg/m3
563 - Updwind	11/16/2022 14:44	Dust - 15 MInute Average	0.000843	mg/m3
563 - Updwind	11/16/2022 14:45	Dust - 15 MInute Average	0.000856	mg/m3
563 - Updwind	11/16/2022 14:46	Dust - 15 MInute Average	0.00088	mg/m3
563 - Updwind	11/16/2022 14:47	Dust - 15 MInute Average	0.001028	mg/m3
563 - Updwind	11/16/2022 14:48	Dust - 15 MInute Average	0.001035	mg/m3
563 - Updwind	11/16/2022 14:49	Dust - 15 MInute Average	0.001078	mg/m3
563 - Updwind	11/16/2022 14:50	Dust - 15 MInute Average	0.001015	mg/m3
563 - Updwind	11/16/2022 14:51	Dust - 15 MInute Average	0.000918	mg/m3
563 - Updwind	11/16/2022 14:52	Dust - 15 MInute Average	0.000922	mg/m3
563 - Updwind	11/16/2022 14:53	Dust - 15 MInute Average	0.000947	mg/m3
563 - Updwind	11/16/2022 14:54	Dust - 15 MInute Average	0.000927	mg/m3
563 - Updwind	11/16/2022 14:55	Dust - 15 MInute Average	0.0009	mg/m3
563 - Updwind	11/16/2022 14:56	Dust - 15 MInute Average	0.000914	mg/m3
563 - Updwind	11/16/2022 14:57	Dust - 15 MInute Average	0.000883	mg/m3
563 - Updwind	11/16/2022 14:58	Dust - 15 MInute Average	0.00089	mg/m3
563 - Updwind	11/16/2022 14:59	Dust - 15 MInute Average	0.00086	mg/m3
563 - Updwind	11/16/2022 15:00	Dust - 15 MInute Average	0.000877	mg/m3
563 - Updwind	11/16/2022 15:01	Dust - 15 MInute Average	0.000955	mg/m3
563 - Updwind	11/16/2022 15:02	Dust - 15 MInute Average	0.000964	mg/m3
563 - Updwind	11/16/2022 15:03	Dust - 15 MInute Average	0.000998	mg/m3
563 - Updwind	11/16/2022 15:04	Dust - 15 MInute Average	0.001117	mg/m3
563 - Updwind	11/16/2022 15:05	Dust - 15 MInute Average	0.001169	mg/m3

563 - Updwind	11/16/2022 15:06	Dust - 15 MInute Average	0.001142	mg/m3
563 - Updwind	11/16/2022 15:07	Dust - 15 MInute Average	0.001252	mg/m3
563 - Updwind	11/16/2022 15:08	Dust - 15 MInute Average	0.001364	mg/m3
563 - Updwind	11/16/2022 15:09	Dust - 15 MInute Average	0.001391	mg/m3
563 - Updwind	11/16/2022 15:10	Dust - 15 MInute Average	0.001371	mg/m3
563 - Updwind	11/16/2022 15:11	Dust - 15 MInute Average	0.00135	mg/m3
563 - Updwind	11/16/2022 15:12	Dust - 15 MInute Average	0.001373	mg/m3
563 - Updwind	11/16/2022 15:13	Dust - 15 MInute Average	0.001385	mg/m3
563 - Updwind	11/16/2022 15:14	Dust - 15 MInute Average	0.001359	mg/m3
563 - Updwind	11/16/2022 15:15	Dust - 15 MInute Average	0.001449	mg/m3
563 - Updwind	11/16/2022 15:16	Dust - 15 MInute Average	0.001557	mg/m3
563 - Updwind	11/16/2022 15:17	Dust - 15 MInute Average	0.001644	mg/m3
563 - Updwind	11/16/2022 15:18	Dust - 15 MInute Average	0.001651	mg/m3
563 - Updwind	11/16/2022 15:19	Dust - 15 MInute Average	0.001769	mg/m3
563 - Updwind	11/16/2022 15:20	Dust - 15 MInute Average	0.001978	mg/m3
563 - Updwind	11/16/2022 15:21	Dust - 15 MInute Average	0.002115	mg/m3
563 - Updwind	11/17/2022 9:36	Dust - 15 MInute Average	0.01404	mg/m3
563 - Updwind	11/17/2022 9:37	Dust - 15 MInute Average	0.015394	mg/m3
563 - Updwind	11/17/2022 9:38	Dust - 15 MInute Average	0.016508	mg/m3
563 - Updwind	11/17/2022 9:39	Dust - 15 MInute Average	0.017404	mg/m3
563 - Updwind	11/17/2022 9:40	Dust - 15 MInute Average	0.018252	mg/m3
563 - Updwind	11/17/2022 9:41	Dust - 15 MInute Average	0.019058	mg/m3
563 - Updwind	11/17/2022 9:42	Dust - 15 MInute Average	0.019791	mg/m3
563 - Updwind	11/17/2022 9:43	Dust - 15 MInute Average	0.020236	mg/m3
563 - Updwind	11/17/2022 9:44	Dust - 15 MInute Average	0.020523	mg/m3
563 - Updwind	11/17/2022 9:45	Dust - 15 MInute Average	0.0203	mg/m3
563 - Updwind	11/17/2022 9:46	Dust - 15 MInute Average	0.02005	mg/m3
563 - Updwind	11/17/2022 9:47	Dust - 15 MInute Average	0.019874	mg/m3
563 - Updwind	11/17/2022 9:48	Dust - 15 MInute Average	0.019647	mg/m3
563 - Updwind	11/17/2022 9:49	Dust - 15 MInute Average	0.019494	mg/m3
563 - Updwind	11/17/2022 9:50	Dust - 15 MInute Average	0.019349	mg/m3
563 - Updwind	11/17/2022 9:51	Dust - 15 MInute Average	0.01925	mg/m3
563 - Updwind	11/17/2022 9:52	Dust - 15 MInute Average	0.021024	mg/m3
563 - Updwind	11/17/2022 9:53	Dust - 15 MInute Average	0.020644	mg/m3
563 - Updwind	11/17/2022 9:54	Dust - 15 MInute Average	0.020319	mg/m3
563 - Updwind	11/17/2022 9:55	Dust - 15 MInute Average	0.020175	mg/m3
563 - Updwind	11/17/2022 9:56	Dust - 15 MInute Average	0.019978	mg/m3
563 - Updwind	11/17/2022 9:57	Dust - 15 MInute Average	0.019826	mg/m3
563 - Updwind	11/17/2022 9:58	Dust - 15 MInute Average	0.019654	mg/m3
563 - Updwind	11/17/2022 9:59	Dust - 15 MInute Average	0.019501	mg/m3
563 - Updwind	11/17/2022 10:00	Dust - 15 MInute Average	0.019408	mg/m3
563 - Updwind	11/17/2022 10:01	Dust - 15 MInute Average	0.019434	mg/m3
563 - Updwind	11/17/2022 10:02	Dust - 15 MInute Average	0.019432	mg/m3
563 - Updwind	11/17/2022 10:03	Dust - 15 MInute Average	0.019463	mg/m3
563 - Updwind	11/17/2022 10:04	Dust - 15 MInute Average	0.01949	mg/m3
563 - Updwind	11/17/2022 10:05	Dust - 15 MInute Average	0.019583	mg/m3
563 - Updwind	11/17/2022 10:06	Dust - 15 MInute Average	0.019559	mg/m3

563 - Updwind	11/17/2022 10:07	Dust - 15 Minute Average	0.019433	mg/m3
563 - Updwind	11/17/2022 10:08	Dust - 15 Minute Average	0.019323	mg/m3
563 - Updwind	11/17/2022 10:09	Dust - 15 Minute Average	0.019127	mg/m3
563 - Updwind	11/17/2022 10:10	Dust - 15 Minute Average	0.01888	mg/m3
563 - Updwind	11/17/2022 10:11	Dust - 15 Minute Average	0.018662	mg/m3
563 - Updwind	11/17/2022 10:12	Dust - 15 Minute Average	0.018428	mg/m3
563 - Updwind	11/17/2022 10:13	Dust - 15 Minute Average	0.018316	mg/m3
563 - Updwind	11/17/2022 10:14	Dust - 15 Minute Average	0.018344	mg/m3
563 - Updwind	11/17/2022 10:15	Dust - 15 Minute Average	0.018408	mg/m3
563 - Updwind	11/17/2022 10:16	Dust - 15 Minute Average	0.018416	mg/m3
563 - Updwind	11/17/2022 10:17	Dust - 15 Minute Average	0.018417	mg/m3
563 - Updwind	11/17/2022 10:18	Dust - 15 Minute Average	0.018455	mg/m3
563 - Updwind	11/17/2022 10:19	Dust - 15 Minute Average	0.018515	mg/m3
563 - Updwind	11/17/2022 10:20	Dust - 15 Minute Average	0.018618	mg/m3
563 - Updwind	11/17/2022 10:21	Dust - 15 Minute Average	0.01881	mg/m3
563 - Updwind	11/17/2022 10:22	Dust - 15 Minute Average	0.019077	mg/m3
563 - Updwind	11/17/2022 10:23	Dust - 15 Minute Average	0.019328	mg/m3
563 - Updwind	11/17/2022 10:24	Dust - 15 Minute Average	0.019574	mg/m3
563 - Updwind	11/17/2022 10:25	Dust - 15 Minute Average	0.019811	mg/m3
563 - Updwind	11/17/2022 10:26	Dust - 15 Minute Average	0.020017	mg/m3
563 - Updwind	11/17/2022 10:27	Dust - 15 Minute Average	0.020134	mg/m3
563 - Updwind	11/17/2022 10:28	Dust - 15 Minute Average	0.020348	mg/m3
563 - Updwind	11/17/2022 10:29	Dust - 15 Minute Average	0.020559	mg/m3
563 - Updwind	11/17/2022 10:30	Dust - 15 Minute Average	0.020749	mg/m3
563 - Updwind	11/17/2022 10:31	Dust - 15 Minute Average	0.020831	mg/m3
563 - Updwind	11/17/2022 10:32	Dust - 15 Minute Average	0.020966	mg/m3
563 - Updwind	11/17/2022 10:33	Dust - 15 Minute Average	0.021061	mg/m3
563 - Updwind	11/17/2022 10:34	Dust - 15 Minute Average	0.021146	mg/m3
563 - Updwind	11/17/2022 10:35	Dust - 15 Minute Average	0.021707	mg/m3
563 - Updwind	11/17/2022 10:36	Dust - 15 Minute Average	0.021766	mg/m3
563 - Updwind	11/17/2022 10:37	Dust - 15 Minute Average	0.022067	mg/m3
563 - Updwind	11/17/2022 10:38	Dust - 15 Minute Average	0.022287	mg/m3
563 - Updwind	11/17/2022 10:39	Dust - 15 Minute Average	0.022275	mg/m3
563 - Updwind	11/17/2022 10:40	Dust - 15 Minute Average	0.022337	mg/m3
563 - Updwind	11/17/2022 10:41	Dust - 15 Minute Average	0.02267	mg/m3
563 - Updwind	11/17/2022 10:42	Dust - 15 Minute Average	0.022847	mg/m3
563 - Updwind	11/17/2022 10:43	Dust - 15 Minute Average	0.022345	mg/m3
563 - Updwind	11/17/2022 10:44	Dust - 15 Minute Average	0.021744	mg/m3
563 - Updwind	11/17/2022 10:45	Dust - 15 Minute Average	0.020895	mg/m3
563 - Updwind	11/17/2022 10:46	Dust - 15 Minute Average	0.020173	mg/m3
563 - Updwind	11/17/2022 10:47	Dust - 15 Minute Average	0.019326	mg/m3
563 - Updwind	11/17/2022 10:48	Dust - 15 Minute Average	0.01831	mg/m3
563 - Updwind	11/17/2022 10:49	Dust - 15 Minute Average	0.017448	mg/m3
563 - Updwind	11/17/2022 10:50	Dust - 15 Minute Average	0.016343	mg/m3
563 - Updwind	11/17/2022 10:51	Dust - 15 Minute Average	0.015599	mg/m3
563 - Updwind	11/17/2022 10:52	Dust - 15 Minute Average	0.014862	mg/m3
563 - Updwind	11/17/2022 10:53	Dust - 15 Minute Average	0.014348	mg/m3

563 - Updwind	11/17/2022 10:54	Dust - 15 Minute Average	0.013588	mg/m3
563 - Updwind	11/17/2022 10:55	Dust - 15 Minute Average	0.012852	mg/m3
563 - Updwind	11/17/2022 10:56	Dust - 15 Minute Average	0.011745	mg/m3
563 - Updwind	11/17/2022 10:57	Dust - 15 Minute Average	0.010731	mg/m3
563 - Updwind	11/17/2022 10:58	Dust - 15 Minute Average	0.010062	mg/m3
563 - Updwind	11/17/2022 10:59	Dust - 15 Minute Average	0.009314	mg/m3
563 - Updwind	11/17/2022 11:00	Dust - 15 Minute Average	0.008852	mg/m3
563 - Updwind	11/17/2022 11:01	Dust - 15 Minute Average	0.008209	mg/m3
563 - Updwind	11/17/2022 11:02	Dust - 15 Minute Average	0.007651	mg/m3
563 - Updwind	11/17/2022 11:03	Dust - 15 Minute Average	0.007205	mg/m3
563 - Updwind	11/17/2022 11:04	Dust - 15 Minute Average	0.006826	mg/m3
563 - Updwind	11/17/2022 11:05	Dust - 15 Minute Average	0.006469	mg/m3
563 - Updwind	11/17/2022 11:06	Dust - 15 Minute Average	0.006197	mg/m3
563 - Updwind	11/17/2022 11:07	Dust - 15 Minute Average	0.005976	mg/m3
563 - Updwind	11/17/2022 11:08	Dust - 15 Minute Average	0.005798	mg/m3
563 - Updwind	11/17/2022 11:09	Dust - 15 Minute Average	0.005591	mg/m3
563 - Updwind	11/17/2022 11:10	Dust - 15 Minute Average	0.005411	mg/m3
563 - Updwind	11/17/2022 11:11	Dust - 15 Minute Average	0.005195	mg/m3
563 - Updwind	11/17/2022 11:12	Dust - 15 Minute Average	0.005035	mg/m3
563 - Updwind	11/17/2022 11:13	Dust - 15 Minute Average	0.004842	mg/m3
563 - Updwind	11/17/2022 11:14	Dust - 15 Minute Average	0.004681	mg/m3
563 - Updwind	11/17/2022 11:15	Dust - 15 Minute Average	0.00452	mg/m3
563 - Updwind	11/17/2022 11:16	Dust - 15 Minute Average	0.004338	mg/m3
563 - Updwind	11/17/2022 11:17	Dust - 15 Minute Average	0.004201	mg/m3
563 - Updwind	11/17/2022 11:18	Dust - 15 Minute Average	0.004156	mg/m3
563 - Updwind	11/17/2022 11:19	Dust - 15 Minute Average	0.004142	mg/m3
563 - Updwind	11/17/2022 11:20	Dust - 15 Minute Average	0.004113	mg/m3
563 - Updwind	11/17/2022 11:21	Dust - 15 Minute Average	0.004085	mg/m3
563 - Updwind	11/17/2022 11:22	Dust - 15 Minute Average	0.004005	mg/m3
563 - Updwind	11/17/2022 11:23	Dust - 15 Minute Average	0.004012	mg/m3
563 - Updwind	11/17/2022 11:24	Dust - 15 Minute Average	0.003982	mg/m3
563 - Updwind	11/17/2022 11:25	Dust - 15 Minute Average	0.003952	mg/m3
563 - Updwind	11/17/2022 11:26	Dust - 15 Minute Average	0.003938	mg/m3
563 - Updwind	11/17/2022 11:27	Dust - 15 Minute Average	0.003962	mg/m3
563 - Updwind	11/17/2022 11:28	Dust - 15 Minute Average	0.004245	mg/m3
563 - Updwind	11/17/2022 11:29	Dust - 15 Minute Average	0.004568	mg/m3
563 - Updwind	11/17/2022 11:30	Dust - 15 Minute Average	0.004903	mg/m3
563 - Updwind	11/17/2022 11:31	Dust - 15 Minute Average	0.005333	mg/m3
563 - Updwind	11/17/2022 11:32	Dust - 15 Minute Average	0.005792	mg/m3
563 - Updwind	11/17/2022 11:33	Dust - 15 Minute Average	0.006224	mg/m3
563 - Updwind	11/17/2022 11:34	Dust - 15 Minute Average	0.006578	mg/m3
563 - Updwind	11/17/2022 11:35	Dust - 15 Minute Average	0.00698	mg/m3
563 - Updwind	11/17/2022 11:36	Dust - 15 Minute Average	0.007371	mg/m3
563 - Updwind	11/17/2022 11:37	Dust - 15 Minute Average	0.007811	mg/m3
563 - Updwind	11/17/2022 11:38	Dust - 15 Minute Average	0.008179	mg/m3
563 - Updwind	11/17/2022 11:39	Dust - 15 Minute Average	0.008458	mg/m3
563 - Updwind	11/17/2022 11:40	Dust - 15 Minute Average	0.008753	mg/m3

563 - Updwind	11/17/2022 11:41	Dust - 15 MInute Average	0.009081	mg/m3
563 - Updwind	11/17/2022 11:42	Dust - 15 MInute Average	0.009365	mg/m3
563 - Updwind	11/17/2022 11:43	Dust - 15 MInute Average	0.009622	mg/m3
563 - Updwind	11/17/2022 11:44	Dust - 15 MInute Average	0.010729	mg/m3
563 - Updwind	11/17/2022 11:45	Dust - 15 MInute Average	0.013448	mg/m3
563 - Updwind	11/17/2022 11:46	Dust - 15 MInute Average	0.013095	mg/m3
563 - Updwind	11/17/2022 11:47	Dust - 15 MInute Average	0.012792	mg/m3
563 - Updwind	11/17/2022 11:48	Dust - 15 MInute Average	0.01258	mg/m3
563 - Updwind	11/17/2022 11:49	Dust - 15 MInute Average	0.012331	mg/m3
563 - Updwind	11/17/2022 11:50	Dust - 15 MInute Average	0.012072	mg/m3
563 - Updwind	11/17/2022 11:51	Dust - 15 MInute Average	0.011832	mg/m3
563 - Updwind	11/17/2022 11:52	Dust - 15 MInute Average	0.011652	mg/m3
563 - Updwind	11/17/2022 11:53	Dust - 15 MInute Average	0.011525	mg/m3
563 - Updwind	11/17/2022 11:54	Dust - 15 MInute Average	0.011244	mg/m3
563 - Updwind	11/17/2022 11:55	Dust - 15 MInute Average	0.010982	mg/m3
563 - Updwind	11/17/2022 11:56	Dust - 15 MInute Average	0.010808	mg/m3
563 - Updwind	11/17/2022 11:57	Dust - 15 MInute Average	0.010592	mg/m3
563 - Updwind	11/17/2022 11:58	Dust - 15 MInute Average	0.010421	mg/m3
563 - Updwind	11/17/2022 11:59	Dust - 15 MInute Average	0.010197	mg/m3

Attachment 2

Soil Boring / Well Construction Logs



PROJECT NUMBER: 060017

6/29/2023

Friedrichsohn Cooperage OU-2

SUBSURFACE LOG

HOLE NUMBER MW-100

Page 1 of 1

LOCATION: Waterford, New York

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Drilling

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

START DATE and TIME: 11/14/2022 1:20:00 PM

FINISH DATE and TIME: 11/14/2022 1:40:00 PM

SURFACE
ELEV:

CHECKED BY: K. Ehmann

DRILL FLUID: None

DRILLING RIG:

DATE

TIME

WATER
DEPTH (ft)CASING
BOTTOM (ft)HOLE
BOTTOM (ft)WATER LEVEL
OBSERVATIONS

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	PID Readings (ppm)	"N" Value or ROD %	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	5	3.4	0			2		<u>SILT AND F. SAND</u> , trace f. gravel, dark brown, moist (SM)			
						4		<u>SILT</u> , Some f. Sand, Some f. Gravel, gray, dry (SM)			
						6		<u>SILT AND F. SAND</u> , trace f. gravel, brown, moist (SM)			
S2	5	4.5	0			8		<u>SILT AND F. SAND</u> , brown, moist (SM)			
						10		becomes wet			
						12		<u>SILT</u> , trace f. sand, brown, dense, moist (SM)			
S3	5	5	0			14		<u>SILT AND F.M. SAND</u> , little f. gravel, brown, wet (SM)			
S4	2	1.5	0			16					
						18		End of Boring at 17 ft		Refusal at 17 feet bgs.	

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PROJECT NUMBER: 060017

6/29/2023

Friedrichsohn Cooperage OU-2**SUBSURFACE LOG****HOLE NUMBER MW-102**

Page 1 of 1

LOCATION: Waterford, New York

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Drilling

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

START DATE and TIME: 11/14/2022 2:05:00 PM

FINISH DATE and TIME: 11/14/2022 2:30:00 PM

SURFACE
ELEV:

CHECKED BY: K. Ehmann

DRILL FLUID: None

DRILLING RIG:

DATE

TIME

WATER
DEPTH (ft)CASING
BOTTOM (ft)HOLE
BOTTOM (ft)WATER LEVEL
OBSERVATIONS

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	PID Readings (ppm)	"N" Value or RQD %	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	5	5	0			2		<u>SILT AND F. SAND</u> , brown, moist (SM)			
								<u>f. SAND</u> , brown, moist (SP)			
						4		<u>f. SAND and SILT</u> , Some f. Gravel, dark gray, moist (SM)			
								<u>f. SAND and SILT</u> , trace f. gravel, dark gray, moist (SM)			
S2	5	4	0			8		1 inch lens of f. SAND, wet			
						10		No Recovery		Possible gravel in shoe of sampler because probe advanced to 15 feet without observed obstruction.	
S3	5	0				12					
						14					
						16		<u>f. SAND AND SILT</u> , brown, wet (SM)			
								<u>f.m. SAND</u> , trace silt, brown, wet (SM)			
S4	5	5	5			18		<u>f.c. SAND</u> , little silt, trace f. gravel, brown, wet (SM)			

End of Boring at 20 ft

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PROJECT NUMBER: 060017

6/29/2023

Friedrichsohn Cooperage OU-2

SUBSURFACE LOG

HOLE NUMBER MW-103

Page 1 of 1

LOCATION: Waterford, New York

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Drilling

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

START DATE and TIME: 11/15/2022 3:05:00 PM

FINISH DATE and TIME: 11/15/2022 3:25:00 PM

SURFACE
ELEV:

CHECKED BY: K. Ehmann

DRILL FLUID: None

DRILLING RIG:

DATE

TIME

WATER
DEPTH (ft)CASING
BOTTOM (ft)HOLE
BOTTOM (ft)WATER LEVEL
OBSERVATIONS

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	PID Readings (ppm)	"N" Value or ROD %	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	5	4	0			2		<u>f. SAND AND SILT</u> , trace f. gravel, brown, moist (SM)			
						4		<u>f. SAND AND SILT</u> , brown, moist (SM)			
S2	5	2.5	0			6					
						8					
						10		<u>f.m. SAND AND SILT</u> , trace clay, trace f. gravel, brown moist (SM)			
S3	5	3.5	0			12					
						14		becomes wet			
S4	1.5	1	0			16		<u>SHALE</u> , weathered, dark gray, wet (HIGHLY WEATHERED BEDROCK)			
						18		End of Boring at 16.5 ft		Refusal at 16.5 feet bgs.	

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PROJECT NUMBER: 060017

6/29/2023

Friedrichsohn Cooperage OU-2**SUBSURFACE LOG****HOLE NUMBER MW-104**

Page 1 of 1

LOCATION: Waterford, New York

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Drilling

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

START DATE and TIME: 11/15/2022 2:30:00 PM

FINISH DATE and TIME: 11/15/2022 2:50:00 PM

SURFACE
ELEV:

CHECKED BY: K. Ehmann

DRILL FLUID: None

DRILLING RIG:

DATE

TIME

WATER
DEPTH (ft)CASING
BOTTOM (ft)HOLE
BOTTOM (ft)WATER LEVEL
OBSERVATIONS

SAMP./CORE NUMBER	SAMP. ADV. (ft) LEN. CORE (ft)	RECOVERY (ft)	PID Readings (ppm)	"N" Value or ROD %	SAMPLE	DEPTH (Feet)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Feet)	Remarks on Character of Drilling, Water Return, etc.	WATER LEVELS AND/OR WELL DATA
S1	5	3.5	0			2		f. SAND , little silt, brown, moist (SM)			
S2	5	4	0			8		f. SAND AND SILT , trace clay, brown, moist (SM)			
S3	5	4	0			12		f.m. SAND AND SILT , trace clay, trace f. gravel, dark gray and brown (SM) lens of f. SAND, wet			
S4	5	3	0			18		f. SAND AND SILT , little clay, soft, brown, wet (SC)			

End of Boring at 20 ft

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WELL CONSTRUCTION LOG

BORING NO. MW-100

WELL NO. MW-100

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

ELEVATION:

START DATE: 11/15/22 TIME: 11:15

FINISH DATE: 11/15/22 TIME: 13:30

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

The diagram illustrates a well construction log for a 2-inch riser pipe. The riser pipe is shown as a vertical cylinder with a dashed line indicating its internal diameter. The well is constructed with a steel casing, a concrete surface seal, and a bentonite seal. The riser pipe is surrounded by a sand pack and a fine sand choke. The well is capped with an expandable gripper. The diagram includes various labels for the different components and their depths.

Depth Below Ground to Top of Riser Pipe: _____

Type of Cap: Expandable Gripper

Type of Protective Casing: Steel
Inside Dia. Of Casing: 8 in.
Depth Below Ground of Casing: 1 ft.

Type of Surface Seal: Concrete
Thickness of Surface Seal: 1 ft.

Diameter Borehole: 8 in.

Type of Backfill Around Riser Pipe: Bentonite

Inside Diameter of Riser Pipe: 2 in.

Depth to Top of Fine Sand Choke: N/A

Type of Bentonite Seal: Pellets
Depth to Top of Bentonite Seal: 1 ft.

Type of Sand Pack: No. 0 Sand
Depth to Top of Sand Pack: 4 ft.
Depth to Bottom of Sand Pack: 15.1 ft.

Type of Screen: PVC
Screen Diameter: 2 in.
Screen Slot Size: 0.010 in.
Depth to Top of Screen: 5.1 ft. bgs
Depth to Bottom of Screen: 15.1 ft. bgs

Backfill (if any): None

Depth to Bottom of Borehole: 15.1 ft. bgs



WELL CONSTRUCTION LOG

BORING NO. MW-101B

WELL NO. MW-101B

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services, LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

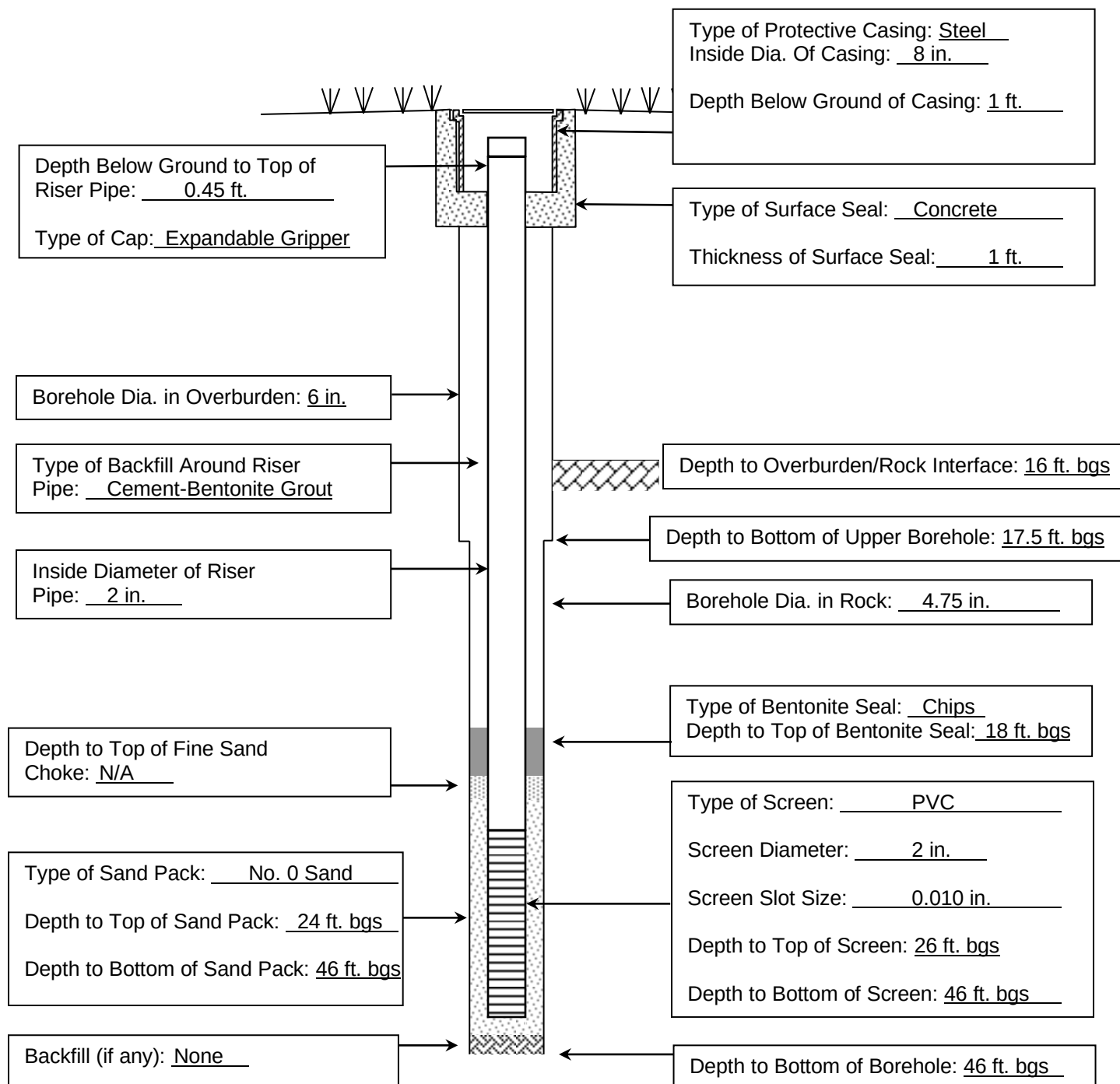
ELEVATION:

START DATE: 4/25/23 TIME: 15:00

FINISH DATE: 4/26/23 TIME: 11:00

DRILLER: D. Lee

INSPECTOR: C. Hurlburt





WELL CONSTRUCTION LOG

BORING NO. MW-102

WELL NO. MW-102

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services, LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

ELEVATION:

START DATE: 11/15/22 TIME: 09:00

FINISH DATE: 11/15/22 TIME: 10:30

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

The diagram illustrates a well construction log for a 2-inch riser pipe. The well is shown as a vertical shaft with various components and materials. The riser pipe is surrounded by backfill (Bentonite) and a sand pack (No. 0 Sand). The well is capped with an Expandable Gripper. The casing is made of Steel with an 8-inch inside diameter. The surface seal is made of Concrete with a thickness of 1 foot. The well is sealed with Bentonite Pellets at a depth of 1 foot. The screen is made of PVC with a 2-inch diameter and 0.010-inch slot size. The screen is located at a depth of 4.2 feet below ground surface (bgs) and extends to a depth of 19.2 feet bgs. The sand pack is located at a depth of 3 feet bgs and extends to a depth of 19.2 feet bgs. The backfill (if any) is None. The depth to the bottom of the borehole is 19.2 feet bgs.

Depth Below Ground to Top of Riser Pipe: _____

Type of Cap: Expandable Gripper

Type of Protective Casing: Steel

Inside Dia. Of Casing: 8 in.

Depth Below Ground of Casing: 1 ft.

Type of Surface Seal: Concrete

Thickness of Surface Seal: 1 ft.

Diameter Borehole: 8 in.

Type of Backfill Around Riser Pipe: Bentonite

Inside Diameter of Riser Pipe: 2 in.

Type of Bentonite Seal: Pellets

Depth to Top of Bentonite Seal: 1 ft.

Depth to Top of Fine Sand Choke: N/A

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 3 ft.

Depth to Bottom of Sand Pack: 19.2 ft.

Type of Screen: PVC

Screen Diameter: 2 in.

Screen Slot Size: 0.010 in.

Depth to Top of Screen: 4.2 ft. bgs

Depth to Bottom of Screen: 19.2 ft. bgs

Backfill (if any): None

Depth to Bottom of Borehole: 19.2 ft. bgs



WELL CONSTRUCTION LOG

BORING NO. MW-102B

WELL NO. MW-102B

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services, LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

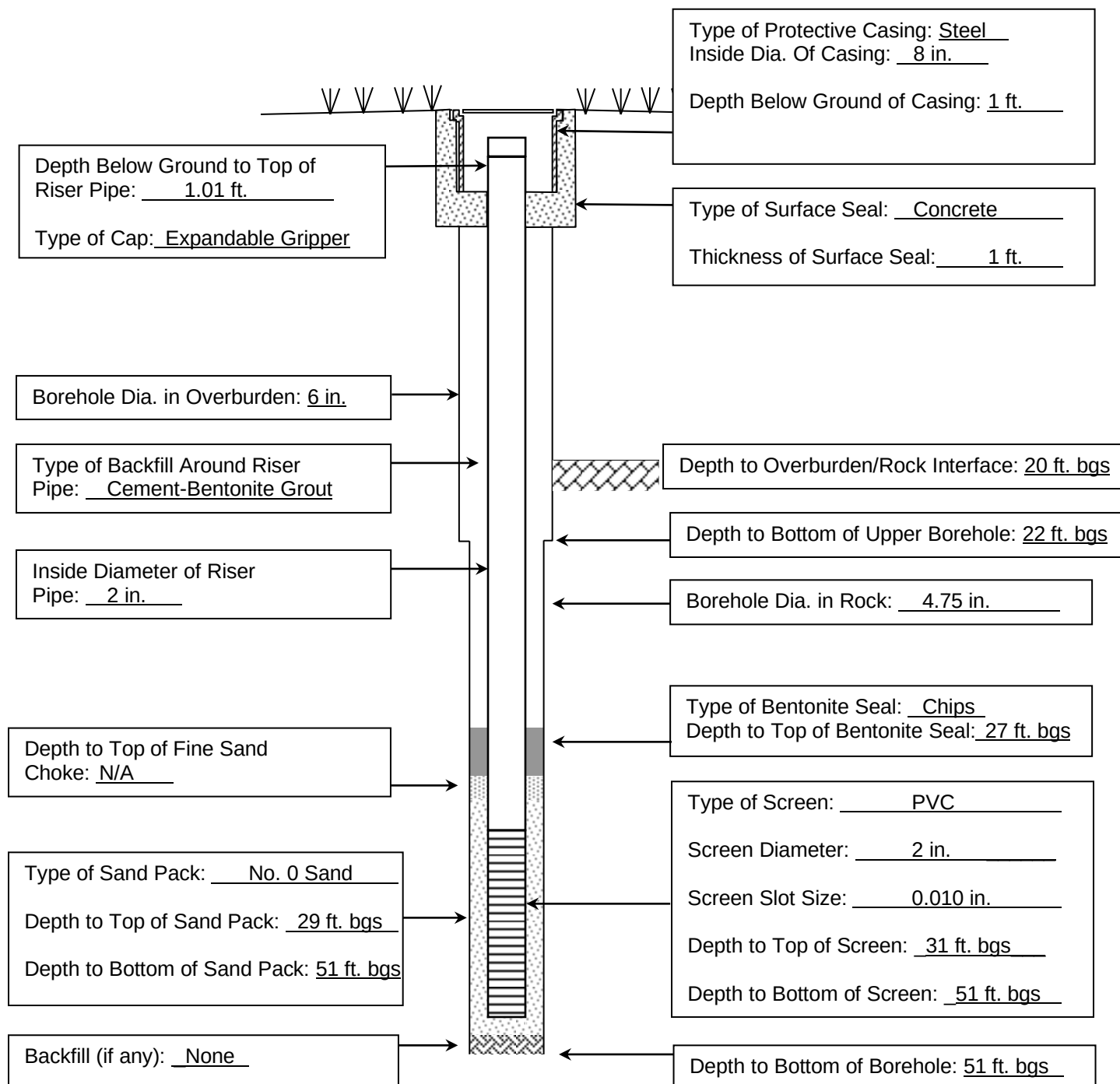
ELEVATION:

START DATE: 4/24/23 TIME: 15:00

FINISH DATE: 4/25/23 TIME: 14:30

DRILLER: D. Lee

INSPECTOR: J. Favreau





WELL CONSTRUCTION LOG

BORING NO. MW-103

WELL NO. MW-103

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services, LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

ELEVATION:

START DATE: 11/16/22 TIME: 10:55

FINISH DATE: 11/16/22 TIME: 15:00

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

The diagram illustrates a well construction log. It shows a central riser pipe extending from the ground surface down to a depth of 15.5 feet below ground surface (bgs). The riser pipe is surrounded by a sand pack and a bentonite seal. The casing is made of steel with an inside diameter of 8 inches. The surface seal is concrete with a thickness of 1 foot. The borehole diameter is 8 inches. The backfill around the riser pipe is bentonite. The inside diameter of the riser pipe is 2 inches. The depth to the top of the fine sand choke is N/A. The sand pack is No. 0 Sand, with a depth to the top of 4 feet and a depth to the bottom of 15.5 feet. The screen is PVC with a diameter of 2 inches and a slot size of 0.010 inches. The depth to the top of the screen is 5.5 feet bgs, and the depth to the bottom of the screen is 15.5 feet bgs. The backfill (if any) is None. The depth to the bottom of the borehole is 15.5 feet bgs.

Depth Below Ground to Top of Riser Pipe: _____

Type of Cap: Expandable Gripper

Diameter Borehole: 8 in.

Type of Backfill Around Riser Pipe: Bentonite

Inside Diameter of Riser Pipe: 2 in.

Depth to Top of Fine Sand Choke: N/A

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 4 ft.

Depth to Bottom of Sand Pack: 15.5 ft.

Backfill (if any): None

Type of Protective Casing: Steel

Inside Dia. Of Casing: 8 in.

Depth Below Ground of Casing: 1 ft.

Type of Surface Seal: Concrete

Thickness of Surface Seal: 1 ft.

Type of Bentonite Seal: Pellets

Depth to Top of Bentonite Seal: 1 ft.

Type of Screen: PVC

Screen Diameter: 2 in.

Screen Slot Size: 0.010 in.

Depth to Top of Screen: 5.5 ft. bgs

Depth to Bottom of Screen: 15.5 ft. bgs

Depth to Bottom of Borehole: 15.5 ft. bgs



WELL CONSTRUCTION LOG

BORING NO. MW-103B

WELL NO. MW-103B

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services, LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

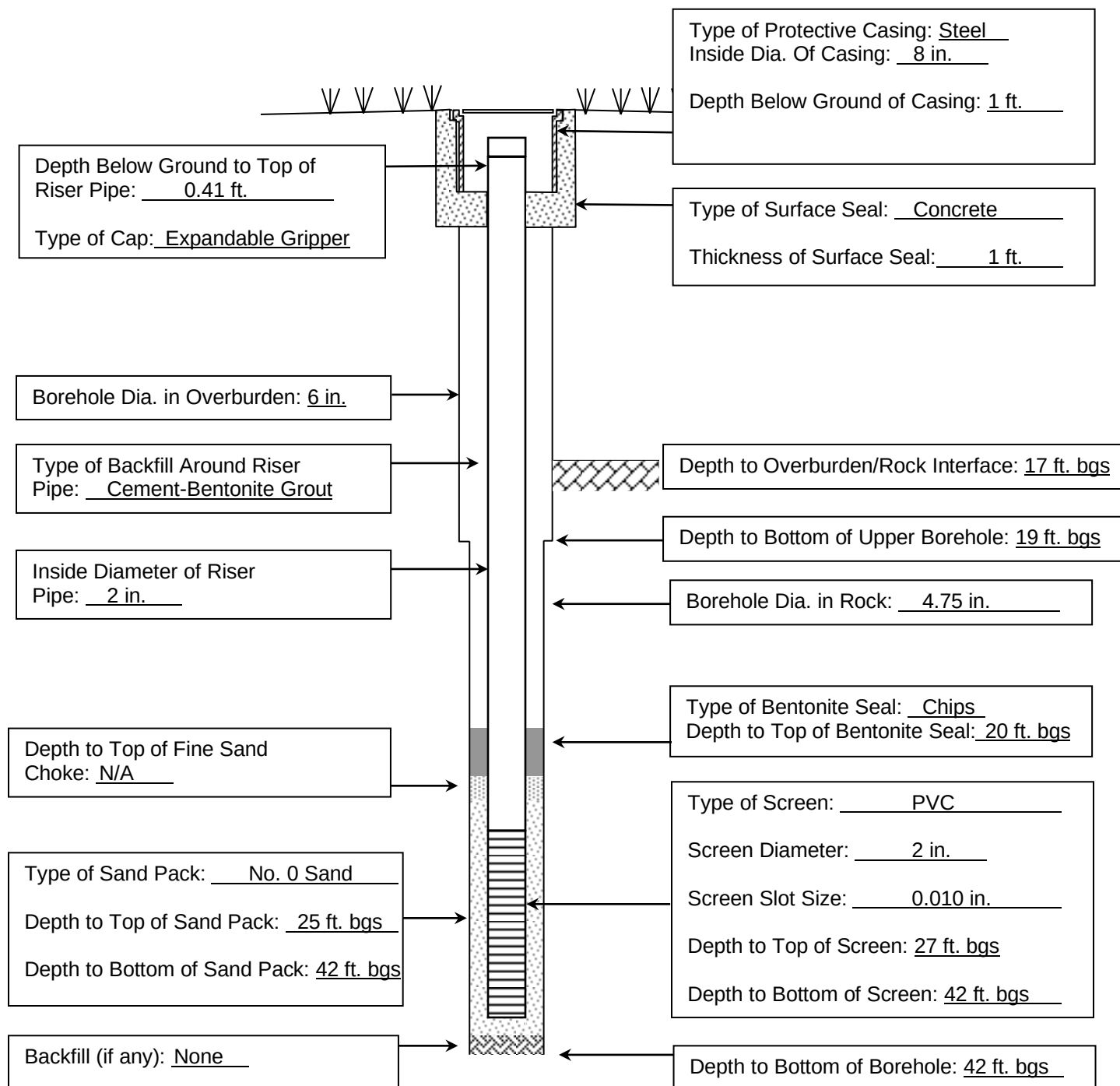
ELEVATION:

START DATE: 4/26/23 TIME: 15:15

FINISH DATE: 4/27/23 TIME: 11:00

DRILLER: D. Lee

INSPECTOR: C. Hurlburt





WELL CONSTRUCTION LOG

BORING NO. MW-104

WELL NO. MW-104

PROJECT & LOCATION: Friedrichsohn Cooperage Site, Route 32, Waterford, NY

CLIENT: SI Group, Inc. and General Electric Company

CONTRACTOR: Cascade Remediation Services, LLC

PROJECT NO.: 060017.000

SHEET NO.: 1 OF 1

ELEVATION:

START DATE: 11/17/22 TIME: 10:30

FINISH DATE: 11/17/22 TIME: 14:15

DRILLER: J. Hutchins

INSPECTOR: J. Favreau

The diagram illustrates a well construction log for a 2-inch riser pipe. The well is shown as a vertical shaft with various components and materials. The riser pipe is surrounded by a backfill of bentonite. A protective casing is installed at the surface, and a concrete surface seal is used to seal the wellhead. The well is screened with a PVC screen at a depth of 9.5 feet below ground surface (bgs). The screen has a diameter of 2 inches and a slot size of 0.010 inches. The screen is surrounded by a sand pack of No. 0 sand, which is 7 feet thick. The total depth of the borehole is 19.5 feet bgs. The well is capped with an expandable gripper. The diagram also shows the depth to the top of the fine sand choke (N/A) and the depth to the bottom of the borehole (19.5 ft. bgs).

Depth Below Ground to Top of Riser Pipe: _____

Type of Cap: Expandable Gripper

Type of Protective Casing: Steel
Inside Dia. Of Casing: 8 in.

Depth Below Ground of Casing: 1 ft.

Type of Surface Seal: Concrete
Thickness of Surface Seal: 1 ft.

Diameter Borehole: 8 in.

Type of Backfill Around Riser Pipe: Bentonite

Inside Diameter of Riser Pipe: 2 in.

Type of Bentonite Seal: Pellets
Depth to Top of Bentonite Seal: 1 ft.

Depth to Top of Fine Sand Choke: N/A

Type of Sand Pack: No. 0 Sand
Depth to Top of Sand Pack: 7 ft.
Depth to Bottom of Sand Pack: 19.5 ft.

Type of Screen: PVC
Screen Diameter: 2 in.
Screen Slot Size: 0.010 in.
Depth to Top of Screen: 9.5 ft. bgs
Depth to Bottom of Screen: 19.5 ft. bgs

Backfill (if any): None

Depth to Bottom of Borehole: 19.5 ft. bgs

Attachment 3

Waste Characterization Laboratory Analytical Reports



ANALYTICAL REPORT

Lab Number:	L2267534
Client:	CHA Companies 3 Winners Circle Albany, NY 12205
ATTN:	Scott Smith
Phone:	(518) 453-2869
Project Name:	FRIEDRICHSOHN SITE
Project Number:	060017.000
Report Date:	12/19/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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

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



Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2267534-01	DRUMMED SOIL COMPOSITE	SOIL	WATERFORD,NY	12/01/22 15:45	12/01/22
L2267534-02	DRUMMED WATER COMPOSITE	WATER	WATERFORD,NY	12/01/22 15:10	12/01/22
L2267534-03	TRIP BLANK	WATER	WATERFORD,NY	12/01/22 00:00	12/01/22

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Case Narrative

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

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

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

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

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

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

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2267534-03: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. At the client's request, this sample was not analyzed.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/19/22

ORGANICS

VOLATILES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01
Client ID: DRUMMED SOIL COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:45
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 12/14/22 19:30
Analyst: MCM
Percent Solids: 87%
TCLP/SPLP Ext. Date: 12/13/22 17:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.4	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-02
 Client ID: DRUMMED WATER COMPOSITE
 Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:10
 Date Received: 12/01/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 12/08/22 23:27
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	0.90	J	ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	1.7		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	51		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-02
 Client ID: DRUMMED WATER COMPOSITE
 Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:10
 Date Received: 12/01/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	74		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	13		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	1.9	J	ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 12/08/22 17:45
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1721256-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 12/08/22 17:45
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1721256-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 12/08/22 17:45
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1721256-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	112		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 12/14/22 18:36
 Analyst: LAC
 TCLP/SPLP Extraction Date: 12/13/22 17:10

Extraction Date: 12/13/22 17:10

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1723508-5					
Chloroform	2.4	J	ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
dibromofluoromethane	108		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1721256-3 WG1721256-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	120		120		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	98		95		63-132	3		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	94		90		63-130	4		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	99		93		70-130	6		20
Chlorobenzene	100		96		75-130	4		20
Trichlorofluoromethane	83		81		62-150	2		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	97		95		67-130	2		20
Bromodichloromethane	98		94		67-130	4		20
trans-1,3-Dichloropropene	94		90		70-130	4		20
cis-1,3-Dichloropropene	91		89		70-130	2		20
Bromoform	86		80		54-136	7		20
1,1,2,2-Tetrachloroethane	100		95		67-130	5		20
Benzene	100		100		70-130	0		20
Toluene	100		98		70-130	2		20
Ethylbenzene	99		95		70-130	4		20
Chloromethane	120		120		64-130	0		20
Bromomethane	83		85		39-139	2		20
Vinyl chloride	120		120		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1721256-3 WG1721256-4								
Chloroethane	95		93		55-138	2		20
1,1-Dichloroethene	88		84		61-145	5		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		98		70-130	2		20
1,2-Dichlorobenzene	98		92		70-130	6		20
1,3-Dichlorobenzene	100		93		70-130	7		20
1,4-Dichlorobenzene	100		94		70-130	6		20
Methyl tert butyl ether	90		89		63-130	1		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	86		84		36-147	2		20
Acetone	140		140		58-148	0		20
Carbon disulfide	92		90		51-130	2		20
2-Butanone	120		120		63-138	0		20
4-Methyl-2-pentanone	99		96		59-130	3		20
2-Hexanone	100		100		57-130	0		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	98		93		70-130	5		20
1,2-Dibromo-3-chloropropane	89		86		41-144	3		20
Isopropylbenzene	99		91		70-130	8		20
1,2,3-Trichlorobenzene	96		89		70-130	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1721256-3 WG1721256-4								
1,2,4-Trichlorobenzene	100		92		70-130	8		20
Methyl Acetate	120		120		70-130	0		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	112		110		56-162	2		20
Freon-113	88		87		70-130	1		20
Methyl cyclohexane	92		88		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		105		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	104		104		70-130
Dibromofluoromethane	102		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1723508-3 WG1723508-4								
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	97		100		63-132	3		20
Tetrachloroethene	95		96		70-130	1		20
Chlorobenzene	100		100		75-130	0		25
1,2-Dichloroethane	100		110		70-130	10		20
Benzene	100		110		70-130	10		25
Vinyl chloride	110		120		55-140	9		20
1,1-Dichloroethene	100		110		61-145	10		25
Trichloroethene	97		100		70-130	3		25
1,4-Dichlorobenzene	92		100		70-130	8		20
2-Butanone	83		87		63-138	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		100		70-130
Toluene-d8	104		105		70-130
4-Bromofluorobenzene	104		107		70-130
dibromofluoromethane	96		98		70-130

SEMIVOLATILES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01
Client ID: DRUMMED SOIL COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:45
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 12/15/22 13:58
Analyst: IM
Percent Solids: 87%
TCLP/SPLP Ext. Date: 12/06/22 15:37

Extraction Method: EPA 3510C
Extraction Date: 12/12/22 18:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	87		33-120

Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-02
 Client ID: DRUMMED WATER COMPOSITE
 Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:10
 Date Received: 12/01/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 12/08/22 02:06
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 12/06/22 19:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-02
 Client ID: DRUMMED WATER COMPOSITE
 Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:10
 Date Received: 12/01/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	46		41-149

Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-02
 Client ID: DRUMMED WATER COMPOSITE
 Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:10
 Date Received: 12/01/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 12/08/22 14:17
 Analyst: RP

Extraction Method: EPA 3510C
 Extraction Date: 12/06/22 19:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS****Lab ID:** L2267534-02**Date Collected:** 12/01/22 15:10**Client ID:** DRUMMED WATER COMPOSITE**Date Received:** 12/01/22**Sample Location:** WATERFORD,NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	76		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 12/07/22 00:07
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/06/22 04:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1719714-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 12/07/22 00:07
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/06/22 04:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1719714-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	58		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 12/07/22 09:51
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/06/22 04:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02 Batch: WG1719715-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
 Analytical Date: 12/07/22 09:51
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 12/06/22 04:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02 Batch: WG1719715-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	70		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
 Analytical Date: 12/15/22 13:34
 Analyst: IM
 TCLP/SPLP Extraction Date: 12/06/22 18:29

Extraction Method: EPA 3510C
 Extraction Date: 12/12/22 18:39

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1722383-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	68		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	85		33-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1719714-2 WG1719714-3								
Bis(2-chloroethyl)ether	71		79		40-140	11		30
3,3'-Dichlorobenzidine	58		61		40-140	5		30
2,4-Dinitrotoluene	104		105		48-143	1		30
2,6-Dinitrotoluene	94		100		40-140	6		30
4-Chlorophenyl phenyl ether	71		73		40-140	3		30
4-Bromophenyl phenyl ether	79		76		40-140	4		30
Bis(2-chloroisopropyl)ether	83		95		40-140	13		30
Bis(2-chloroethoxy)methane	80		88		40-140	10		30
Hexachlorocyclopentadiene	61		67		40-140	9		30
Isophorone	76		82		40-140	8		30
Nitrobenzene	87		99		40-140	13		30
NDPA/DPA	73		77		40-140	5		30
n-Nitrosodi-n-propylamine	78		84		29-132	7		30
Bis(2-ethylhexyl)phthalate	115		115		40-140	0		30
Butyl benzyl phthalate	98		103		40-140	5		30
Di-n-butylphthalate	84		84		40-140	0		30
Di-n-octylphthalate	108		108		40-140	0		30
Diethyl phthalate	85		85		40-140	0		30
Dimethyl phthalate	82		79		40-140	4		30
Biphenyl	69		73		40-140	6		30
4-Chloroaniline	40		59		40-140	38	Q	30
2-Nitroaniline	110		109		52-143	1		30
3-Nitroaniline	83		85		25-145	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1719714-2 WG1719714-3								
4-Nitroaniline	101		100		51-143	1		30
Dibenzofuran	73		75		40-140	3		30
1,2,4,5-Tetrachlorobenzene	66		68		2-134	3		30
Acetophenone	73		79		39-129	8		30
2,4,6-Trichlorophenol	70		73		30-130	4		30
p-Chloro-m-cresol	85		85		23-97	0		30
2-Chlorophenol	71		76		27-123	7		30
2,4-Dichlorophenol	76		80		30-130	5		30
2,4-Dimethylphenol	33		59		30-130	57	Q	30
2-Nitrophenol	91		100		30-130	9		30
4-Nitrophenol	114	Q	113	Q	10-80	1		30
2,4-Dinitrophenol	130		116		20-130	11		30
4,6-Dinitro-o-cresol	131		129		20-164	2		30
Phenol	66		71		12-110	7		30
2-Methylphenol	69		78		30-130	12		30
3-Methylphenol/4-Methylphenol	75		79		30-130	5		30
2,4,5-Trichlorophenol	76		78		30-130	3		30
Carbazole	78		78		55-144	0		30
Atrazine	89		90		40-140	1		30
Benzaldehyde	75		78		40-140	4		30
Caprolactam	51		52		10-130	2		30
2,3,4,6-Tetrachlorophenol	79		72		40-140	9		30

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FRIEDRICHSOHN SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1719714-2 WG1719714-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		78		21-120
Phenol-d6	64		71		10-120
Nitrobenzene-d5	92		97		23-120
2-Fluorobiphenyl	69		72		15-120
2,4,6-Tribromophenol	82		81		10-120
4-Terphenyl-d14	69		70		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02 Batch: WG1719715-2 WG1719715-3								
Acenaphthene	71		81		40-140	13		40
2-Chloronaphthalene	67		78		40-140	15		40
Fluoranthene	71		79		40-140	11		40
Hexachlorobutadiene	61		72		40-140	17		40
Naphthalene	68		79		40-140	15		40
Benzo(a)anthracene	76		85		40-140	11		40
Benzo(a)pyrene	76		87		40-140	13		40
Benzo(b)fluoranthene	82		87		40-140	6		40
Benzo(k)fluoranthene	79		97		40-140	20		40
Chrysene	78		88		40-140	12		40
Acenaphthylene	69		80		40-140	15		40
Anthracene	76		85		40-140	11		40
Benzo(ghi)perylene	79		91		40-140	14		40
Fluorene	72		83		40-140	14		40
Phenanthrene	74		84		40-140	13		40
Dibenzo(a,h)anthracene	83		92		40-140	10		40
Indeno(1,2,3-cd)pyrene	82		95		40-140	15		40
Pyrene	72		79		40-140	9		40
2-Methylnaphthalene	67		79		40-140	16		40
Pentachlorophenol	118		126		40-140	7		40
Hexachlorobenzene	81		89		40-140	9		40
Hexachloroethane	75		85		40-140	13		40

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02 Batch: WG1719715-2 WG1719715-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		74		21-120
Phenol-d6	58		68		10-120
Nitrobenzene-d5	111		130	Q	23-120
2-Fluorobiphenyl	67		78		15-120
2,4,6-Tribromophenol	94		106		10-120
4-Terphenyl-d14	69		76		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1722383-2 WG1722383-3								
Hexachlorobenzene	83		77		40-140	8		30
2,4-Dinitrotoluene	89		79		40-132	12		30
Hexachlorobutadiene	67		65		28-111	3		30
Hexachloroethane	60		59		21-105	2		30
Nitrobenzene	74		72		40-140	3		30
2,4,6-Trichlorophenol	86		81		30-130	6		30
Pentachlorophenol	90		82		9-103	9		30
2-Methylphenol	76		74		30-130	3		30
3-Methylphenol/4-Methylphenol	78		74		30-130	5		30
2,4,5-Trichlorophenol	89		82		30-130	8		30
Pyridine	31		48		10-66	43	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	81		79		21-120
Phenol-d6	76		72		10-120
Nitrobenzene-d5	80		76		23-120
2-Fluorobiphenyl	86		80		15-120
2,4,6-Tribromophenol	91		81		10-120
4-Terphenyl-d14	88		79		33-120

PCBS

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01
Client ID: DRUMMED SOIL COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:45
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/08/22 17:35
Analyst: MEO
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 12/07/22 21:01
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/22
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.4	3.32	1	A
Aroclor 1221	ND		ug/kg	37.4	3.75	1	A
Aroclor 1232	ND		ug/kg	37.4	7.93	1	A
Aroclor 1242	14.4	J	ug/kg	37.4	5.04	1	B
Aroclor 1248	ND		ug/kg	37.4	5.61	1	A
Aroclor 1254	ND		ug/kg	37.4	4.09	1	A
Aroclor 1260	ND		ug/kg	37.4	6.92	1	A
Aroclor 1262	ND		ug/kg	37.4	4.75	1	A
Aroclor 1268	ND		ug/kg	37.4	3.88	1	A
PCBs, Total	14.4	J	ug/kg	37.4	3.32	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-02
Client ID: DRUMMED WATER COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:10
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 12/15/22 01:49
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 12/14/22 17:05
Cleanup Method: EPA 3665A
Cleanup Date: 12/14/22
Cleanup Method: EPA 3660B
Cleanup Date: 12/15/22

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	127		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/08/22 16:38
Analyst: MEO

Extraction Method: EPA 3546
Extraction Date: 12/07/22 21:01
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/22
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1720622-1						
Aroclor 1016	ND		ug/kg	32.7	2.91	A
Aroclor 1221	ND		ug/kg	32.7	3.28	A
Aroclor 1232	ND		ug/kg	32.7	6.94	A
Aroclor 1242	ND		ug/kg	32.7	4.41	A
Aroclor 1248	ND		ug/kg	32.7	4.91	A
Aroclor 1254	ND		ug/kg	32.7	3.58	A
Aroclor 1260	ND		ug/kg	32.7	6.05	A
Aroclor 1262	ND		ug/kg	32.7	4.16	A
Aroclor 1268	ND		ug/kg	32.7	3.39	A
PCBs, Total	ND		ug/kg	32.7	2.91	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/14/22 15:57
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 12/14/22 04:58
Cleanup Method: EPA 3665A
Cleanup Date: 12/14/22
Cleanup Method: EPA 3660B
Cleanup Date: 12/14/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02 Batch: WG1723009-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	B
Aroclor 1260	ND		ug/l	0.071	0.061	B
PCBs, Total	ND		ug/l	0.071	0.061	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	112		30-150	A
2,4,5,6-Tetrachloro-m-xylene	103		30-150	B
Decachlorobiphenyl	113		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1720622-2 WG1720622-3									
Aroclor 1016	90		92		40-140	2		50	A
Aroclor 1260	82		85		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		75		30-150	A
Decachlorobiphenyl	75		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		83		30-150	B
Decachlorobiphenyl	84		86		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 Batch: WG1723009-2 WG1723009-3									
Aroclor 1016	91		90		40-140	1		50	A
Aroclor 1260	85		78		40-140	9		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		92		30-150	A
Decachlorobiphenyl	100		92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		84		30-150	B
Decachlorobiphenyl	100		93		30-150	B

PESTICIDES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01
Client ID: DRUMMED SOIL COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:45
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 12/13/22 15:59
Analyst: AKM
Percent Solids: 87%
TCLP/SPLP Ext. Date: 12/06/22 04:29

Extraction Method: EPA 3510C
Extraction Date: 12/12/22 18:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	111		30-150	A
Decachlorobiphenyl	106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01
Client ID: DRUMMED SOIL COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:45
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 12/09/22 09:27
Analyst: MMG
Percent Solids: 87%
TCLP/SPLP Ext. Date: 12/06/22 15:37
Methylation Date: 12/09/22 04:58

Extraction Method: EPA 8151A
Extraction Date: 12/08/22 13:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	60		30-150	A
DCAA	49		30-150	B

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 12/09/22 07:54
Analyst: AAR
TCLP/SPLP Extraction Date: 12/06/22 04:29
Methylation Date: 12/09/22 04:58

Extraction Method: EPA 8151A
Extraction Date: 12/08/22 13:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1721005-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	79		30-150	A
DCAA	76		30-150	B

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 12/13/22 15:25
 Analyst: AKM
 TCLP/SPLP Extraction Date: 12/06/22 04:29

Extraction Method: EPA 3510C
 Extraction Date: 12/12/22 18:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1722384-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	130		30-150	A
Decachlorobiphenyl	133		30-150	A
2,4,5,6-Tetrachloro-m-xylene	124		30-150	B
Decachlorobiphenyl	114		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1721005-2 WG1721005-3									
2,4-D	107		201	Q	30-150	61	Q	25	A
2,4,5-TP (Silvex)	49		53		30-150	8		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	72		62		30-150	A
DCAA	54		56		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1722384-2 WG1722384-3									
Lindane	127		142		30-150	11		20	A
Heptachlor	129		144		30-150	11		20	A
Heptachlor epoxide	127		142		30-150	11		20	A
Endrin	131		146		30-150	11		20	A
Methoxychlor	128		141		30-150	10		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	134		141		30-150	A
Decachlorobiphenyl	138		142		30-150	A
2,4,5,6-Tetrachloro-m-xylene	128		137		30-150	B
Decachlorobiphenyl	120		125		30-150	B

METALS

Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-01

Date Collected: 12/01/22 15:45

Client ID: DRUMMED SOIL COMPOSITE

Date Received: 12/01/22

Sample Location: WATERFORD,NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 12/06/22 15:37

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0373	J	mg/l	1.00	0.0190	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC
Barium, TCLP	0.574		mg/l	0.500	0.0210	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC
Lead, TCLP	0.0358	J	mg/l	0.500	0.0270	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	12/09/22 21:57	12/10/22 13:07	EPA 7470A	1,7470A	DJR
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC
Silver, TCLP	ND		mg/l	0.100	0.0280	1	12/10/22 01:15	12/10/22 13:27	EPA 3015	1,6010D	MRC



Project Name: FRIEDRICHSON SITE**Lab Number:** L2267534**Project Number:** 060017.000**Report Date:** 12/19/22**SAMPLE RESULTS**

Lab ID: L2267534-02

Date Collected: 12/01/22 15:10

Client ID: DRUMMED WATER COMPOSITE

Date Received: 12/01/22

Sample Location: WATERFORD,NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.83		mg/l	0.0100	0.00327	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Arsenic, Total	0.00174		mg/l	0.00050	0.00016	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Barium, Total	0.1576		mg/l	0.00050	0.00017	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Beryllium, Total	0.00017	J	mg/l	0.00050	0.00010	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Cadmium, Total	0.00007	J	mg/l	0.00020	0.00005	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Calcium, Total	68.4		mg/l	0.100	0.0394	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Chromium, Total	0.00348		mg/l	0.00100	0.00017	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Cobalt, Total	0.00392		mg/l	0.00050	0.00016	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Copper, Total	0.00605		mg/l	0.00100	0.00038	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Iron, Total	20.2		mg/l	0.0500	0.0191	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Lead, Total	0.00487		mg/l	0.00100	0.00034	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Magnesium, Total	12.2		mg/l	0.0700	0.0242	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Manganese, Total	4.922		mg/l	0.00100	0.00044	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/08/22 10:46	12/08/22 16:59	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00650		mg/l	0.00200	0.00055	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Potassium, Total	6.34		mg/l	0.100	0.0309	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Sodium, Total	117.		mg/l	0.100	0.0293	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Thallium, Total	ND		mg/l	0.00200	0.00014	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Vanadium, Total	0.00450	J	mg/l	0.00500	0.00157	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV
Zinc, Total	0.05680		mg/l	0.01000	0.00341	1	12/08/22 09:49	12/19/22 11:50	EPA 3005A	1,6020B	SV



Project Name: FRIEDRICHSON SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1720342-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	12/08/22 09:49	12/12/22 13:37	1,6020B	SV
Barium, Total	ND		mg/l	0.00050	0.00017	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Calcium, Total	ND		mg/l	0.100	0.0394	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Copper, Total	ND		mg/l	0.00100	0.00038	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Iron, Total	ND		mg/l	0.0500	0.0191	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Lead, Total	ND		mg/l	0.00100	0.00034	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Manganese, Total	0.00066	J	mg/l	0.00100	0.00044	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Potassium, Total	ND		mg/l	0.100	0.0309	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/08/22 09:49	12/12/22 13:37	1,6020B	SV
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Sodium, Total	ND		mg/l	0.100	0.0293	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Thallium, Total	0.00015	J	mg/l	0.00200	0.00014	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	12/08/22 09:49	12/19/22 12:44	1,6020B	SV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1720343-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/08/22 10:46	12/08/22 16:04	1,7470A	DMB



Project Name: FRIEDRICHSON SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1721418-1										
Arsenic, TCLP	0.0323	J	mg/l	1.00	0.0190	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC
Barium, TCLP	ND		mg/l	0.500	0.0210	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC
Lead, TCLP	ND		mg/l	0.500	0.0270	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC
Silver, TCLP	ND		mg/l	0.100	0.0280	1	12/10/22 01:15	12/10/22 13:13	1,6010D	MRC

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 12/08/22 03:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1721419-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	12/09/22 21:57	12/10/22 12:38	1,7470A	DJR

Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 12/08/22 03:54



Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1720342-2								
Aluminum, Total	107		-		80-120	-		
Antimony, Total	98		-		80-120	-		
Arsenic, Total	104		-		80-120	-		
Barium, Total	99		-		80-120	-		
Beryllium, Total	101		-		80-120	-		
Cadmium, Total	95		-		80-120	-		
Calcium, Total	106		-		80-120	-		
Chromium, Total	100		-		80-120	-		
Cobalt, Total	92		-		80-120	-		
Copper, Total	98		-		80-120	-		
Iron, Total	116		-		80-120	-		
Lead, Total	102		-		80-120	-		
Magnesium, Total	106		-		80-120	-		
Manganese, Total	104		-		80-120	-		
Nickel, Total	97		-		80-120	-		
Potassium, Total	107		-		80-120	-		
Selenium, Total	108		-		80-120	-		
Silver, Total	97		-		80-120	-		
Sodium, Total	109		-		80-120	-		
Thallium, Total	107		-		80-120	-		
Vanadium, Total	98		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1720342-2					
Zinc, Total	96	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1720343-2					
Mercury, Total	87	-	80-120	-	
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1721418-2					
Arsenic, TCLP	107	-	75-125	-	20
Barium, TCLP	88	-	75-125	-	20
Cadmium, TCLP	95	-	75-125	-	20
Chromium, TCLP	88	-	75-125	-	20
Lead, TCLP	92	-	75-125	-	20
Selenium, TCLP	102	-	75-125	-	20
Silver, TCLP	90	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1721419-2					
Mercury, TCLP	93	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1720342-3 QC Sample: L2267273-02 Client ID: MS Sample												
Aluminum, Total	3.39	2	5.54	108		-	-		75-125	-		20
Antimony, Total	ND	0.5	0.4595	92		-	-		75-125	-		20
Arsenic, Total	0.03821	0.12	0.1577	100		-	-		75-125	-		20
Barium, Total	0.0684	2	2.068	100		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05270	105		-	-		75-125	-		20
Cadmium, Total	ND	0.053	0.05040	95		-	-		75-125	-		20
Calcium, Total	166	10	173	70	Q	-	-		75-125	-		20
Chromium, Total	0.0288	0.2	0.2226	97		-	-		75-125	-		20
Cobalt, Total	0.0070	0.5	0.4816	95		-	-		75-125	-		20
Copper, Total	0.0055	0.25	0.2454	96		-	-		75-125	-		20
Iron, Total	11.2	1	12.1	90		-	-		75-125	-		20
Lead, Total	0.0038J	0.53	0.5606	106		-	-		75-125	-		20
Magnesium, Total	45.9	10	57.0	111		-	-		75-125	-		20
Manganese, Total	0.4914	0.5	0.9915	100		-	-		75-125	-		20
Nickel, Total	0.0844	0.5	0.5427	92		-	-		75-125	-		20
Potassium, Total	361	10	353	0	Q	-	-		75-125	-		20
Selenium, Total	ND	0.12	0.132	110		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04966	99		-	-		75-125	-		20
Sodium, Total	220	10	225	50	Q	-	-		75-125	-		20
Thallium, Total	ND	0.12	0.09211	77		-	-		75-125	-		20
Vanadium, Total	0.0805	0.5	0.5816	100		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1720342-3 QC Sample: L2267273-02 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4918	98	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1720343-3 QC Sample: L2267273-04 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00430	86	-	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1721418-3 QC Sample: L2268215-09 Client ID: MS Sample									
Arsenic, TCLP	0.0356J	1.2	1.29	108	-	-	75-125	-	20
Barium, TCLP	1.30	20	18.9	88	-	-	75-125	-	20
Cadmium, TCLP	ND	0.53	0.505	95	-	-	75-125	-	20
Chromium, TCLP	ND	2	1.76	88	-	-	75-125	-	20
Lead, TCLP	ND	5.3	4.90	92	-	-	75-125	-	20
Selenium, TCLP	ND	1.2	1.24	103	-	-	75-125	-	20
Silver, TCLP	ND	0.5	0.456	91	-	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1721419-3 QC Sample: L2268215-09 Client ID: MS Sample									
Mercury, TCLP	ND	0.025	0.0248	99	-	-	80-120	-	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1720342-4 QC Sample: L2267273-02 Client ID: DUP Sample						
Arsenic, Total	0.03821	0.03804	mg/l	0		20
Selenium, Total	ND	0.0106J	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1720343-4 QC Sample: L2267273-04 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1721418-4 QC Sample: L2268215-09 Client ID: DUP Sample						
Arsenic, TCLP	0.0356J	0.0315J	mg/l	NC		20
Barium, TCLP	1.30	1.29	mg/l	1		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	ND	ND	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1721419-4 QC Sample: L2268215-09 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2267534
Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01
Client ID: DRUMMED SOIL COMPOSITE
Sample Location: WATERFORD,NY

Date Collected: 12/01/22 15:45
Date Received: 12/01/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material: Unknown
Description of Material: Non-Metallic - Wet Soil
Particle Size: Medium
Preliminary Burning Time (sec): 120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	12/09/22 13:45	1,1030	MJ



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-01

Date Collected: 12/01/22 15:45

Client ID: DRUMMED SOIL COMPOSITE

Date Received: 12/01/22

Sample Location: WATERFORD,NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.7		%	0.100	NA	1	-	12/06/22 10:49	121,2540G	RI
pH (H)	7.9		SU	-	NA	1	-	12/14/22 21:54	1,9045D	AAS
Cyanide, Reactive	ND		mg/kg	10	10.	1	12/09/22 10:40	12/09/22 12:22	125,7.3	MJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	12/09/22 10:40	12/09/22 11:54	125,7.3	MJ



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

SAMPLE RESULTS

Lab ID: L2267534-02

Date Collected: 12/01/22 15:10

Client ID: DRUMMED WATER COMPOSITE

Date Received: 12/01/22

Sample Location: WATERFORD,NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	7.2		SU	-	NA	1	-	12/09/22 09:52	1,9040C	KES
Flash Point	>150		deg F	70	NA	1	-	12/10/22 09:00	1,1010A	MRM
Cyanide, Reactive	ND		mg/l	1.0	1.0	1	12/08/22 08:45	12/08/22 10:59	125,7.3	MJ
Sulfide, Reactive	ND		mg/l	1.0	1.0	1	12/08/22 08:45	12/08/22 10:21	125,7.3	MJ



Project Name: FRIEDRICHSON SITE

Lab Number: L2267534

Project Number: 060017.000

Report Date: 12/19/22

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1720730-1										
Sulfide, Reactive	ND		mg/l	1.0	1.0	1	12/08/22 08:45	12/08/22 10:19	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1720732-1										
Cyanide, Reactive	ND		mg/l	1.0	1.0	1	12/08/22 08:45	12/08/22 10:58	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1721330-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	12/09/22 10:40	12/09/22 11:51	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1721334-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	12/09/22 10:40	12/09/22 12:17	125,7.3	MJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2267534

Report Date: 12/19/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1720730-2								
Sulfide, Reactive	85		-		60-125	-		25
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1720732-2								
Cyanide, Reactive	65		-		30-125	-		25
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1721330-2								
Sulfide, Reactive	86		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1721334-2								
Cyanide, Reactive	38		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1721400-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1721748-1								
Flash Point	101		-		96-104	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1723412-1								
pH	100		-		99-101	-		

Lab Duplicate Analysis *Batch Quality Control*

Project Name: FRIEDRICHSOHN SITE
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Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1719842-1 QC Sample: L2268107-07 Client ID: DUP Sample						
Solids, Total	91.4	91.8	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1720730-3 QC Sample: L2267534-02 Client ID: DRUMMED WATER COMPOSITE						
Sulfide, Reactive	ND	ND	mg/l	NC		25
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1720732-3 QC Sample: L2267534-02 Client ID: DRUMMED WATER COMPOSITE						
Cyanide, Reactive	ND	ND	mg/l	NC		25
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1721330-3 QC Sample: L2267361-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1721334-3 QC Sample: L2267361-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1721400-2 QC Sample: L2268997-01 Client ID: DUP Sample						
pH	6.7	6.9	SU	3		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1723412-2 QC Sample: L2267361-01 Client ID: DUP Sample						
pH	8.4	8.3	SU	1		5

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Serial_No:12192218:24
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Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2267534-01A	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2267534-01B	Vial Large Septa unpreserved (4oz)	A	NA		2.8	Y	Absent		TCLP-EXT-ZHE(14)
L2267534-01C	Glass 500ml/16oz unpreserved	A	NA		2.8	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2267534-01W	Amber 1000ml unpreserved Extracts	A	NA		2.8	Y	Absent		TCLP-8270(14),PEST-TCLP*(14),HERB-TCLP*(14)
L2267534-01X	Vial unpreserved Extracts	A	NA		2.8	Y	Absent		TCLP-VOA(14)
L2267534-01X9	Tumble Vessel	A	NA		2.8	Y	Absent		-
L2267534-01Y	Vial unpreserved Extracts	A	NA		2.8	Y	Absent		TCLP-VOA(14)
L2267534-01Z	Plastic 120ml HNO3 preserved Extracts	A	NA		2.8	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2267534-02A	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260-R2(14)
L2267534-02B	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260-R2(14)
L2267534-02C	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260-R2(14)
L2267534-02D	Plastic 120ml unpreserved	A	7	7	2.8	Y	Absent		PH-9040(1)
L2267534-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.8	Y	Absent		SE-6020T(180),FE-6020T(180),TL-6020T(180),BA-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),MG-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2267534-02F	Amber 120ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2267534-02G	Amber 120ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8082-LVI(365)
L2267534-02H	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2267534-02I	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2267534-02J	Amber 500ml unpreserved	A	7	7	2.8	Y	Absent		REACTS(7),REACTCN(7),FLASH()
L2267534-03A	Vial HCl preserved	A	NA		2.8	Y	Absent		ARCHIVE()
L2267534-03B	Vial HCl preserved	A	NA		2.8	Y	Absent		ARCHIVE()

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



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Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: FRIEDRICHSOHN SITE
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Report Date: 12/19/22

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

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

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>1</u> of <u>1</u>		Date Rec'd in Lab <u>12/2/22</u>		ALPHA Job # <u>L2207534</u>																																																																																																																																																																																																																																																																																	
		Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3286		Project Information Project Name: <u>FRIEDRICHSON SITE</u> Project Location: <u>WATERFORD, NY</u> Project # <u>060017.000</u> (Use Project name as Project #) ☐		Deliverables: ☒ ASP-A ☐ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☒ Other <u>STANDARD</u>		Billing Information ☒ Same as Client Info PO #																																																																																																																																																																																																																																																																															
Client Information Client: <u>CHA</u> Address: <u>3 OWNERS CIRCLE</u> <u>ALBANY, NY 12205</u> Phone: <u>(518) 453-8795</u> Fax: Email: <u>jfavreau@chacompanies.com</u>		Project Manager: <u>SCOTT SMITH</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☒ NY ☐ Other:																																																																																																																																																																																																																																																																																			
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments:		ANALYSIS TCLP VOCs/SVOCs TCLP & PCBs METALS TCLP PEST./HERB. TCL PCBs TOXICITY/RESPONIVITY TCL VOCs/SVOCs TML METALS		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)		Total Bottles																																																																																																																																																																																																																																																																																			
Please specify Metals or TAL.		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th colspan="8"></th> </tr> <tr> <th>Date</th> <th>Time</th> <th colspan="8"></th> </tr> </thead> <tbody> <tr> <td><u>07534 -01</u></td> <td><u>DRUMMED SOIL COMPOSITE</u></td> <td><u>12/01/22</u></td> <td><u>15:45</u></td> <td><u>SOIL</u></td> <td><u>g-z.f.</u></td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td><u>3</u></td> </tr> <tr> <td><u>-02</u></td> <td><u>DRUMMED WATER COMPOSITE</u></td> <td><u>12/01/22</u></td> <td><u>15:10</u></td> <td><u>WATER</u></td> <td><u>g-z.f.</u></td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td><u>10</u></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials									Date	Time									<u>07534 -01</u>	<u>DRUMMED SOIL COMPOSITE</u>	<u>12/01/22</u>	<u>15:45</u>	<u>SOIL</u>	<u>g-z.f.</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>3</u>	<u>-02</u>	<u>DRUMMED WATER COMPOSITE</u>	<u>12/01/22</u>	<u>15:10</u>	<u>WATER</u>	<u>g-z.f.</u>	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	<u>10</u>																																																																																																																																																																																																																									Sample Specific Comments	
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type ☒ A ☐ A ☐ A ☐ A ☐ A ☐ A ☐ A ☐ A ☐ A		Preservative ☒ A ☐ A ☐ A ☐ A ☐ A ☐ A ☐ A ☐ A ☐ A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																																																																																																																																															
Relinquished By: <u>John J. Faneau</u> <u>John J. Faneau</u>		Date/Time <u>12/01/22 17:05</u> <u>12/1/22 1707</u>		Received By: <u>John J. Faneau</u> <u>John J. Faneau</u>		Date/Time <u>12/1/22 1705</u> <u>12/1/22 1705</u>		Date/Time <u>12/1/22 1705</u> <u>12/1/22 1705</u>		Date/Time <u>12/1/22 1705</u> <u>12/1/22 1705</u>																																																																																																																																																																																																																																																																															



ANALYTICAL REPORT

Lab Number:	L2329534
Client:	CHA Companies 16 West Main Street Powers Building, Suite 830 Rochester, NY 14614
ATTN:	Scott Smith
Phone:	(585) 262-2640
Project Name:	FRIEDRICHSOHN SITE
Project Number:	060017.000
Report Date:	06/20/23

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2329534-01	DRUMMED WATER COMP. 2	WATER	WATERFORD, NY	05/25/23 13:30	05/25/23
L2329534-02	DRUMMED SOIL COMP. 2	SOIL	WATERFORD, NY	05/25/23 14:00	05/25/23

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Case Narrative

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

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

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

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

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

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

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Case Narrative (continued)

Report Submission

June 20, 2023: This final report includes the results of all requested analyses.

June 14, 2023: This is a preliminary report.

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

PCBs

L2329534-01: The surrogate recoveries were outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (22%, 22%) and decachlorobiphenyl (25%, 25%); however, re-extraction achieved similar results: 2,4,5,6-tetrachloro-m-xylene (20%, 21%) and decachlorobiphenyl (24%, 26%). The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

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

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 06/20/23

ORGANICS

VOLATILES

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-01
 Client ID: DRUMMED WATER COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 06/06/23 16:09
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	0.88	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	1.9		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-01
Client ID: DRUMMED WATER COMP. 2
Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
Date Received: 05/25/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	2.2	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.4	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-02
 Client ID: DRUMMED SOIL COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 14:00
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 06/07/23 22:38
 Analyst: MCM
 Percent Solids: 83%
 TCLP/SPLP Ext. Date: 06/06/23 11:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
dibromofluoromethane	130		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/06/23 09:29
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1788330-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/06/23 09:29
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1788330-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/06/23 09:29
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1788330-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/07/23 17:39
 Analyst: TMS
 TCLP/SPLP Extraction Date: 06/06/23 11:03

Extraction Date: 06/06/23 11:03

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 02 Batch: WG1788593-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
dibromofluoromethane	128		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1788330-3 WG1788330-4								
Methylene chloride	92		93		70-130	1		20
1,1-Dichloroethane	94		96		70-130	2		20
Chloroform	94		94		70-130	0		20
Carbon tetrachloride	93		96		63-132	3		20
1,2-Dichloropropane	92		95		70-130	3		20
Dibromochloromethane	87		90		63-130	3		20
1,1,2-Trichloroethane	94		99		70-130	5		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	96		97		75-130	1		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	90		92		70-130	2		20
1,1,1-Trichloroethane	93		96		67-130	3		20
Bromodichloromethane	87		88		67-130	1		20
trans-1,3-Dichloropropene	88		90		70-130	2		20
cis-1,3-Dichloropropene	88		90		70-130	2		20
Bromoform	81		84		54-136	4		20
1,1,2,2-Tetrachloroethane	89		93		67-130	4		20
Benzene	95		96		70-130	1		20
Toluene	97		98		70-130	1		20
Ethylbenzene	98		98		70-130	0		20
Chloromethane	83		87		64-130	5		20
Bromomethane	61		60		39-139	2		20
Vinyl chloride	97		99		55-140	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1788330-3 WG1788330-4								
Chloroethane	95		98		55-138	3		20
1,1-Dichloroethene	97		100		61-145	3		20
trans-1,2-Dichloroethene	93		94		70-130	1		20
Trichloroethene	92		94		70-130	2		20
1,2-Dichlorobenzene	97		99		70-130	2		20
1,3-Dichlorobenzene	98		100		70-130	2		20
1,4-Dichlorobenzene	97		98		70-130	1		20
Methyl tert butyl ether	83		87		63-130	5		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	93		93		70-130	0		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	90		95		36-147	5		20
Acetone	85		84		58-148	1		20
Carbon disulfide	96		96		51-130	0		20
2-Butanone	79		82		63-138	4		20
4-Methyl-2-pentanone	79		86		59-130	8		20
2-Hexanone	77		83		57-130	8		20
Bromochloromethane	94		96		70-130	2		20
1,2-Dibromoethane	93		96		70-130	3		20
1,2-Dibromo-3-chloropropane	79		83		41-144	5		20
Isopropylbenzene	97		98		70-130	1		20
1,2,3-Trichlorobenzene	91		94		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1788330-3 WG1788330-4								
1,2,4-Trichlorobenzene	94		97		70-130	3		20
Methyl Acetate	80		84		70-130	5		20
Cyclohexane	99		100		70-130	1		20
1,4-Dioxane	82		86		56-162	5		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	97		99		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		94		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	97		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 02 Batch: WG1788593-3 WG1788593-4								
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	98		100		63-132	2		20
Tetrachloroethene	98		95		70-130	3		20
Chlorobenzene	98		98		75-130	0		25
1,2-Dichloroethane	88		91		70-130	3		20
Benzene	100		100		70-130	0		25
Vinyl chloride	110		110		55-140	0		20
1,1-Dichloroethene	100		100		61-145	0		25
Trichloroethene	93		93		70-130	0		25
1,4-Dichlorobenzene	96		97		70-130	1		20
2-Butanone	87		95		63-138	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		102		70-130
Toluene-d8	107		104		70-130
4-Bromofluorobenzene	94		96		70-130
dibromofluoromethane	100		102		70-130

SEMIVOLATILES

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-01
 Client ID: DRUMMED WATER COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 06/01/23 18:47
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 05/31/23 16:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-01
 Client ID: DRUMMED WATER COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	41		41-149

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-01
 Client ID: DRUMMED WATER COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 06/01/23 12:24
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 05/31/23 16:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.05	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.01	J	ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS****Lab ID:** L2329534-01**Date Collected:** 05/25/23 13:30**Client ID:** DRUMMED WATER COMP. 2**Date Received:** 05/25/23**Sample Location:** WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	53		41-149

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-02
 Client ID: DRUMMED SOIL COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 14:00
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 06/06/23 18:31
 Analyst: JG
 Percent Solids: 83%
 TCLP/SPLP Ext. Date: 05/27/23 06:08

Extraction Method: EPA 3510C
 Extraction Date: 06/01/23 08:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	4.0	J	ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	52		33-120

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/01/23 08:09
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 05/31/23 16:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1785544-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	2.4	J	ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/01/23 08:09
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 05/31/23 16:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1785544-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	63		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/01/23 08:33
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/31/23 16:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1785554-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.02	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	0.04	J	ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	0.02	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 06/01/23 08:33
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/31/23 16:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1785554-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	74		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
 Analytical Date: 06/06/23 10:27
 Analyst: JG
 TCLP/SPLP Extraction Date: 05/26/23 05:45

Extraction Method: EPA 3510C
 Extraction Date: 06/01/23 08:54

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 02 Batch: WG1785846-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	63		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	74		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1785544-2 WG1785544-3								
Bis(2-chloroethyl)ether	58		58		40-140	0		30
3,3'-Dichlorobenzidine	44		30	Q	40-140	38	Q	30
2,4-Dinitrotoluene	62		59		48-143	5		30
2,6-Dinitrotoluene	63		65		40-140	3		30
4-Chlorophenyl phenyl ether	62		58		40-140	7		30
4-Bromophenyl phenyl ether	63		61		40-140	3		30
Bis(2-chloroisopropyl)ether	64		65		40-140	2		30
Bis(2-chloroethoxy)methane	59		58		40-140	2		30
Hexachlorocyclopentadiene	61		62		40-140	2		30
Isophorone	63		61		40-140	3		30
Nitrobenzene	67		66		40-140	2		30
NDPA/DPA	58		58		40-140	0		30
n-Nitrosodi-n-propylamine	64		66		29-132	3		30
Bis(2-ethylhexyl)phthalate	83		101		40-140	20		30
Butyl benzyl phthalate	68		72		40-140	6		30
Di-n-butylphthalate	66		68		40-140	3		30
Di-n-octylphthalate	76		83		40-140	9		30
Diethyl phthalate	62		61		40-140	2		30
Dimethyl phthalate	65		64		40-140	2		30
Biphenyl	60		57		40-140	5		30
4-Chloroaniline	60		46		40-140	26		30
2-Nitroaniline	65		61		52-143	6		30
3-Nitroaniline	60		44		25-145	31	Q	30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1785544-2 WG1785544-3								
4-Nitroaniline	57		49	Q	51-143	15		30
Dibenzofuran	63		62		40-140	2		30
1,2,4,5-Tetrachlorobenzene	57		56		2-134	2		30
Acetophenone	63		54		39-129	15		30
2,4,6-Trichlorophenol	70		67		30-130	4		30
p-Chloro-m-cresol	73		72		23-97	1		30
2-Chlorophenol	67		65		27-123	3		30
2,4-Dichlorophenol	71		68		30-130	4		30
2,4-Dimethylphenol	63		58		30-130	8		30
2-Nitrophenol	67		64		30-130	5		30
4-Nitrophenol	70		66		10-80	6		30
2,4-Dinitrophenol	75		73		20-130	3		30
4,6-Dinitro-o-cresol	76		76		20-164	0		30
Phenol	44		41		12-110	7		30
2-Methylphenol	61		63		30-130	3		30
3-Methylphenol/4-Methylphenol	69		60		30-130	14		30
2,4,5-Trichlorophenol	78		71		30-130	9		30
Carbazole	63		65		55-144	3		30
Atrazine	69		70		40-140	1		30
Benzaldehyde	59		56		40-140	5		30
Caprolactam	35		39		10-130	11		30
2,3,4,6-Tetrachlorophenol	71		69		40-140	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1785544-2 WG1785544-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		58		21-120
Phenol-d6	49		46		10-120
Nitrobenzene-d5	71		67		23-120
2-Fluorobiphenyl	65		65		15-120
2,4,6-Tribromophenol	73		72		10-120
4-Terphenyl-d14	60		61		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1785554-2 WG1785554-3								
Acenaphthene	64		64		40-140	0		40
2-Chloronaphthalene	64		64		40-140	0		40
Fluoranthene	70		69		40-140	1		40
Hexachlorobutadiene	59		57		40-140	3		40
Naphthalene	62		61		40-140	2		40
Benzo(a)anthracene	74		73		40-140	1		40
Benzo(a)pyrene	75		75		40-140	0		40
Benzo(b)fluoranthene	69		70		40-140	1		40
Benzo(k)fluoranthene	68		68		40-140	0		40
Chrysene	68		68		40-140	0		40
Acenaphthylene	72		72		40-140	0		40
Anthracene	70		69		40-140	1		40
Benzo(ghi)perylene	76		71		40-140	7		40
Fluorene	67		67		40-140	0		40
Phenanthrene	63		63		40-140	0		40
Dibenzo(a,h)anthracene	75		70		40-140	7		40
Indeno(1,2,3-cd)pyrene	76		72		40-140	5		40
Pyrene	68		67		40-140	1		40
2-Methylnaphthalene	66		66		40-140	0		40
Pentachlorophenol	82		88		40-140	7		40
Hexachlorobenzene	59		58		40-140	2		40
Hexachloroethane	61		59		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1785554-2 WG1785554-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		58		21-120
Phenol-d6	48		49		10-120
Nitrobenzene-d5	76		77		23-120
2-Fluorobiphenyl	65		66		15-120
2,4,6-Tribromophenol	99		100		10-120
4-Terphenyl-d14	68		68		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 02 Batch: WG1785846-2 WG1785846-3								
Hexachlorobenzene	64		64		40-140	0		30
2,4-Dinitrotoluene	71		78		40-132	9		30
Hexachlorobutadiene	50		54		28-111	8		30
Hexachloroethane	50		54		21-105	8		30
Nitrobenzene	62		75		40-140	19		30
2,4,6-Trichlorophenol	63		69		30-130	9		30
Pentachlorophenol	58		81		9-103	33	Q	30
2-Methylphenol	61		69		30-130	12		30
3-Methylphenol/4-Methylphenol	68		69		30-130	1		30
2,4,5-Trichlorophenol	63		69		30-130	9		30
Pyridine	17		14		10-66	19		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		67		21-120
Phenol-d6	57		64		10-120
Nitrobenzene-d5	62		70		23-120
2-Fluorobiphenyl	57		60		15-120
2,4,6-Tribromophenol	70		74		10-120
4-Terphenyl-d14	66		67		33-120

PCBS

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-01
Client ID: DRUMMED WATER COMP. 2
Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
Date Received: 05/25/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/08/23 04:02
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/06/23 23:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	22	Q	30-150	A
Decachlorobiphenyl	25	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	22	Q	30-150	B
Decachlorobiphenyl	25	Q	30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-01 RE
Client ID: DRUMMED WATER COMP. 2
Sample Location: WATERFORD, NY

Date Collected: 05/25/23 13:30
Date Received: 05/25/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/09/23 11:00
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/08/23 09:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/09/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	20	Q	30-150	A
Decachlorobiphenyl	24	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	21	Q	30-150	B
Decachlorobiphenyl	26	Q	30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-02
Client ID: DRUMMED SOIL COMP. 2
Sample Location: WATERFORD, NY

Date Collected: 05/25/23 14:00
Date Received: 05/25/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 05/28/23 14:54
Analyst: MEO
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 05/26/23 21:25
Cleanup Method: EPA 3665A
Cleanup Date: 05/27/23
Cleanup Method: EPA 3660B
Cleanup Date: 05/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	58.0	5.15	1	A
Aroclor 1221	ND		ug/kg	58.0	5.81	1	A
Aroclor 1232	ND		ug/kg	58.0	12.3	1	A
Aroclor 1242	19.2	J	ug/kg	58.0	7.81	1	B
Aroclor 1248	ND		ug/kg	58.0	8.69	1	A
Aroclor 1254	ND		ug/kg	58.0	6.34	1	A
Aroclor 1260	ND		ug/kg	58.0	10.7	1	A
Aroclor 1262	ND		ug/kg	58.0	7.36	1	A
Aroclor 1268	ND		ug/kg	58.0	6.00	1	A
PCBs, Total	19.2	J	ug/kg	58.0	5.15	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 05/27/23 07:44
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 05/26/23 14:29
Cleanup Method: EPA 3665A
Cleanup Date: 05/26/23
Cleanup Method: EPA 3660B
Cleanup Date: 05/27/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02 Batch: WG1784046-1						
Aroclor 1016	ND		ug/kg	48.4	4.30	A
Aroclor 1221	ND		ug/kg	48.4	4.85	A
Aroclor 1232	ND		ug/kg	48.4	10.3	A
Aroclor 1242	ND		ug/kg	48.4	6.53	A
Aroclor 1248	ND		ug/kg	48.4	7.27	A
Aroclor 1254	ND		ug/kg	48.4	5.30	A
Aroclor 1260	ND		ug/kg	48.4	8.95	A
Aroclor 1262	ND		ug/kg	48.4	6.15	A
Aroclor 1268	ND		ug/kg	48.4	5.02	A
PCBs, Total	ND		ug/kg	48.4	4.30	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/06/23 07:44
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/05/23 22:12
Cleanup Method: EPA 3665A
Cleanup Date: 06/06/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/06/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1787506-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/09/23 10:32
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/08/23 09:34
Cleanup Method: EPA 3665A
Cleanup Date: 06/08/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/09/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1788732-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	66		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 Batch: WG1784046-2 WG1784046-3									
Aroclor 1016	68		64		40-140	6		50	A
Aroclor 1260	65		62		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		66		30-150	A
Decachlorobiphenyl	72		69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		69		30-150	B
Decachlorobiphenyl	74		71		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1787506-2 WG1787506-3									
Aroclor 1016	73		72		40-140	2		50	A
Aroclor 1260	62		63		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		71		30-150	A
Decachlorobiphenyl	78		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		69		30-150	B
Decachlorobiphenyl	80		81		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1788732-2 WG1788732-3									
Aroclor 1016	56		53		40-140	5		50	A
Aroclor 1260	52		51		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		50		30-150	A
Decachlorobiphenyl	58		57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		46		30-150	B
Decachlorobiphenyl	72		55		30-150	B

PESTICIDES

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-02
Client ID: DRUMMED SOIL COMP. 2
Sample Location: WATERFORD, NY

Date Collected: 05/25/23 14:00
Date Received: 05/25/23
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/02/23 17:00
Analyst: MMG
Percent Solids: 83%
TCLP/SPLP Ext. Date: 05/27/23 06:08

Extraction Method: EPA 3510C
Extraction Date: 06/01/23 12:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Pesticides by EPA 1311 - Westborough Lab							
Lindane	ND		ug/l	0.100	0.022	1	A
Heptachlor	ND		ug/l	0.100	0.016	1	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	A
Endrin	ND		ug/l	0.200	0.021	1	A
Methoxychlor	ND		ug/l	1.00	0.034	1	A
Toxaphene	ND		ug/l	1.00	0.314	1	A
Chlordane	ND		ug/l	1.00	0.232	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	130		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	106		30-150	B

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-02
 Client ID: DRUMMED SOIL COMP. 2
 Sample Location: WATERFORD, NY

Date Collected: 05/25/23 14:00
 Date Received: 05/25/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 06/06/23 20:53
 Analyst: RMP
 Percent Solids: 83%
 TCLP/SPLP Ext. Date: 06/04/23 13:08
 Methylation Date: 06/06/23 06:01

Extraction Method: EPA 8151A
 Extraction Date: 06/05/23 10:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311 - Westborough Lab							
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	44		30-150	A
DCAA	37		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/02/23 15:53
 Analyst: MMG
 TCLP/SPLP Extraction Date: 05/26/23 05:45

Extraction Method: EPA 3510C
 Extraction Date: 06/01/23 12:51

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Pesticides by EPA 1311 - Westborough Lab for sample(s): 02 Batch: WG1786021-1						
Lindane	ND		ug/l	0.100	0.022	A
Heptachlor	ND		ug/l	0.100	0.016	A
Heptachlor epoxide	ND		ug/l	0.100	0.021	A
Endrin	ND		ug/l	0.200	0.021	A
Methoxychlor	ND		ug/l	1.00	0.034	A
Toxaphene	ND		ug/l	1.00	0.314	A
Chlordane	ND		ug/l	1.00	0.232	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	129		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	104		30-150	B

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 06/06/23 11:58
Analyst: ER
TCLP/SPLP Extraction Date: 06/02/23 18:22
Methylation Date: 06/06/23 06:01

Extraction Method: EPA 8151A
Extraction Date: 06/05/23 10:44

Parameter	Result	Qualifier	Units	RL	MDL	Column
TCLP Herbicides by EPA 1311 - Westborough Lab for sample(s): 02 Batch: WG1787263-1						
2,4-D	ND		mg/l	0.025	0.001	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	48		30-150	A
DCAA	46		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Pesticides by EPA 1311 - Westborough Lab Associated sample(s): 02 Batch: WG1786021-2 WG1786021-3									
Lindane	97		102		30-150	5		20	A
Heptachlor	102		106		30-150	4		20	A
Heptachlor epoxide	99		105		30-150	6		20	A
Endrin	99		105		30-150	6		20	A
Methoxychlor	102		110		30-150	8		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		86		30-150	A
Decachlorobiphenyl	118		125		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		78		30-150	B
Decachlorobiphenyl	99		103		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
TCLP Herbicides by EPA 1311 - Westborough Lab Associated sample(s): 02 Batch: WG1787263-2 WG1787263-3									
2,4-D	259	Q	92		30-150	95	Q	25	A
2,4,5-TP (Silvex)	43		40		30-150	7		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	48		47		30-150	A
DCAA	55		52		30-150	B

METALS

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-01

Date Collected: 05/25/23 13:30

Client ID: DRUMMED WATER COMP. 2

Date Received: 05/25/23

Sample Location: WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	41.2		mg/l	0.0100	0.00327	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00438		mg/l	0.00400	0.00042	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.03920		mg/l	0.00050	0.00016	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Barium, Total	3.917		mg/l	0.00050	0.00017	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00464		mg/l	0.00050	0.00010	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00024		mg/l	0.00020	0.00005	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Calcium, Total	33.5		mg/l	0.100	0.0394	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Chromium, Total	0.07220		mg/l	0.00100	0.00017	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.02555		mg/l	0.00050	0.00016	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Copper, Total	0.09191		mg/l	0.00100	0.00038	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Iron, Total	81.9		mg/l	0.0500	0.0191	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Lead, Total	0.05243		mg/l	0.00100	0.00034	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Magnesium, Total	24.4		mg/l	0.0700	0.0242	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Manganese, Total	1.912		mg/l	0.00100	0.00044	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/08/23 00:15	06/13/23 14:12	EPA 7470A	1,7470A	DMB
Nickel, Total	0.06970		mg/l	0.00200	0.00055	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Potassium, Total	30.2		mg/l	0.100	0.0309	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Selenium, Total	0.00768		mg/l	0.00500	0.00173	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Sodium, Total	68.8		mg/l	0.100	0.0293	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00056	J	mg/l	0.00100	0.00014	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.08382		mg/l	0.00500	0.00157	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV
Zinc, Total	0.1253		mg/l	0.01000	0.00341	1	06/07/23 23:00	06/08/23 16:36	EPA 3005A	1,6020B	SMV



Project Name: FRIEDRICHSON SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23**SAMPLE RESULTS**

Lab ID: L2329534-02

Date Collected: 05/25/23 14:00

Client ID: DRUMMED SOIL COMP. 2

Date Received: 05/25/23

Sample Location: WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 05/27/23 06:08

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL
Barium, TCLP	0.876		mg/l	0.500	0.0210	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/09/23 17:45	06/19/23 18:18	EPA 7470A	1,7470A	MJR
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/09/23 23:06	06/18/23 11:13	EPA 3015	1,6010D	DHL



Project Name: FRIEDRICHSON SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1788389-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Sodium, Total	0.0708	J	mg/l	0.100	0.0293	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/07/23 23:00	06/08/23 14:06	1,6020B	SMV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1788391-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/08/23 00:15	06/08/23 19:35	1,7470A	DJR



Project Name: FRIEDRICHSON SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 02 Batch: WG1789383-1										
Arsenic, TCLP	ND		mg/l	1.00	0.0190	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL
Barium, TCLP	ND		mg/l	0.500	0.0210	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL
Lead, TCLP	ND		mg/l	0.500	0.0270	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL
Selenium, TCLP	ND		mg/l	0.500	0.0350	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL
Silver, TCLP	ND		mg/l	0.100	0.0280	1	06/09/23 23:06	06/18/23 10:55	1,6010D	DHL

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 05/26/23 05:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 02 Batch: WG1789385-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	06/09/23 17:45	06/19/23 17:54	1,7470A	MJR

Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 05/26/23 05:45



Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1788389-2								
Aluminum, Total	114		-		80-120	-		
Antimony, Total	84		-		80-120	-		
Arsenic, Total	93		-		80-120	-		
Barium, Total	97		-		80-120	-		
Beryllium, Total	101		-		80-120	-		
Cadmium, Total	98		-		80-120	-		
Calcium, Total	104		-		80-120	-		
Chromium, Total	100		-		80-120	-		
Cobalt, Total	96		-		80-120	-		
Copper, Total	98		-		80-120	-		
Iron, Total	96		-		80-120	-		
Lead, Total	92		-		80-120	-		
Magnesium, Total	110		-		80-120	-		
Manganese, Total	103		-		80-120	-		
Nickel, Total	96		-		80-120	-		
Potassium, Total	112		-		80-120	-		
Selenium, Total	91		-		80-120	-		
Silver, Total	98		-		80-120	-		
Sodium, Total	112		-		80-120	-		
Thallium, Total	96		-		80-120	-		
Vanadium, Total	101		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1788389-2					
Zinc, Total	98	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1788391-2					
Mercury, Total	98	-	80-120	-	
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 02 Batch: WG1789383-2					
Arsenic, TCLP	98	-	75-125	-	20
Barium, TCLP	91	-	75-125	-	20
Cadmium, TCLP	97	-	75-125	-	20
Chromium, TCLP	95	-	75-125	-	20
Lead, TCLP	92	-	75-125	-	20
Selenium, TCLP	98	-	75-125	-	20
Silver, TCLP	90	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 02 Batch: WG1789385-2					
Mercury, TCLP	100	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1788389-3 QC Sample: L2329184-06 Client ID: MS Sample												
Aluminum, Total	0.031	2	2.39	118		-	-		75-125	-		20
Antimony, Total	ND	0.5	0.4451	89		-	-		75-125	-		20
Arsenic, Total	0.00104	0.12	0.1237	102		-	-		75-125	-		20
Barium, Total	0.01447	2	2.094	104		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05370	107		-	-		75-125	-		20
Cadmium, Total	ND	0.053	0.05519	104		-	-		75-125	-		20
Calcium, Total	10.6	10	23.4	128	Q	-	-		75-125	-		20
Chromium, Total	0.00019J	0.2	0.2154	108		-	-		75-125	-		20
Cobalt, Total	0.0003J	0.5	0.5160	103		-	-		75-125	-		20
Copper, Total	0.00072J	0.25	0.2681	107		-	-		75-125	-		20
Iron, Total	0.482	1	1.46	98		-	-		75-125	-		20
Lead, Total	ND	0.53	0.5184	98		-	-		75-125	-		20
Magnesium, Total	2.18	10	13.7	115		-	-		75-125	-		20
Manganese, Total	0.1070	0.5	0.6663	112		-	-		75-125	-		20
Nickel, Total	0.0007J	0.5	0.5192	104		-	-		75-125	-		20
Potassium, Total	1.49	10	13.4	119		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.128	107		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05201	104		-	-		75-125	-		20
Sodium, Total	18.6	10	32.3	137	Q	-	-		75-125	-		20
Thallium, Total	0.0001J	0.12	0.1223	102		-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.5363	107		-	-		75-125	-		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1788389-3 QC Sample: L2329184-06 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.5355	107	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1788391-3 QC Sample: L2331684-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00484	97	-	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789383-3 QC Sample: L2329386-01 Client ID: MS Sample									
Arsenic, TCLP	ND	1.2	1.21	101	-	-	75-125	-	20
Barium, TCLP	0.570	20	19.4	94	-	-	75-125	-	20
Cadmium, TCLP	0.0111J	0.53	0.547	103	-	-	75-125	-	20
Chromium, TCLP	ND	2	1.94	97	-	-	75-125	-	20
Lead, TCLP	1.82	5.3	6.79	94	-	-	75-125	-	20
Selenium, TCLP	ND	1.2	1.25	104	-	-	75-125	-	20
Silver, TCLP	ND	0.5	0.475	95	-	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789385-3 QC Sample: L2329386-01 Client ID: MS Sample									
Mercury, TCLP	ND	0.025	0.0251	100	-	-	75-125	-	20

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L2329534
Report Date: 06/20/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1788389-4 QC Sample: L2329184-06 Client ID: DUP Sample						
Arsenic, Total	0.00104	0.00112	mg/l	7		20
Barium, Total	0.01447	0.01516	mg/l	5		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00019J	0.00018J	mg/l	NC		20
Copper, Total	0.00072J	0.00048J	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Manganese, Total	0.1070	0.1139	mg/l	6		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1788391-4 QC Sample: L2331684-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L2329534
Report Date: 06/20/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789383-4 QC Sample: L2329386-01 Client ID: DUP Sample					
Arsenic, TCLP	ND	ND	mg/l	NC	20
Barium, TCLP	0.570	0.585	mg/l	3	20
Cadmium, TCLP	0.0111J	0.0109J	mg/l	NC	20
Chromium, TCLP	ND	ND	mg/l	NC	20
Lead, TCLP	1.82	1.82	mg/l	0	20
Selenium, TCLP	ND	ND	mg/l	NC	20
Silver, TCLP	ND	ND	mg/l	NC	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1789385-4 QC Sample: L2329386-01 Client ID: DUP Sample					
Mercury, TCLP	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: FRIEDRICHSON SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-02

Client ID: DRUMMED SOIL COMP. 2

Sample Location: WATERFORD, NY

Date Collected: 05/25/23 14:00

Date Received: 05/25/23

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Test Material Information

Source of Material: Unknown

Description of Material: Non-Metallic - Wet Paste

Particle Size: Medium

Preliminary Burning Time (sec): 120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	06/08/23 09:51	1,1030	MMJ



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-01

Date Collected: 05/25/23 13:30

Client ID: DRUMMED WATER COMP. 2

Date Received: 05/25/23

Sample Location: WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	8.83		SU	-	NA	1	-	06/09/23 18:43	1,9040C	AAS
Flash Point	>150		deg F	70	NA	1	-	06/05/23 13:07	1,1010A	AAA
Cyanide, Reactive	ND		mg/l	1.0	1.0	1	05/31/23 12:10	05/31/23 13:57	125,7.3	MMJ
Sulfide, Reactive	ND		mg/l	1.0	1.0	1	05/31/23 12:10	05/31/23 13:29	125,7.3	MMJ



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

SAMPLE RESULTS

Lab ID: L2329534-02

Date Collected: 05/25/23 14:00

Client ID: DRUMMED SOIL COMP. 2

Date Received: 05/25/23

Sample Location: WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.8		%	0.100	NA	1	-	05/27/23 11:38	121,2540G	ROI
pH (H)	7.77		SU	-	NA	1	-	06/12/23 22:56	1,9045D	AAS
Cyanide, Reactive	ND		mg/kg	10	10.	1	06/07/23 09:35	06/07/23 12:01	125,7.3	MMJ
Sulfide, Reactive	ND		mg/kg	10	10.	1	06/07/23 09:35	06/07/23 10:47	125,7.3	MMJ



Project Name: FRIEDRICHSON SITE

Lab Number: L2329534

Project Number: 060017.000

Report Date: 06/20/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1784964-1										
Sulfide, Reactive	ND		mg/l	1.0	1.0	1	05/31/23 12:10	05/31/23 13:27	125,7.3	MMJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1785263-1										
Cyanide, Reactive	ND		mg/l	1.0	1.0	1	05/31/23 12:10	05/31/23 13:56	125,7.3	MMJ
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1787694-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	06/07/23 09:35	06/07/23 10:42	125,7.3	MMJ
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1788161-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	06/07/23 09:35	06/07/23 11:57	125,7.3	MMJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1784964-2								
Sulfide, Reactive	88		-		60-125	-		25
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1785263-2								
Cyanide, Reactive	88		-		30-125	-		25
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1787289-1								
Flash Point	100		-		96-104	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1787694-2								
Sulfide, Reactive	74		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1788161-2								
Cyanide, Reactive	84		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1789477-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1790378-1								
pH	100		-		99-101	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329534

Report Date: 06/20/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1784239-1 QC Sample: L2327351-12 Client ID: DUP Sample						
Solids, Total	83.4	83.2	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1784964-3 QC Sample: L2329371-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/l	NC		25
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1785263-3 QC Sample: L2329371-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/l	NC		25
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1787694-3 QC Sample: L2329534-02 Client ID: DRUMMED SOIL COMP. 2						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1788161-3 QC Sample: L2329534-02 Client ID: DRUMMED SOIL COMP. 2						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1789477-2 QC Sample: L2331645-01 Client ID: DUP Sample						
pH	4.56	4.47	SU	2		5
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1790378-2 QC Sample: L2329559-02 Client ID: DUP Sample						
pH	7.89	7.85	SU	1		5

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Serial_No:06202309:41
Lab Number: L2329534
Report Date: 06/20/23

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2329534-01A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L2329534-01B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L2329534-01C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L2329534-01D	Amber 120ml unpreserved	A	10	10	3.9	Y	Absent		NYTCL-8082-LVI(365)
L2329534-01E	Amber 120ml unpreserved	A	10	10	3.9	Y	Absent		NYTCL-8082-LVI(365)
L2329534-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L2329534-01G	Amber 250ml unpreserved	A	10	10	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2329534-01H	Amber 250ml unpreserved	A	10	10	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2329534-01I	Amber 500ml unpreserved	A	10	10	3.9	Y	Absent		REACTS(7),REACTCN(7),FLASH()
L2329534-01J	Plastic 120ml unpreserved	A	10	10	3.9	Y	Absent		PH-9040(1)
L2329534-02A	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L2329534-02B	Vial Large Septa unpreserved (4oz)	A	NA		3.9	Y	Absent		TCLP-EXT-ZHE(14)
L2329534-02C	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2329534-02W	Amber 1000ml unpreserved Extracts	A	NA		3.9	Y	Absent		TCLP-8270(14),HERB-TCLP*(14),PEST-TCLP*(14)
L2329534-02W1	Amber 1000ml unpreserved Extracts	NA	NA			Y	Absent		HERB-TCLP*(14)
L2329534-02X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2329534-02X9	Tumble Vessel	A	NA		3.9	Y	Absent		-

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Serial_No:06202309:41
Lab Number: L2329534
Report Date: 06/20/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2329534-02Y	Vial unpreserved Extracts	A	NA		3.9	Y	Absent		TCLP-VOA(14)
L2329534-02Z	Vial unpreserved Extracts	A	NA		3.9	Y	Absent		TCLP-VOA(14)

Project Name: FRIEDRICHSOHN SITE**Lab Number:** L2329534**Project Number:** 060017.000**Report Date:** 06/20/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329534
Report Date: 06/20/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 20

Published Date: 6/16/2023 4:52:28 PM

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>2</u> of <u>2</u>		Date Rec'd in Lab <u>5/20/23</u>		ALPHA Job # <u>10329534</u>																																																																																																																																																																																										
		Project Information Project Name: <u>Frederickson Site</u> Project Location: <u>Rte 32, Watertown, N.Y.</u> Project # <u>0600171000</u> (Use Project name as Project #) ☐ Project Manager: <u>Scott Smith</u> ALPHAQuote #: _____ Turn-Around Time Standard ☒ Due Date: _____ Rush (only if pre approved) ☐ # of Days: _____		Deliverables ☒ ASP-A ☐ ASP-B ☐ EQulS (1 File) ☐ EQulS (4 File) ☐ Other _____		Billing Information ☒ Same as Client Info PO #: _____																																																																																																																																																																																												
Client Information Client: <u>CHA</u> Address: <u>3 Winners Circle</u> <u>Albany, NY 12205</u> Phone: _____ Fax: _____ Email: <u>jfourneau@charson.com</u>		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☒ Other _____ ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☒ NY ☐ Other: _____																																																																																																																																																																																														
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments: _____ Please specify Metals or TAL: _____		ANALYSIS <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Total Solids</th> <th>TCLP VOC</th> <th>TCLP ABW Compound</th> <th>TCLP Particulate</th> <th>TCLP Heavy Metals</th> <th>Equitability/Reactivity</th> <th>pH-Hydrogen Ion</th> <th>TCLP PCB's</th> <th>TCLP PCB's & Metals</th> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </table>		Total Solids	TCLP VOC	TCLP ABW Compound	TCLP Particulate	TCLP Heavy Metals	Equitability/Reactivity	pH-Hydrogen Ion	TCLP PCB's	TCLP PCB's & Metals	✓	✓	✓	✓	✓	✓	✓	✓	✓	Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below) Sample Specific Comments: _____																																																																																																																																																																												
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ALPHA Lab ID (Lab Use Only)	Sample ID			Collection															Sample Matrix	Sampler's Initials	Total Solids	TCLP VOC	TCLP ABW Compound	TCLP Particulate	TCLP Heavy Metals	Equitability/Reactivity	pH-Hydrogen Ion	TCLP PCB's	TCLP PCB's & Metals	Sample Specific Comments	Total Bottles																																																																																																																																																																			
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Attachment 4

Waste Disposal Documentation

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

N/A

Manifest Document No.

2023-2004

2. Page 1 of 1

3. Generator's Name and Mailing Address

Friedrichsohn Cooperage Trust
153-155 Sara to 99 Avenue
Waterford, NY 12188

4. Generator's Phone

(315) 257-7250

5. Transporter 1 Company Name

Corbett Industrial Cleaning Services Inc.

6. US EPA ID Number

NYR000235168

7. Transporter 2 Company Name

Veolia ES Technical Solutions

8. US EPA ID Number

MSD0671369

9. Designated Facility Name and Site Address

Veolia ES Technical Solutions LLC
1 Eden Lane
Flanders, NJ 07836

10. US EPA ID Number

NJD980536593

A. State Transporter's ID

4A-70B

B. Transporter 1 Phone

518-560-910

C. State Transporter's ID

D. Transporter 2 Phone

E. State Facility's ID

1-973-347-7111

F. Facility's Phone

11. WASTE DESCRIPTION

a. Non-RCRA Non-DOT Regulated Solid
(Soil - drill cuttings)

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt./Vol.

3

DM

1500

P

b. Non-RCRA Non-DOT Regulated Liquid
(Purge Water)

3

DM

1500

P

G. Additional Descriptions for Materials Listed Above

11a.) Profile # 1134866 ERC-LF (NJ-ID72)
11b.) Profile # 1134869 ERC-LF (NJ-ID72)

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Lic. Plate # NY

24965NA

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Caroline Hurlbert

Printed/Typed Name

Agent for Friedrichsohn Cooperage

Signature

Date

Month Day Year
1/19/23

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Will Shippy

Signature

Date

Month Day Year
1/19/23

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

A. Bellini

Signature

Date

Month Day Year
1/19/23

19. Discrepancy Indication Space

1. H141 2. H141

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name

James Christopher

Signature

Date

Month Day Year
1/20/23



NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

BT

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <u>N/A</u>		Manifest Document No. <u>2023-2030</u>		2. Page 1 of <u>2</u>	
3. Generator's Name and Mailing Address <u>Friedrichsohn Cooperage Trust</u> <u>153-155 SARATOGA AVE WATERFORD, NY 12188</u>							
4. Generator's Phone (315) <u>257-7250</u>							
5. Transporter 1 Company Name <u>SVS INC.</u>		6. US EPA ID Number <u>NY12000235168</u>		A. State Transporter's ID <u>4A-708</u>			
7. Transporter 2 Company Name <u>Verolia Technical Solutions</u>		8. US EPA ID Number <u>NJ1080631369</u>		B. Transporter 1 Phone <u>(518) 439-3950</u>			
9. Designated Facility Name and Site Address <u>Verolia ES Technical Solutions LLC</u> <u>1 EDEN LANE</u> <u>ELANDERS, NJ 07836</u>		10. US EPA ID Number <u>NJD980536593</u>		C. State Transporter's ID			
				D. Transporter 2 Phone			
				E. State Facility's ID			
				F. Facility's Phone <u>(973) 347-7111</u>			
11. WASTE DESCRIPTION				12. Containers		13. Total Quantity	
				No. Type		Unit Wt./Vol.	
a. <u>NON RCRA NON DOT Regulated Solid</u> <u>(SOIL - DRILL CUTTINGS)</u>				<u>2</u> <u>DM</u>		<u>900</u> <u>P</u>	
b. <u>NON RCRA NON DOT Regulated Liquid</u> <u>(PURGE WATER)</u>				<u>14</u> <u>DM</u>		<u>9800</u> <u>11,200</u> <u>P</u>	
c.							
d.							
G. Additional Descriptions for Materials Listed Above				H. Handling Codes for Wastes Listed Above			
<u>11a), Profile # 1134866 ERC-LF</u>				<u>11a) NJ-ID-27 L</u>			
<u>11b), Profile # 1134869 ERC-LF</u>				<u>11b) NJ-ID-72 L</u>			
15. Special Handling Instructions and Additional Information <u>Lic. Plate # NY</u> <u>24965 NA</u>							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name <u>James E. Herrick III (Gen'l for SIE Corp)</u>				Signature <u>[Signature]</u>		Date Month <u>7</u> Day <u>24</u> Year <u>23</u>	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature <u>[Signature]</u>		Date Month <u>7</u> Day <u>24</u> Year <u>23</u>	
Printed/Typed Name <u>Robert Van Heusen</u>				Signature <u>[Signature]</u>		Date Month <u>7</u> Day <u>24</u> Year <u>23</u>	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature <u>[Signature]</u>		Date Month <u>7</u> Day <u>24</u> Year <u>23</u>	
Printed/Typed Name <u>Chris Krzanicki</u>				Signature <u>[Signature]</u>		Date Month <u>7</u> Day <u>24</u> Year <u>23</u>	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name <u>James Christopher</u>				Signature <u>[Signature]</u>		Date Month <u>08</u> Day <u>01</u> Year <u>23</u>	



**SHIPPING DOCUMENT
(Continuation Sheet)**

21. Generator ID Number

N/A

22. Page

2 of 2

23. Shipping Document Tracking Number

2023-2030

24. Generator's Name

Friedrichson Cooperative Trust

25. Transporter 3 Company Name

Freehold Cartage Inc.

U.S. EPA ID Number

MSD 054126164

26. Transporter _____ Company Name

U.S. EPA ID Number

27a. HM 27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))

28. Containers

No.

Type

29. Total Quantity

30. Unit Wt./Vol.

31. Codes

For Transporter use only

32. Special Handling Instructions and Additional Information

33. Transporter 3 Acknowledgment of Receipt of Shipment

Printed/Typed Name

Paul Schillinger

Signature

Paul Schillinger

Month Day Year

07/31/23

34. Transporter Acknowledgment of Receipt of Shipment

Printed/Typed Name

Signature

Month Day Year

35. Discrepancy

36. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)

DESIGNATED FACILITY TO GENERATOR

Attachment 5

Monitoring Well Sampling Logs



Logged By: CRH, JF

Date: 5.22.23

Instrument: HERON WATER LEVEL METER

[illegible]

Comments:



Monitoring Well Sampling/ Development Log

Sample/Well ID: MW-102B

Project Number: 060017.000

Sampling Date: 5.22.23

Project/Facility Name: Friedrichsohn Site

Logged By: CRH, JF

Project Location/Sampling Event: Waterford, NY

Weather/Temp: sunny, 75°

Purging/Sampling Method: P = Purging Method S = Sampling Method

Water Level Measurement Device:

☐ ☐ Submersible Pump Model: _____

☒ Water Level Meter Model: Heron

☐ ☐ Peristaltic Pump Model: _____☐ Interface Probe Model: _____☐ ☐ Dedicated Pump Model: _____

Water Quality Instrumentation:

☒ ☒ MicroPurge Pump Model: QED ☐ Dedicated ☒ Disposable

Instrument: YSI Pro DSS

☐ ☐ Bailer Type: _____

Instrument:

☐ ☐ Other:

Instrument:

Time Well Unlocked:

Time Well Locked: _____

Headspace Reading: _____ ppm ☒ N/A

Depth to Static Water Level (ft.): 6.29

☒ Flush-mount casing ☐ Stickup casing

Pump Intake Depth (ft.): ~~50~~ 40' bgs

Flow Rate (mL/min):

Controller ID No.: _____

Monitoring Well Condition: A = Acceptable U = Unacceptable

A	U	
☒	☐	Well visibility
☐	☒	Well Identification
☐	☒	Well lock/security
☒	☐	Well cap & gripper plug

A U

☒	☐	Surface seal
☒	☐	Surface casing condition
☒	☐	Corrosion of surface casing
☒	☐	Inner Casing/Screen Integrity

~~A~~ ~~U~~

~~☐~~ ☐ Total depth

~~☐~~ ☐ Siltation level

~~☐~~ ☐ Recharge Rate

☐ ☐ Other: _____

Field Analysis:

[illegible]

Start Purge Time: 13:00 Total Vol. Purged: _____ gal. Odor: No Purge Water Disposal Method: Down

End Purge Time: 13:48 Total Purge Time: 48 min Color: Gray Sheen Observed?: No

Sampling Information: Sampling Time: 14:00 Laboratory: AZURA

Sample Analyses: See Col No. Bottles: 15

Comments/Additional Observations:

Signature(s) of Sampling Team:

\\OH Data\Technical Groups\Env\Planning\Technical Info\SOPs\Final SOPs\Forms\Well Losses\Well Samolind\Draft - DO NOT USE - 2013 Updated Well Samolind Loa.doc

Attachment 6

May 2023 Laboratory Analytical Results



ANALYTICAL REPORT

Lab Number:	L2328902
Client:	CHA Companies 3 Winners Circle Albany, NY 12205
ATTN:	Scott Smith
Phone:	(518) 453-2869
Project Name:	FRIEDRICHSOHN SITE
Project Number:	060017.000
Report Date:	06/08/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2328902-01	MW-102-20230522	WATER	Not Specified	05/22/23 11:45	05/23/23
L2328902-02	MW-102B-20230522	WATER	Not Specified	05/22/23 14:00	05/23/23
L2328902-03	MW-100-20230522	WATER	Not Specified	05/22/23 16:40	05/23/23
L2328902-04	MW-101B-20230523	WATER	Not Specified	05/23/23 09:20	05/23/23
L2328902-05	MW-103B-20230523	WATER	Not Specified	05/23/23 11:45	05/23/23
L2328902-06	MW-103-20230523	WATER	Not Specified	05/23/23 15:00	05/23/23
L2328902-07	MW-104-20230523	WATER	Not Specified	05/23/23 16:30	05/23/23
L2328902-08	CHA-1-20230522	WATER	Not Specified	05/22/23 18:00	05/23/23
L2328902-09	RINSE-20230522	WATER	Not Specified	05/22/23 15:15	05/23/23
L2328902-10	TRIP BLANK	WATER	Not Specified	05/22/23 00:00	05/23/23

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Case Narrative

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

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

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

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

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

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Case Narrative (continued)

Report Submission

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

PCBs

L2328902-06 contains peaks which match the retention times for Aroclor 1242, but do not match the area ratios typical for this aroclor. The result for Aroclor 1242 is reported as "altered".

Total Metals

L2328902-04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1786091-3 MS recovery, performed on L2328902-06, is outside the acceptance criteria for calcium (153%). A post digestion spike was performed and was within acceptance criteria.

The WG1786091-3 MS recovery for sodium (210%), performed on L2328902-06, does not apply because the sample concentration is greater than four times the spike amount added.

Nitrogen, Ammonia

WG1787885: A Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however, the native sample was not available for reporting; therefore, the results could not be reported.

Total Alkalinity

The WG1786334-4 MS recovery, performed on L2328902-09, is outside the acceptance criteria for alkalinity, total (77%); however, the associated LCS recovery is within criteria. No further action was taken.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 06/08/23

ORGANICS

VOLATILES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 22:28
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.38	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	113		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 22:07
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	160		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	30		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 21:46
Analyst: MJV

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 21:25
Analyst: MJV

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	4.1	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	112		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 21:04
Analyst: MJV

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	4.2	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 20:44
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	2.1	J	ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	1.9		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07 D
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 20:23
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	ND		ug/l	1.2	0.45	2.5
Chlorobenzene	15		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	7.7		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	190		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Trichloroethene	ND		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07 D
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	320		ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/01/23 21:06
Analyst: MJV

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	111		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 19:41
Analyst: MJV

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-10
Client ID: TRIP BLANK
Sample Location: Not Specified

Date Collected: 05/22/23 00:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 05/31/23 19:20
Analyst: MJV

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-10
Client ID: TRIP BLANK
Sample Location: Not Specified

Date Collected: 05/22/23 00:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 05/31/23 19:00
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09-10 Batch: WG1786055-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 05/31/23 19:00
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09-10 Batch: WG1786055-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 05/31/23 19:00
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09-10 Batch: WG1786055-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	110		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/01/23 17:59
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1786504-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/01/23 17:59
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1786504-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/01/23 17:59
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1786504-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-10 Batch: WG1786055-3 WG1786055-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	96		96		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	91		93		70-130	2		20
cis-1,3-Dichloropropene	93		93		70-130	0		20
Bromoform	87		86		54-136	1		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	98		98		70-130	0		20
Chloromethane	110		110		64-130	0		20
Bromomethane	54		51		39-139	6		20
Vinyl chloride	110		110		55-140	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-10 Batch: WG1786055-3 WG1786055-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	93		94		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	96		97		63-130	1		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	100		110		58-148	10		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	99		99		63-138	0		20
4-Methyl-2-pentanone	86		84		59-130	2		20
2-Hexanone	84		86		57-130	2		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	97		97		41-144	0		20
Isopropylbenzene	97		96		70-130	1		20
1,2,3-Trichlorobenzene	98		97		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-10 Batch: WG1786055-3 WG1786055-4								
1,2,4-Trichlorobenzene	97		98		70-130	1		20
Methyl Acetate	100		110		70-130	10		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	84		82		56-162	2		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	98		96		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		114		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	108		106		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1786504-3 WG1786504-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	95		100		63-130	5		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	97		100		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	98		100		67-130	2		20
trans-1,3-Dichloropropene	91		95		70-130	4		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	88		92		54-136	4		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	97		100		70-130	3		20
Ethylbenzene	94		97		70-130	3		20
Chloromethane	96		99		64-130	3		20
Bromomethane	37	Q	43		39-139	15		20
Vinyl chloride	100		110		55-140	10		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1786504-3 WG1786504-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	92		99		70-130	7		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	95		98		63-130	3		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		97		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	100		100		36-147	0		20
Acetone	120		120		58-148	0		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	110		120		63-138	9		20
4-Methyl-2-pentanone	88		96		59-130	9		20
2-Hexanone	90		99		57-130	10		20
Bromochloromethane	98		98		70-130	0		20
1,2-Dibromoethane	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	99		110		41-144	11		20
Isopropylbenzene	94		94		70-130	0		20
1,2,3-Trichlorobenzene	95		99		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1786504-3 WG1786504-4								
1,2,4-Trichlorobenzene	93		98		70-130	5		20
Methyl Acetate	110		110		70-130	0		20
Cyclohexane	100		110		70-130	10		20
1,4-Dioxane	88		92		56-162	4		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	92		90		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		118		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	104		104		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-10 QC Batch ID: WG1786055-6 WG1786055-7 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Methylene chloride	ND	10	11	110		12	120		70-130	9		20
1,1-Dichloroethane	ND	10	12	120		12	120		70-130	0		20
Chloroform	ND	10	12	120		12	120		70-130	0		20
Carbon tetrachloride	ND	10	13	130		13	130		63-132	0		20
1,2-Dichloropropane	ND	10	12	120		12	120		70-130	0		20
Dibromochloromethane	ND	10	11	110		11	110		63-130	0		20
1,1,2-Trichloroethane	ND	10	12	120		11	110		70-130	9		20
Tetrachloroethene	ND	10	11	110		12	120		70-130	9		20
Chlorobenzene	2.1J	10	14	140	Q	14	140	Q	75-130	0		20
Trichlorofluoromethane	ND	10	13	130		13	130		62-150	0		20
1,2-Dichloroethane	ND	10	12	120		12	120		70-130	0		20
1,1,1-Trichloroethane	ND	10	12	120		13	130		67-130	8		20
Bromodichloromethane	ND	10	11	110		11	110		67-130	0		20
trans-1,3-Dichloropropene	ND	10	10	100		10	100		70-130	0		20
cis-1,3-Dichloropropene	ND	10	9.5	95		10	100		70-130	5		20
Bromoform	ND	10	9.7	97		9.5	95		54-136	2		20
1,1,2,2-Tetrachloroethane	ND	10	12	120		11	110		67-130	9		20
Benzene	1.9	10	14	121		14	121		70-130	0		20
Toluene	ND	10	11	110		11	110		70-130	0		20
Ethylbenzene	ND	10	11	110		11	110		70-130	0		20
Chloromethane	ND	10	12	120		12	120		64-130	0		20
Bromomethane	ND	10	4.5	45		5.5	55		39-139	20		20
Vinyl chloride	ND	10	13	130		13	130		55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-10 QC Batch ID: WG1786055-6 WG1786055-7 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Chloroethane	ND	10	12	120		13	130		55-138	8		20
1,1-Dichloroethene	ND	10	12	120		13	130		61-145	8		20
trans-1,2-Dichloroethene	ND	10	11	110		12	120		70-130	9		20
Trichloroethene	ND	10	11	110		11	110		70-130	0		20
1,2-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,3-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,4-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
Methyl tert butyl ether	ND	10	10	100		11	110		63-130	10		20
p/m-Xylene	ND	20	23	115		23	115		70-130	0		20
o-Xylene	ND	20	22	110		22	110		70-130	0		20
cis-1,2-Dichloroethene	ND	10	11	110		12	120		70-130	9		20
Styrene	ND	20	22	110		22	110		70-130	0		20
Dichlorodifluoromethane	ND	10	12	120		13	130		36-147	8		20
Acetone	ND	10	12	120		13	130		58-148	8		20
Carbon disulfide	ND	10	12	120		12	120		51-130	0		20
2-Butanone	ND	10	10	100		11	110		63-138	10		20
4-Methyl-2-pentanone	ND	10	9.7	97		10	100		59-130	3		20
2-Hexanone	ND	10	9.8	98		9.7	97		57-130	1		20
Bromochloromethane	ND	10	12	120		12	120		70-130	0		20
1,2-Dibromoethane	ND	10	12	120		12	120		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	11	110		11	110		41-144	0		20
Isopropylbenzene	ND	10	11	110		11	110		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	11	110		10	100		70-130	10		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-10 QC Batch ID: WG1786055-6 WG1786055-7 QC Sample: L2328902-06 Client ID: MW-103-20230523												
1,2,4-Trichlorobenzene	ND	10	10	100		10	100		70-130	0		20
Methyl Acetate	ND	10	11	110		11	110		70-130	0		20
Cyclohexane	ND	10	12	120		12	120		70-130	0		20
1,4-Dioxane	ND	500	430	86		470	94		56-162	9		20
Freon-113	ND	10	13	130		13	130		70-130	0		20
Methyl cyclohexane	ND	10	11	110		11	110		70-130	0		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		114		70-130
4-Bromofluorobenzene	101		99		70-130
Dibromofluoromethane	113		110		70-130
Toluene-d8	100		97		70-130

SEMIVOLATILES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/01/23 04:09
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	61		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 19:39
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	82		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/31/23 06:58
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	17.		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	57		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 19:55
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.45		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.05	J	ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.09	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	108		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	63		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/31/23 06:35
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	2.2	J	ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	13.		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	82		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 20:12
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.31		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	113		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	125	Q	10-120
4-Terphenyl-d14	84		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/31/23 06:12
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	55		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 20:29
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	105		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	114		10-120
4-Terphenyl-d14	63		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/31/23 05:48
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	1.5	J	ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	83		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 20:45
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.05	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	115		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	137	Q	10-120
4-Terphenyl-d14	93		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/30/23 19:30
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	53		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/28/23 14:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.02	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.04	J	ug/l	0.10	0.01	1
Acenaphthylene	0.01	J	ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.07	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	73		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/29/23 03:07
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	61		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 21:02
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	65		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/31/23 05:25
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/27/23 01:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	1.8	J	ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	10.		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	65		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 21:19
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	74		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 05/31/23 05:01
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 05/27/23 01:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	76		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 21:35
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.07	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	87		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 05/28/23 13:51
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1784151-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 05/28/23 13:51
Analyst: CMM

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1784151-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	64		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 05/27/23 15:48
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-09 Batch: WG1784152-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
 Analytical Date: 05/27/23 15:48
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 05/26/23 23:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-09 Batch: WG1784152-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	70		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1784151-2 WG1784151-3								
Bis(2-chloroethyl)ether	73		72		40-140	1		30
3,3'-Dichlorobenzidine	56		57		40-140	2		30
2,4-Dinitrotoluene	79		76		48-143	4		30
2,6-Dinitrotoluene	70		66		40-140	6		30
4-Chlorophenyl phenyl ether	63		65		40-140	3		30
4-Bromophenyl phenyl ether	62		59		40-140	5		30
Bis(2-chloroisopropyl)ether	82		74		40-140	10		30
Bis(2-chloroethoxy)methane	77		68		40-140	12		30
Hexachlorocyclopentadiene	64		61		40-140	5		30
Isophorone	70		62		40-140	12		30
Nitrobenzene	73		70		40-140	4		30
NDPA/DPA	70		66		40-140	6		30
n-Nitrosodi-n-propylamine	69		66		29-132	4		30
Bis(2-ethylhexyl)phthalate	80		76		40-140	5		30
Butyl benzyl phthalate	86		76		40-140	12		30
Di-n-butylphthalate	78		71		40-140	9		30
Di-n-octylphthalate	83		80		40-140	4		30
Diethyl phthalate	78		73		40-140	7		30
Dimethyl phthalate	73		66		40-140	10		30
Biphenyl	61		57		40-140	7		30
4-Chloroaniline	62		63		40-140	2		30
2-Nitroaniline	73		72		52-143	1		30
3-Nitroaniline	63		71		25-145	12		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1784151-2 WG1784151-3								
4-Nitroaniline	76		74		51-143	3		30
Dibenzofuran	68		69		40-140	1		30
1,2,4,5-Tetrachlorobenzene	57		56		2-134	2		30
Acetophenone	63		59		39-129	7		30
2,4,6-Trichlorophenol	67		61		30-130	9		30
p-Chloro-m-cresol	67		64		23-97	5		30
2-Chlorophenol	71		68		27-123	4		30
2,4-Dichlorophenol	74		71		30-130	4		30
2,4-Dimethylphenol	61		51		30-130	18		30
2-Nitrophenol	86		79		30-130	8		30
4-Nitrophenol	79		72		10-80	9		30
2,4-Dinitrophenol	69		63		20-130	9		30
4,6-Dinitro-o-cresol	98		86		20-164	13		30
Phenol	47		46		12-110	2		30
2-Methylphenol	62		58		30-130	7		30
3-Methylphenol/4-Methylphenol	72		66		30-130	9		30
2,4,5-Trichlorophenol	68		60		30-130	13		30
Carbazole	70		67		55-144	4		30
Atrazine	71		66		40-140	7		30
Benzaldehyde	67		61		40-140	9		30
Caprolactam	29		27		10-130	7		30
2,3,4,6-Tetrachlorophenol	70		68		40-140	3		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1784151-2 WG1784151-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		57		21-120
Phenol-d6	49		46		10-120
Nitrobenzene-d5	82		77		23-120
2-Fluorobiphenyl	64		59		15-120
2,4,6-Tribromophenol	77		70		10-120
4-Terphenyl-d14	68		64		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG1784152-2 WG1784152-3								
Acenaphthene	68		66		40-140	3		40
2-Chloronaphthalene	69		68		40-140	1		40
Fluoranthene	70		68		40-140	3		40
Hexachlorobutadiene	60		58		40-140	3		40
Naphthalene	64		63		40-140	2		40
Benzo(a)anthracene	80		78		40-140	3		40
Benzo(a)pyrene	80		79		40-140	1		40
Benzo(b)fluoranthene	73		70		40-140	4		40
Benzo(k)fluoranthene	74		75		40-140	1		40
Chrysene	72		70		40-140	3		40
Acenaphthylene	77		76		40-140	1		40
Anthracene	74		73		40-140	1		40
Benzo(ghi)perylene	79		78		40-140	1		40
Fluorene	71		70		40-140	1		40
Phenanthrene	66		65		40-140	2		40
Dibenzo(a,h)anthracene	78		77		40-140	1		40
Indeno(1,2,3-cd)pyrene	77		76		40-140	1		40
Pyrene	68		65		40-140	5		40
2-Methylnaphthalene	71		70		40-140	1		40
Pentachlorophenol	85		83		40-140	2		40
Hexachlorobenzene	62		61		40-140	2		40
Hexachloroethane	66		65		40-140	2		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG1784152-2 WG1784152-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		58		21-120
Phenol-d6	49		50		10-120
Nitrobenzene-d5	86		87		23-120
2-Fluorobiphenyl	70		71		15-120
2,4,6-Tribromophenol	104		102		10-120
4-Terphenyl-d14	67		66		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1784151-4 WG1784151-5 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Bis(2-chloroethyl)ether	ND	18.2	10	55		13	72		40-140	26		30
3,3'-Dichlorobenzidine	ND	18.2	8.4	46		8.9	49		40-140	6		30
2,4-Dinitrotoluene	ND	18.2	12	66		14	77		48-143	15		30
2,6-Dinitrotoluene	ND	18.2	12	66		14	77		40-140	15		30
4-Chlorophenyl phenyl ether	ND	18.2	11	61		13	72		40-140	17		30
4-Bromophenyl phenyl ether	ND	18.2	11	61		13	72		40-140	17		30
Bis(2-chloroisopropyl)ether	ND	18.2	11	61		15	83		40-140	31	Q	30
Bis(2-chloroethoxy)methane	ND	18.2	11	61		15	83		40-140	31	Q	30
Hexachlorocyclopentadiene	ND	18.2	10.J	55		14.J	77		40-140	33	Q	30
Isophorone	ND	18.2	11	61		15	83		40-140	31	Q	30
Nitrobenzene	ND	18.2	11	61		15	83		40-140	31	Q	30
NDPA/DPA	ND	18.2	11	61		13	72		40-140	17		30
n-Nitrosodi-n-propylamine	ND	18.2	12	66		15	83		29-132	22		30
Bis(2-ethylhexyl)phthalate	ND	18.2	13	72		16	88		40-140	21		30
Butyl benzyl phthalate	ND	18.2	12	66		15	83		40-140	22		30
Di-n-butylphthalate	ND	18.2	12	66		15	83		40-140	22		30
Di-n-octylphthalate	ND	18.2	12	66		16	88		40-140	29		30
Diethyl phthalate	ND	18.2	12	66		14	77		40-140	15		30
Dimethyl phthalate	ND	18.2	12	66		14	77		40-140	15		30
Biphenyl	ND	18.2	11	61		13	72		40-140	17		30
4-Chloroaniline	ND	18.2	11	61		13	72		40-140	17		30
2-Nitroaniline	ND	18.2	13	72		16	88		52-143	21		30
3-Nitroaniline	ND	18.2	9.6	53		11	61		25-145	14		30

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1784151-4 WG1784151-5 QC Sample: L2328902-06 Client ID: MW-103-20230523												
4-Nitroaniline	ND	18.2	12	66		13	72		51-143	8		30
Dibenzofuran	ND	18.2	11	61		13	72		40-140	17		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	9.6J	53		13	72		2-134	30		30
Acetophenone	ND	18.2	9.7	53		13	72		39-129	29		30
2,4,6-Trichlorophenol	ND	18.2	12	66		14	77		30-130	15		30
p-Chloro-m-cresol	ND	18.2	14	77		17	94		23-97	19		30
2-Chlorophenol	ND	18.2	11	61		14	77		27-123	24		30
2,4-Dichlorophenol	ND	18.2	13	72		16	88		30-130	21		30
2,4-Dimethylphenol	ND	18.2	11	61		14	77		30-130	24		30
2-Nitrophenol	ND	18.2	12	66		16	88		30-130	29		30
4-Nitrophenol	ND	18.2	12	66		14	77		10-80	15		30
2,4-Dinitrophenol	ND	18.2	14.J	77		18.J	99		20-130	25		30
4,6-Dinitro-o-cresol	ND	18.2	14	77		16	88		20-164	13		30
Phenol	ND	18.2	6.9	38		9.6	53		12-110	33	Q	30
2-Methylphenol	ND	18.2	10	55		14	77		30-130	33	Q	30
3-Methylphenol/4-Methylphenol	ND	18.2	12	66		14	77		30-130	15		30
2,4,5-Trichlorophenol	ND	18.2	13	72		16	88		30-130	21		30
Carbazole	ND	18.2	12	66		14	77		55-144	15		30
Atrazine	ND	18.2	13	72		16	88		40-140	21		30
Benzaldehyde	ND	18.2	10	55		13	72		40-140	26		30
Caprolactam	ND	18.2	5.4J	30		6.7J	37		10-130	21		30
2,3,4,6-Tetrachlorophenol	ND	18.2	12	66		14	77		40-140	15		30

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1784151-4 WG1784151-5 QC Sample: L2328902-06 Client ID: MW-103-20230523												

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	75		92		10-120
2-Fluorobiphenyl	62		78		15-120
2-Fluorophenol	51		71		21-120
4-Terphenyl-d14	59		69		41-149
Nitrobenzene-d5	64		81		23-120
Phenol-d6	45		56		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1784152-4 WG1784152-5 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Acenaphthene	0.02J	18.2	11	61		13	72		40-140	17		40
2-Chloronaphthalene	ND	18.2	11	61		14	77		40-140	24		40
Fluoranthene	ND	18.2	12	66		13	72		40-140	8		40
Hexachlorobutadiene	ND	18.2	10	55		13	72		40-140	26		40
Naphthalene	ND	18.2	10	55		13	72		40-140	26		40
Benzo(a)anthracene	ND	18.2	13	72		15	83		40-140	14		40
Benzo(a)pyrene	ND	18.2	13	72		15	83		40-140	14		40
Benzo(b)fluoranthene	0.01J	18.2	12	66		14	77		40-140	15		40
Benzo(k)fluoranthene	0.01J	18.2	12	66		14	77		40-140	15		40
Chrysene	0.04J	18.2	12	66		14	77		40-140	15		40
Acenaphthylene	0.01J	18.2	12	66		15	83		40-140	22		40
Anthracene	ND	18.2	12	66		14	77		40-140	15		40
Benzo(ghi)perylene	ND	18.2	12	66		14	77		40-140	15		40
Fluorene	ND	18.2	12	66		14	77		40-140	15		40
Phenanthrene	ND	18.2	11	61		13	72		40-140	17		40
Dibenzo(a,h)anthracene	ND	18.2	12	66		14	77		40-140	15		40
Indeno(1,2,3-cd)pyrene	ND	18.2	12	66		14	77		40-140	15		40
Pyrene	ND	18.2	11	61		12	66		40-140	9		40
2-Methylnaphthalene	ND	18.2	12	66		14	77		40-140	15		40
Pentachlorophenol	0.07J	18.2	16	88		18	99		40-140	12		40
Hexachlorobenzene	ND	18.2	11	61		12	66		40-140	9		40
Hexachloroethane	ND	18.2	11	61		14	77		40-140	24		40

Matrix Spike Analysis**Batch Quality Control****Project Name:** FRIEDRICHSOHN SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23

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

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1784152-4 WG1784152-5 QC Sample: L2328902-06
 Client ID: MW-103-20230523

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	96		113		10-120
2-Fluorobiphenyl	66		77		15-120
2-Fluorophenol	52		63		21-120
4-Terphenyl-d14	63		69		41-149
Nitrobenzene-d5	79		96		23-120
Phenol-d6	45		55		10-120

PCBS

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:07
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:15
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:16
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	0.099		ug/l	0.071	0.061	1	B
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	0.099		ug/l	0.071	0.061	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	42		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	40		30-150	B
Decachlorobiphenyl	41		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:25
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:33
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	0.134		ug/l	0.071	0.061	1	B
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	0.134		ug/l	0.071	0.061	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	35		30-150	A
Decachlorobiphenyl	37		30-150	A
2,4,5,6-Tetrachloro-m-xylene	35		30-150	B
Decachlorobiphenyl	39		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:42
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	0.220		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	0.220		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	37		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06
Client ID: MW-103-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 15:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 19:16
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	1.11		ug/l	0.071	0.061	1	B
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	1.11		ug/l	0.071	0.061	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:51
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.071	0.061	1	A
Aroclor 1221	ND		ug/l	0.071	0.061	1	A
Aroclor 1232	ND		ug/l	0.071	0.061	1	A
Aroclor 1242	0.481		ug/l	0.071	0.061	1	A
Aroclor 1248	ND		ug/l	0.071	0.061	1	A
Aroclor 1254	ND		ug/l	0.071	0.061	1	A
Aroclor 1260	ND		ug/l	0.071	0.061	1	A
Aroclor 1262	ND		ug/l	0.071	0.061	1	A
Aroclor 1268	ND		ug/l	0.071	0.061	1	A
PCBs, Total	0.481		ug/l	0.071	0.061	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/05/23 20:59
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/06/23 01:14
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	34		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	36		30-150	B

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/05/23 18:50
Analyst: JM

Extraction Method: EPA 3510C
Extraction Date: 06/04/23 19:02
Cleanup Method: EPA 3665A
Cleanup Date: 06/05/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/05/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-09 Batch: WG1787051-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	86		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1787051-2 WG1787051-3									
Aroclor 1016	84		91		40-140	8		50	A
Aroclor 1260	72		78		40-140	8		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		83		30-150	A
Decachlorobiphenyl	83		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		78		30-150	B
Decachlorobiphenyl	87		85		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1787051-4 WG1787051-5 QC Sample: L2328902-06 Client ID: MW-103-20230523													
Aroclor 1016	ND	1.78	1.87	105		1.90	106		40-140	2		50	A
Aroclor 1260	ND	1.78	1.28	72		1.28	72		40-140	0		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	84		85		30-150	A
Decachlorobiphenyl	78		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		85		30-150	B
Decachlorobiphenyl	82		83		30-150	B

METALS

Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-01

Date Collected: 05/22/23 11:45

Client ID: MW-102-20230522

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.139		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00443		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Barium, Total	0.05332		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Calcium, Total	77.4		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00139		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00069		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Copper, Total	0.00161		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Iron, Total	3.43		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Lead, Total	0.00072	J	mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Magnesium, Total	10.6		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Manganese, Total	0.9184		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 18:43	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00303		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Potassium, Total	3.29		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Sodium, Total	22.5		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00015	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 07:37	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0255	J	mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 20:19	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSOHN SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-02

Date Collected: 05/22/23 14:00

Client ID: MW-102B-20230522

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	16.1		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00204	J	mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.02041		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Barium, Total	2.128		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00068		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00018	J	mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Calcium, Total	52.0		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Chromium, Total	0.04090		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.02392		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Copper, Total	0.05746		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Iron, Total	49.2		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Lead, Total	0.03942		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Magnesium, Total	29.7		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Manganese, Total	1.860		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Mercury, Total	0.00015	J	mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 18:46	EPA 7470A	1,7470A	DMB
Nickel, Total	0.05899		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Potassium, Total	13.0		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Selenium, Total	0.00413	J	mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Sodium, Total	115.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00058	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.03627		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Zinc, Total	0.07380		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 07:42	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0977		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 20:24	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-03

Date Collected: 05/22/23 16:40

Client ID: MW-100-20230522

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.34		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00187		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Barium, Total	0.1197		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00013	J	mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00013	J	mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Calcium, Total	153.		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00349		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00455		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Copper, Total	0.00526		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Iron, Total	4.64		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Lead, Total	0.00305		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Magnesium, Total	22.5		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Manganese, Total	9.520		mg/l	0.00500	0.00220	5	06/06/23 08:11	06/07/23 09:09	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 18:50	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00659		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Potassium, Total	11.1		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Sodium, Total	137.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00015	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.00470	J	mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Zinc, Total	0.01170		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 07:47	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 20:29	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-04

Date Collected: 05/23/23 09:20

Client ID: MW-101B-20230523

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	69.7		mg/l	0.0500	0.0164	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00358	J	mg/l	0.02000	0.00214	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.09524		mg/l	0.00250	0.00082	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Barium, Total	4.024		mg/l	0.00250	0.00086	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00447		mg/l	0.00250	0.00053	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00054	J	mg/l	0.00100	0.00029	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Calcium, Total	82.8		mg/l	0.500	0.197	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Chromium, Total	0.1340		mg/l	0.00500	0.00089	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.1294		mg/l	0.00250	0.00081	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Copper, Total	0.2350		mg/l	0.00500	0.00192	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Iron, Total	193.		mg/l	0.250	0.0955	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Lead, Total	0.1340		mg/l	0.00500	0.00171	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Magnesium, Total	53.2		mg/l	0.350	0.121	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Manganese, Total	14.65		mg/l	0.00500	0.00220	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Mercury, Total	0.00043		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 18:53	EPA 7470A	1,7470A	DMB
Nickel, Total	0.1846		mg/l	0.01000	0.00278	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Potassium, Total	21.7		mg/l	0.500	0.154	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Selenium, Total	0.0152	J	mg/l	0.0250	0.00865	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00200	0.00081	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Sodium, Total	174.		mg/l	0.500	0.146	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00138	J	mg/l	0.00500	0.00071	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.1168		mg/l	0.02500	0.00785	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Zinc, Total	0.2788		mg/l	0.05000	0.01705	5	06/06/23 08:11	06/07/23 07:52	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	1.22		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 20:33	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-05

Date Collected: 05/23/23 11:45

Client ID: MW-103B-20230523

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	50.1		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00065	J	mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.02532		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Barium, Total	1.258		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00187		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00026		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Calcium, Total	36.0		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Chromium, Total	0.1295		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.05592		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Copper, Total	0.1100		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Iron, Total	120.		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Lead, Total	0.07202		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Magnesium, Total	37.6		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Manganese, Total	3.514		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Mercury, Total	0.00012	J	mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 18:56	EPA 7470A	1,7470A	DMB
Nickel, Total	0.1623		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Potassium, Total	9.72		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Selenium, Total	0.00772		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Sodium, Total	192.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Thallium, Total	0.00035	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.09858		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Zinc, Total	0.1631		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 07:57	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	3.15		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 20:38	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-06

Date Collected: 05/23/23 15:00

Client ID: MW-103-20230523

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.794		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Arsenic, Total	0.00628		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Barium, Total	0.06908		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Calcium, Total	40.0		mg/l	0.100	0.0394	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Chromium, Total	0.00200		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Cobalt, Total	0.00099		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Copper, Total	0.00337		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Iron, Total	1.69		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Lead, Total	0.00193		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Magnesium, Total	8.30		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Manganese, Total	0.8842		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 15:05	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00827		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Potassium, Total	2.35		mg/l	0.100	0.0309	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Selenium, Total	0.00224	J	mg/l	0.00500	0.00173	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Sodium, Total	114.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Thallium, Total	0.00032	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Vanadium, Total	0.00212	J	mg/l	0.00500	0.00157	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Zinc, Total	0.00770	J	mg/l	0.01000	0.00341	1	06/06/23 08:11	06/06/23 17:45	EPA 3005A	1,6020B	EGW
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0743		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/02/23 01:00	EPA 3005A	1,6020B	EGW



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-07

Date Collected: 05/23/23 16:30

Client ID: MW-104-20230523

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.67		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00674		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Barium, Total	0.1685		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00014	J	mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Calcium, Total	55.5		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00731		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00227		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Copper, Total	0.00687		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Iron, Total	10.3		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Lead, Total	0.00661		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Magnesium, Total	11.9		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Manganese, Total	3.809		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 19:00	EPA 7470A	1,7470A	DMB
Nickel, Total	0.01016		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Potassium, Total	2.77		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Sodium, Total	162.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.00537		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Zinc, Total	0.01174		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 08:01	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0283	J	mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 21:33	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-08

Date Collected: 05/22/23 18:00

Client ID: CHA-1-20230522

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4.88		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00311		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Barium, Total	0.1334		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00025	J	mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00016	J	mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Calcium, Total	158.		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00659		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00644		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Copper, Total	0.00978		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Iron, Total	8.88		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Lead, Total	0.00593		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Magnesium, Total	23.7		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Manganese, Total	9.410		mg/l	0.00500	0.00220	5	06/06/23 08:11	06/07/23 09:13	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 19:03	EPA 7470A	1,7470A	DMB
Nickel, Total	0.01063		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Potassium, Total	11.5		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Sodium, Total	138.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.00911		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Zinc, Total	0.01683		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 08:06	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0269	J	mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 21:38	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**SAMPLE RESULTS**

Lab ID: L2328902-09

Date Collected: 05/22/23 15:15

Client ID: RINSE-20230522

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00470	J	mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Barium, Total	0.00085		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Calcium, Total	0.0603	J	mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00130		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Iron, Total	0.0225	J	mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Manganese, Total	0.00185		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 19:06	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00230		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Sodium, Total	0.0366	J	mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 08:11	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0293	J	mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 21:43	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1785834-1										
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/02/23 01:25	1,6020B	EGW

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1786091-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Arsenic, Total	0.00016	J	mg/l	0.00050	0.00016	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Selenium, Total	0.00217	J	mg/l	0.00500	0.00173	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Sodium, Total	0.0637	J	mg/l	0.100	0.0293	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Thallium, Total	0.00015	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1786098-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 14:58	1,7470A	DMB

Prep Information

Digestion Method: EPA 7470A



Lab Control Sample Analysis
Batch Quality Control**Project Name:** FRIEDRICHSOHN SITE**Project Number:** 060017.000**Lab Number:** L2328902**Report Date:** 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1785834-2								
Iron, Dissolved	111		-		80-120	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1786091-2					
Aluminum, Total	105	-	80-120	-	
Antimony, Total	83	-	80-120	-	
Arsenic, Total	93	-	80-120	-	
Barium, Total	96	-	80-120	-	
Beryllium, Total	101	-	80-120	-	
Cadmium, Total	99	-	80-120	-	
Calcium, Total	103	-	80-120	-	
Chromium, Total	109	-	80-120	-	
Cobalt, Total	105	-	80-120	-	
Copper, Total	107	-	80-120	-	
Iron, Total	108	-	80-120	-	
Lead, Total	91	-	80-120	-	
Magnesium, Total	106	-	80-120	-	
Manganese, Total	104	-	80-120	-	
Nickel, Total	106	-	80-120	-	
Potassium, Total	106	-	80-120	-	
Selenium, Total	102	-	80-120	-	
Silver, Total	104	-	80-120	-	
Sodium, Total	112	-	80-120	-	
Thallium, Total	93	-	80-120	-	
Vanadium, Total	105	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1786091-2					
Zinc, Total	100	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1786098-2					
Mercury, Total	104	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1785834-3 WG1785834-4 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Iron, Dissolved	0.0743	1	1.11	104		1.08	100		75-125	3		20

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 20230523 QC Batch ID: WG1786091-3 WG1786091-4 QC Sample: L2328902-06 Client ID: MW-103-									
Aluminum, Total	0.794	2	3.19	120	3.18	119	75-125	0	20
Antimony, Total	ND	0.5	0.4799	96	0.4485	90	75-125	7	20
Arsenic, Total	0.00628	0.12	0.1326	105	0.1231	97	75-125	7	20
Barium, Total	0.06908	2	2.146	104	2.031	98	75-125	6	20
Beryllium, Total	ND	0.05	0.05522	110	0.05184	104	75-125	6	20
Cadmium, Total	ND	0.053	0.05818	110	0.05378	101	75-125	8	20
Calcium, Total	40.0	10	55.3	153	Q 52.0	120	75-125	6	20
Chromium, Total	0.00200	0.2	0.2272	112	0.2193	109	75-125	4	20
Cobalt, Total	0.00099	0.5	0.5614	112	0.5384	107	75-125	4	20
Copper, Total	0.00337	0.25	0.2896	114	0.2770	109	75-125	4	20
Iron, Total	1.69	1	2.85	116	2.89	120	75-125	1	20
Lead, Total	0.00193	0.53	0.5226	98	0.4942	93	75-125	6	20
Magnesium, Total	8.30	10	20.4	121	18.9	106	75-125	8	20
Manganese, Total	0.8842	0.5	1.476	118	1.414	106	75-125	4	20
Nickel, Total	0.00827	0.5	0.5578	110	0.5459	108	75-125	2	20
Potassium, Total	2.35	10	13.8	114	13.0	106	75-125	6	20
Selenium, Total	0.00224J	0.12	0.150	125	0.136	113	75-125	10	20
Silver, Total	ND	0.05	0.05670	113	0.05274	105	75-125	7	20
Sodium, Total	114.	10	135	210	Q 124	100	75-125	8	20
Thallium, Total	0.00032J	0.12	0.1198	100	0.1146	96	75-125	4	20
Vanadium, Total	0.00212J	0.5	0.5548	111	0.5358	107	75-125	3	20

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 20230523 QC Batch ID: WG1786091-3 WG1786091-4 QC Sample: L2328902-06 Client ID: MW-103-									
Zinc, Total	0.00770J	0.5	0.5682	114	0.5288	106	75-125	7	20
Total Metals - Mansfield Lab Associated sample(s): 01-09 20230523 QC Batch ID: WG1786098-3 WG1786098-4 QC Sample: L2328902-06 Client ID: MW-103-									
Mercury, Total	ND	0.005	0.00509	102	0.00508	102	75-125	0	20

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

**Lab Serial Dilution
 Analysis
 Batch Quality Control**

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1786091-6 QC Sample: L2328902-06 Client ID: MW-103-20230523						
Aluminum, Total	0.794	0.839	mg/l	6		20
Barium, Total	0.06908	0.07008	mg/l	1		20
Calcium, Total	40.0	44.5	mg/l	11		20
Iron, Total	1.69	1.84	mg/l	9		20
Magnesium, Total	8.30	8.82	mg/l	6		20
Manganese, Total	0.8842	0.9371	mg/l	6		20
Sodium, Total	114.	120.	mg/l	5		20

INORGANICS & MISCELLANEOUS

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-01
Client ID: MW-102-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	191.		mg CaCO3/L	2.00	NA	1	-	06/02/23 09:17	121,2320B	MKT
Nitrogen, Ammonia	0.230		mg/l	0.075	0.024	1	06/06/23 23:00	06/08/23 15:52	44,350.1	AAA
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	05/24/23 09:19	44,353.2	KAF
Sulfate	66.		mg/l	25	3.4	2.5	05/31/23 09:00	05/31/23 09:00	1,9038	MRW
Total Organic Carbon	3.0		mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-02
Client ID: MW-102B-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 14:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	376.		mg CaCO3/L	2.00	NA	1	-	06/02/23 09:23	121,2320B	MKT
Nitrogen, Ammonia	2.69		mg/l	0.075	0.024	1	06/06/23 23:00	06/08/23 14:52	44,350.1	AAA
Nitrogen, Nitrate	0.078	J	mg/l	0.10	0.023	1	-	05/24/23 09:20	44,353.2	KAF
Sulfate	31.		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	3.3		mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-03
Client ID: MW-100-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 16:40
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	386.		mg CaCO3/L	2.00	NA	1	-	06/02/23 09:32	121,2320B	MKT
Nitrogen, Ammonia	0.770		mg/l	0.075	0.024	1	06/06/23 23:00	06/08/23 14:53	44,350.1	AAA
Nitrogen, Nitrate	0.047	J	mg/l	0.10	0.023	1	-	05/24/23 09:22	44,353.2	KAF
Sulfate	89.		mg/l	25	3.4	2.5	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	5.4		mg/l	1.0	0.19	2	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-04
Client ID: MW-101B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 09:20
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	349.		mg CaCO3/L	2.00	NA	1	-	06/05/23 10:56	121,2320B	MKT
Nitrogen, Ammonia	2.18		mg/l	0.075	0.024	1	06/06/23 23:00	06/08/23 15:07	44,350.1	AAA
Nitrogen, Nitrate	0.15		mg/l	0.10	0.023	1	-	05/24/23 09:23	44,353.2	KAF
Sulfate	21.		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	1.4		mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-05
Client ID: MW-103B-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 11:45
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	349.		mg CaCO3/L	2.00	NA	1	-	06/05/23 11:42	121,2320B	MKT
Nitrogen, Ammonia	0.861		mg/l	0.075	0.024	1	06/06/23 23:00	06/08/23 15:08	44,350.1	AAA
Nitrogen, Nitrate	0.096	J	mg/l	0.10	0.023	1	-	05/24/23 09:24	44,353.2	KAF
Sulfate	28.		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	7.0		mg/l	1.0	0.19	2	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-06

Date Collected: 05/23/23 15:00

Client ID: MW-103-20230523

Date Received: 05/23/23

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	214.		mg CaCO3/L	2.00	NA	1	-	06/05/23 12:02	121,2320B	MKT
Nitrogen, Ammonia	0.488		mg/l	0.075	0.024	1	06/04/23 10:45	06/06/23 10:39	44,350.1	KEP
Nitrogen, Nitrate	0.049	J	mg/l	0.10	0.023	1	-	05/24/23 09:25	44,353.2	KAF
Sulfate	34.		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	4.7		mg/l	1.0	0.19	2	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-07
Client ID: MW-104-20230523
Sample Location: Not Specified

Date Collected: 05/23/23 16:30
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	237.		mg CaCO3/L	2.00	NA	1	-	06/05/23 12:22	121,2320B	MKT
Nitrogen, Ammonia	1.60		mg/l	0.075	0.024	1	06/04/23 10:45	06/06/23 10:44	44,350.1	KEP
Nitrogen, Nitrate	0.036	J	mg/l	0.10	0.023	1	-	05/24/23 09:33	44,353.2	KAF
Sulfate	26.		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	5.4		mg/l	1.0	0.19	2	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-08
Client ID: CHA-1-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 18:00
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	396.		mg CaCO3/L	2.00	NA	1	-	06/02/23 09:42	121,2320B	MKT
Nitrogen, Ammonia	0.342		mg/l	0.150	0.048	2	06/04/23 10:45	06/06/23 10:45	44,350.1	KEP
Nitrogen, Nitrate	0.033	J	mg/l	0.10	0.023	1	-	05/24/23 09:35	44,353.2	KAF
Sulfate	91.		mg/l	50	6.8	5	06/02/23 13:20	06/02/23 13:20	1,9038	MRW
Total Organic Carbon	5.3		mg/l	1.0	0.19	2	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

SAMPLE RESULTS

Lab ID: L2328902-09
Client ID: RINSE-20230522
Sample Location: Not Specified

Date Collected: 05/22/23 15:15
Date Received: 05/23/23
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	06/02/23 09:52	121,2320B	MKT
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	06/04/23 10:45	06/06/23 10:46	44,350.1	KEP
Nitrogen, Nitrate	0.036	J	mg/l	0.10	0.023	1	-	05/24/23 09:36	44,353.2	KAF
Sulfate	ND		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	0.21	J	mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE

Lab Number: L2328902

Project Number: 060017.000

Report Date: 06/08/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1782717-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	05/24/23 09:16	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1785273-1										
Sulfate	ND		mg/l	10	1.4	1	05/31/23 09:00	05/31/23 09:00	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 02-07,09 Batch: WG1785813-1										
Sulfate	ND		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 01-03,08-09 Batch: WG1786334-1										
Alkalinity, Total	ND		mg CaCO ₃ /L	2.00	NA	1	-	06/02/23 08:30	121,2320B	MKT
General Chemistry - Westborough Lab for sample(s): 08 Batch: WG1786507-1										
Sulfate	ND		mg/l	10	1.4	1	06/02/23 13:20	06/02/23 13:20	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 06-09 Batch: WG1786940-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	06/04/23 10:45	06/06/23 10:31	44,350.1	KEP
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1787073-1										
Total Organic Carbon	ND		mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 04-07 Batch: WG1787166-1										
Alkalinity, Total	ND		mg CaCO ₃ /L	2.00	NA	1	-	06/05/23 10:38	121,2320B	MKT
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1787885-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	06/06/23 23:00	06/08/23 14:44	44,350.1	AAA



Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1782717-2								
Nitrogen, Nitrate	102		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1785273-2								
Sulfate	90		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02-07,09 Batch: WG1785813-2								
Sulfate	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03,08-09 Batch: WG1786334-2								
Alkalinity, Total	108		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 08 Batch: WG1786507-2								
Sulfate	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 06-09 Batch: WG1786940-2								
Nitrogen, Ammonia	96		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1787073-2								
Total Organic Carbon	106		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2328902

Report Date: 06/08/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04-07 Batch: WG1787166-2					
Alkalinity, Total	104	-	90-110	-	10
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1787885-2					
Nitrogen, Ammonia	96	-	90-110	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1782717-4 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Nitrogen, Nitrate	0.049J	4	4.2	105		-	-		83-113	-		6
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1785273-4 QC Sample: L2326814-12 Client ID: MS Sample												
Sulfate	6.4J	20	27	135		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 02-07,09 QC Batch ID: WG1785813-4 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Sulfate	34.	40	65	78		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 01-03,08-09 QC Batch ID: WG1786334-4 QC Sample: L2328902-09 Client ID: RINSE-20230522												
Alkalinity, Total	ND	100	76.8	77	Q	-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 08 QC Batch ID: WG1786507-3 QC Sample: L2330286-01 Client ID: MS Sample												
Sulfate	14.	20	37	115		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 06-09 QC Batch ID: WG1786940-4 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Nitrogen, Ammonia	0.488	4	4.35	96		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1787073-4 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Total Organic Carbon	4.7	16	23	113		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 04-07 QC Batch ID: WG1787166-4 QC Sample: L2328902-06 Client ID: MW-103-20230523												
Alkalinity, Total	214.	100	315	101		-	-		86-116	-		10

Lab Duplicate Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1782717-3 QC Sample: L2328902-06 Client ID: MW-103-20230523						
Nitrogen, Nitrate	0.049J	ND	mg/l	NC		6
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1785273-3 QC Sample: L2326814-12 Client ID: DUP Sample						
Sulfate	6.4J	7.5J	mg/l	NC		14
General Chemistry - Westborough Lab Associated sample(s): 02-07,09 QC Batch ID: WG1785813-3 QC Sample: L2328902-06 Client ID: MW-103-20230523						
Sulfate	34.	31	mg/l	9		14
General Chemistry - Westborough Lab Associated sample(s): 01-03,08-09 QC Batch ID: WG1786334-3 QC Sample: L2328902-09 Client ID: RINSE-20230522						
Alkalinity, Total	ND	ND	mg CaCO3/L	NC		10
General Chemistry - Westborough Lab Associated sample(s): 08 QC Batch ID: WG1786507-4 QC Sample: L2330286-01 Client ID: DUP Sample						
Sulfate	14.	15	mg/l	7		14
General Chemistry - Westborough Lab Associated sample(s): 06-09 QC Batch ID: WG1786940-3 QC Sample: L2328902-06 Client ID: MW-103-20230523						
Nitrogen, Ammonia	0.488	0.578	mg/l	17		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1787073-3 QC Sample: L2328902-06 Client ID: MW-103-20230523						
Total Organic Carbon	4.7	4.4	mg/l	7		20

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L2328902
Report Date: 06/08/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04-07 QC Batch ID: WG1787166-3 QC Sample: L2328902-06 Client ID: MW-103-20230523					
Alkalinity, Total	214.	216	mg CaCO3/L	1	10

Project Name: FRIEDRICHSON SITE**Lab Number:** L2328902**Project Number:** 060017.000**Report Date:** 06/08/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Present/Not Intact
B	Absent
C	Absent
D	Present/Not Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2328902-01A	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-01B	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-01C	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-01D	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-01E	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-01F	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-01G	Plastic 250ml unpreserved/No Headspace	A	NA		5.3	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-01H	Plastic 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		-
L2328902-01J	Plastic 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-01K	Plastic 250ml HNO3 preserved	A	<2	<2	5.3	Y	Present/Not Intact		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),MG-6020T(180),HG-T(28),CO-6020T(180)
L2328902-01L	Amber 120ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-01M	Amber 120ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Serial_No:06082319:47
Lab Number: L2328902
Report Date: 06/08/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2328902-01N	Amber 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-01P	Amber 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-01Q	Plastic 500ml H2SO4 preserved	A	<2	<2	5.3	Y	Present/Not Intact		NH3-350(28)
L2328902-01X	Plastic 120ml HNO3 preserved Filtrates	A	N/A	N/A	5.3	Y	Present/Not Intact		FE-6020S(180)
L2328902-02A	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-02B	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-02C	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-02D	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-02E	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-02F	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-02G	Plastic 250ml unpreserved/No Headspace	A	NA		5.3	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-02H	Plastic 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		-
L2328902-02J	Plastic 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-02K	Plastic 250ml HNO3 preserved	A	<2	<2	5.3	Y	Present/Not Intact		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),MG-6020T(180),AG-6020T(180),CO-6020T(180)
L2328902-02L	Amber 120ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-02M	Amber 120ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-02N	Amber 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-02P	Amber 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Serial_No: 06082319:47
Lab Number: L2328902
Report Date: 06/08/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2328902-02Q	Plastic 500ml H2SO4 preserved	A	<2	<2	5.3	Y	Present/Not Intact		NH3-350(28)
L2328902-02X	Plastic 120ml HNO3 preserved Filtrates	A	N/A	N/A	5.3	Y	Present/Not Intact		FE-6020S(180)
L2328902-03A	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-03B	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-03C	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-03D	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-03E	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-03F	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-03G	Plastic 250ml unpreserved/No Headspace	A	NA		5.3	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-03H	Plastic 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		-
L2328902-03J	Plastic 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-03K	Plastic 250ml HNO3 preserved	A	<2	<2	5.3	Y	Present/Not Intact		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),AL-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2328902-03L	Amber 120ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-03M	Amber 120ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-03N	Amber 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-03P	Amber 250ml unpreserved	A	7	7	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-03Q	Plastic 500ml H2SO4 preserved	A	<2	<2	5.3	Y	Present/Not Intact		NH3-350(28)
L2328902-03X	Plastic 120ml HNO3 preserved Filtrates	A	N/A	N/A	5.3	Y	Present/Not Intact		FE-6020S(180)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2328902-04A	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-04B	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-04C	Vial HCl preserved	A	NA		5.3	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-04D	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-04E	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-04F	Vial H2SO4 preserved	A	NA		5.3	Y	Present/Not Intact		TOC-9060(28)
L2328902-04G	Plastic 250ml unpreserved/No Headspace	A	NA		5.3	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-04H	Plastic 250ml unpreserved	A	9	9	5.3	Y	Present/Not Intact		-
L2328902-04J	Plastic 250ml unpreserved	A	9	9	5.3	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-04K	Plastic 250ml HNO3 preserved	A	<2	<2	5.3	Y	Present/Not Intact		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CA-6020T(180),K-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),HG-T(28),CD-6020T(180),AG-6020T(180),AL-6020T(180),MG-6020T(180),CO-6020T(180)
L2328902-04L	Amber 120ml unpreserved	A	9	9	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-04M	Amber 120ml unpreserved	A	9	9	5.3	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-04N	Amber 250ml unpreserved	A	9	9	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-04P	Amber 250ml unpreserved	A	9	9	5.3	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-04Q	Plastic 500ml H2SO4 preserved	A	<2	<2	5.3	Y	Present/Not Intact		NH3-350(28)
L2328902-04X	Plastic 120ml HNO3 preserved Filtrates	A	N/A	N/A	5.3	Y	Present/Not Intact		FE-6020S(180)
L2328902-05A	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-05B	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2328902-05C	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-05D	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-05E	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-05F	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-05G	Plastic 250ml unpreserved/No Headspace	D	NA		4.4	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-05H	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		-
L2328902-05J	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-05K	Plastic 250ml HNO3 preserved	D	<2	<2	4.4	Y	Present/Not Intact		FE-6020T(180),BA-6020T(180),TL-6020T(180),SE-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),CA-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L2328902-05L	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-05M	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-05N	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-05P	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-05Q	Plastic 500ml H2SO4 preserved	D	<2	<2	4.4	Y	Present/Not Intact		NH3-350(28)
L2328902-05X	Plastic 120ml HNO3 preserved Filtrates	D	N/A	N/A	4.4	Y	Present/Not Intact		FE-6020S(180)
L2328902-06A	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06A1	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06A2	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06B	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)

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L2328902-06B1	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06B2	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06C	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06C1	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06C2	Vial HCl preserved	D	NA		4.4	Y	Present/Not Intact		NYTCL-8260-R2(14)
L2328902-06D	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06D1	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06D2	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06E	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06E1	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06E2	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06F	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06F1	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06F2	Vial H2SO4 preserved	D	NA		4.4	Y	Present/Not Intact		TOC-9060(28)
L2328902-06G	Plastic 250ml unpreserved/No Headspace	D	NA		4.4	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-06G1	Plastic 250ml unpreserved/No Headspace	D	NA		4.4	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-06G2	Plastic 250ml unpreserved/No Headspace	D	NA		4.4	Y	Present/Not Intact		ALK-T-2320(14)
L2328902-06H	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		-
L2328902-06H1	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		-
L2328902-06H2	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		-
L2328902-06J	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)

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L2328902-06J1	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-06J2	Plastic 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		SO4-9038(28),NO3-353(2)
L2328902-06K	Plastic 250ml HNO3 preserved	D	<2	<2	4.4	Y	Present/Not Intact		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2328902-06K1	Plastic 250ml HNO3 preserved	D	<2	<2	4.4	Y	Present/Not Intact		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2328902-06K2	Plastic 250ml HNO3 preserved	D	<2	<2	4.4	Y	Present/Not Intact		SE-6020T(180),BA-6020T(180),FE-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),ZN-6020T(180),NA-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AL-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180),MG-6020T(180),CO-6020T(180)
L2328902-06L	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-06L1	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-06L2	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-06M	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-06M1	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-06M2	Amber 120ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8082-LVI(365)
L2328902-06N	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-06N1	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

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L2328902-06N2	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-06P	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-06P1	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-06P2	Amber 250ml unpreserved	D	7	7	4.4	Y	Present/Not Intact		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-06Q	Plastic 500ml H2SO4 preserved	D	<2	<2	4.4	Y	Present/Not Intact		NH3-350(28)
L2328902-06Q1	Plastic 500ml H2SO4 preserved	D	<2	<2	4.4	Y	Present/Not Intact		NH3-350(28)
L2328902-06Q2	Plastic 500ml H2SO4 preserved	D	<2	<2	4.4	Y	Present/Not Intact		NH3-350(28)
L2328902-06X	Plastic 120ml HNO3 preserved Filtrates	D	N/A	N/A	4.4	Y	Present/Not Intact		FE-6020S(180)
L2328902-06X1	Plastic 120ml HNO3 preserved Filtrates	D	N/A	N/A	4.4	Y	Present/Not Intact		FE-6020S(180)
L2328902-06X2	Plastic 120ml HNO3 preserved Filtrates	D	N/A	N/A	4.4	Y	Present/Not Intact		FE-6020S(180)
L2328902-07A	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-07B	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-07C	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-07D	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-07E	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-07F	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-07G	Plastic 250ml unpreserved/No Headspace	C	NA		4.6	Y	Absent		ALK-T-2320(14)
L2328902-07H	Plastic 250ml unpreserved	C	7	7	4.6	Y	Absent		-
L2328902-07J	Plastic 250ml unpreserved	C	7	7	4.6	Y	Absent		SO4-9038(28),NO3-353(2)
L2328902-07K	Plastic 250ml HNO3 preserved	C	<2	<2	4.6	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),CR-6020T(180),NI-6020T(180),K-6020T(180),CA-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),MG-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2328902-07L	Amber 120ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8082-LVI(365)

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L2328902-07M	Amber 120ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2328902-07N	Amber 250ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-07P	Amber 250ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-07Q	Plastic 500ml H2SO4 preserved	C	<2	<2	4.6	Y	Absent		NH3-350(28)
L2328902-07X	Plastic 120ml HNO3 preserved Filtrates	C	N/A	N/A	4.6	Y	Absent		FE-6020S(180)
L2328902-08A	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-08B	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-08C	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-08D	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-08E	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-08F	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-08G	Plastic 250ml unpreserved/No Headspace	C	NA		4.6	Y	Absent		ALK-T-2320(14)
L2328902-08H	Plastic 250ml unpreserved	C	7	7	4.6	Y	Absent		-
L2328902-08J	Plastic 250ml unpreserved	C	7	7	4.6	Y	Absent		SO4-9038(28),NO3-353(2)
L2328902-08K	Plastic 250ml HNO3 preserved	C	<2	<2	4.6	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AL-6020T(180),AG-6020T(180),MG-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2328902-08L	Amber 120ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2328902-08M	Amber 120ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2328902-08N	Amber 250ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-08P	Amber 250ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-08Q	Plastic 500ml H2SO4 preserved	C	<2	<2	4.6	Y	Absent		NH3-350(28)
L2328902-08X	Plastic 120ml HNO3 preserved Filtrates	C	N/A	N/A	4.6	Y	Absent		FE-6020S(180)
L2328902-09A	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-09B	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2328902-09C	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2328902-09D	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-09E	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-09F	Vial H2SO4 preserved	C	NA		4.6	Y	Absent		TOC-9060(28)
L2328902-09G	Plastic 250ml unpreserved/No Headspace	C	NA		4.6	Y	Absent		ALK-T-2320(14)
L2328902-09H	Plastic 250ml unpreserved	C	7	7	4.6	Y	Absent		-
L2328902-09J	Plastic 250ml unpreserved	C	7	7	4.6	Y	Absent		SO4-9038(28),NO3-353(2)
L2328902-09K	Plastic 250ml HNO3 preserved	C	<2	<2	4.6	Y	Absent		TL-6020T(180),SE-6020T(180),FE-6020T(180),BA-6020T(180),CR-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180),MG-6020T(180),AL-6020T(180),CO-6020T(180)
L2328902-09L	Amber 120ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2328902-09M	Amber 120ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8082-LVI(365)
L2328902-09N	Amber 250ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-09P	Amber 250ml unpreserved	C	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2328902-09Q	Plastic 500ml H2SO4 preserved	C	<2	<2	4.6	Y	Absent		NH3-350(28)
L2328902-09X	Plastic 120ml HNO3 preserved Filtrates	C	N/A	N/A	4.6	Y	Absent		FE-6020S(180)
L2328902-10A	Vial HCl preserved	C	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H-B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

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

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01501 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-896-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3268		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 05/24/23		ALPHA Job # L2328902																																																																																																																																																																																							
		Project Information Project Name: <u>FRIEDRICHSON SITE</u> Project Location: Project # <u>060017.000</u> (Use Project name as Project #) ☐ Project Manager: <u>SCOTT SMITH</u> ALPHAQuote #: Turn-Around Time: Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Deliverables ☐ ASP-A ☒ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		Billing Information ☒ Same as Client Info PO #																																																																																																																																																																																									
Client Information Client: <u>CHA CONSULTING</u> Address: <u>3 WINNEYS CIRCLE</u> <u>ALBANY, NY 12205</u> Phone: <u>(518) 453-8795</u> Fax: Email:		Regulatory Requirement ☒ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☒ NY ☐ Other:																																																																																																																																																																																											
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments: Please specify Metals or TAL.		ANALYSIS		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)		Total Bottles																																																																																																																																																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">VOCs / 8260</th> <th rowspan="2">SVOCs / 8270</th> <th rowspan="2">PCBs / 8082</th> <th rowspan="2">TAT Metals / 4121</th> <th rowspan="2">TOC / 9060</th> <th rowspan="2">NITRATE / 353.2</th> <th rowspan="2">ALKALINITY / 310.2</th> <th rowspan="2">AMMONIA / 310.1</th> <th rowspan="2">TOTAL DISS. IRON</th> <th rowspan="2">SULFATE / 100.1</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>28902-01</td> <td>MW-102-20230522</td> <td>5-22-23</td> <td>11:45</td> <td>W</td> <td>CRH</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td>-02</td> <td>MW-102B-20230522</td> <td>↓</td> <td>14:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-03</td> <td>MW-100-20230522</td> <td>↓</td> <td>16:40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-04</td> <td>MW-101B-20230523</td> <td>5-23-23</td> <td>9:20</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-05</td> <td>MW-103B-20230523</td> <td>↓</td> <td>11:45</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-06</td> <td>MW-103-20230523</td> <td>↓</td> <td>15:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>MS/MSD</td> </tr> <tr> <td>-07</td> <td>MW-104-20230523</td> <td>↓</td> <td>16:30</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-08</td> <td>CHA-1-20230522</td> <td>5-22-23</td> <td>18:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-09</td> <td>MS/MSD-20230523</td> <td>5-23-23</td> <td>15:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>MW-103</td> </tr> <tr> <td>-09</td> <td>RINSE-20230522</td> <td>5-22-23</td> <td>15:15</td> <td>W</td> <td>CRH</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection			Sample Matrix	Sampler's Initials	VOCs / 8260	SVOCs / 8270	PCBs / 8082	TAT Metals / 4121	TOC / 9060	NITRATE / 353.2	ALKALINITY / 310.2	AMMONIA / 310.1	TOTAL DISS. IRON	SULFATE / 100.1	Sample Specific Comments	Date	Time	28902-01	MW-102-20230522	5-22-23	11:45	W	CRH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		-02	MW-102B-20230522	↓	14:00														-03	MW-100-20230522	↓	16:40														-04	MW-101B-20230523	5-23-23	9:20														-05	MW-103B-20230523	↓	11:45														-06	MW-103-20230523	↓	15:00													MS/MSD	-07	MW-104-20230523	↓	16:30														-08	CHA-1-20230522	5-22-23	18:00														-09	MS/MSD-20230523	5-23-23	15:00													MW-103	-09	RINSE-20230522	5-22-23	15:15	W	CRH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015 TRIP BLANK		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																																																							
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ANALYTICAL REPORT

Lab Number:	L2329262
Client:	CHA Companies 3 Winners Circle Albany, NY 12205
ATTN:	Scott Smith
Phone:	(518) 453-2869
Project Name:	FRIEDRICHSOHN SITE
Project Number:	060017.000
Report Date:	06/09/23

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2329262-01	MW-2S-20230524	WATER	RT. 32, WATERFORD, NY	05/24/23 11:00	05/24/23
L2329262-02	MW-2-20230524	WATER	RT. 32, WATERFORD, NY	05/24/23 12:30	05/24/23
L2329262-03	TRIP BLANK	WATER	RT. 32, WATERFORD, NY	05/24/23 00:00	05/24/23

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Case Narrative

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

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

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

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

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

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

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Case Narrative (continued)

Report Submission

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

Semivolatile Organics

L2329262-01: The surrogate recoveries were outside the acceptance criteria for 2-fluorophenol (7%) and 2,4,6-tribromophenol (0%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

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

Authorized Signature:



Kelly O'Neill

Title: Technical Director/Representative

Date: 06/09/23

ORGANICS

VOLATILES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-01
Client ID: MW-2S-20230524
Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 11:00
Date Received: 05/24/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 06/01/23 21:48
Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.7	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.43	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS****Lab ID:** L2329262-01**Date Collected:** 05/24/23 11:00**Client ID:** MW-2S-20230524**Date Received:** 05/24/23**Sample Location:** RT. 32, WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	113		70-130

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-02
 Client ID: MW-2-20230524
 Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 12:30
 Date Received: 05/24/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 06/01/23 22:08
 Analyst: MJV

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

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-02
 Client ID: MW-2-20230524
 Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 12:30
 Date Received: 05/24/23
 Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-03
 Client ID: TRIP BLANK
 Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 00:00
 Date Received: 05/24/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 06/01/23 22:29
 Analyst: MJV

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

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS****Lab ID:** L2329262-03**Date Collected:** 05/24/23 00:00**Client ID:** TRIP BLANK**Date Received:** 05/24/23**Sample Location:** RT. 32, WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	113		70-130

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/01/23 17:59
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1786504-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260D
 Analytical Date: 06/01/23 17:59
 Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1786504-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 06/01/23 17:59
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1786504-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSON SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1786504-3 WG1786504-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	95		100		63-130	5		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	97		100		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	98		100		67-130	2		20
trans-1,3-Dichloropropene	91		95		70-130	4		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	88		92		54-136	4		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	97		100		70-130	3		20
Ethylbenzene	94		97		70-130	3		20
Chloromethane	96		99		64-130	3		20
Bromomethane	37	Q	43		39-139	15		20
Vinyl chloride	100		110		55-140	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1786504-3 WG1786504-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	92		99		70-130	7		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	95		98		63-130	3		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		97		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	100		100		36-147	0		20
Acetone	120		120		58-148	0		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	110		120		63-138	9		20
4-Methyl-2-pentanone	88		96		59-130	9		20
2-Hexanone	90		99		57-130	10		20
Bromochloromethane	98		98		70-130	0		20
1,2-Dibromoethane	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	99		110		41-144	11		20
Isopropylbenzene	94		94		70-130	0		20
1,2,3-Trichlorobenzene	95		99		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1786504-3 WG1786504-4								
1,2,4-Trichlorobenzene	93		98		70-130	5		20
Methyl Acetate	110		110		70-130	0		20
Cyclohexane	100		110		70-130	10		20
1,4-Dioxane	88		92		56-162	4		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	92		90		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		118		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	104		104		70-130

SEMIVOLATILES

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-01
Client ID: MW-2S-20230524
Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 11:00
Date Received: 05/24/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 06/02/23 06:03
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS****Lab ID:** L2329262-01**Date Collected:** 05/24/23 11:00**Client ID:** MW-2S-20230524**Date Received:** 05/24/23**Sample Location:** RT. 32, WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	4.1	J	ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	7	Q	21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	0	Q	10-120
4-Terphenyl-d14	74		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-01
Client ID: MW-2S-20230524
Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 11:00
Date Received: 05/24/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 05/30/23 15:15
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.54		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.26		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.92		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	1.5		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.47		ug/l	0.10	0.01	1
Chrysene	0.51		ug/l	0.10	0.01	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	1.6		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.09	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.22		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	1.4		ug/l	0.10	0.01	1
Pyrene	0.51		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	0.05	J	ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS****Lab ID:** L2329262-01**Date Collected:** 05/24/23 11:00**Client ID:** MW-2S-20230524**Date Received:** 05/24/23**Sample Location:** RT. 32, WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	28		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	26		10-120
4-Terphenyl-d14	83		41-149

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-01 RE
 Client ID: MW-2S-20230524
 Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 11:00
 Date Received: 05/24/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 06/09/23 16:18
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 06/08/23 15:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-01 RE

Date Collected: 05/24/23 11:00

Client ID: MW-2S-20230524

Date Received: 05/24/23

Sample Location: RT. 32, WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	55		41-149

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-02
 Client ID: MW-2-20230524
 Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 12:30
 Date Received: 05/24/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 06/02/23 06:26
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS****Lab ID:** L2329262-02**Date Collected:** 05/24/23 12:30**Client ID:** MW-2-20230524**Date Received:** 05/24/23**Sample Location:** RT. 32, WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	46.		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	62		41-149

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-02
 Client ID: MW-2-20230524
 Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 12:30
 Date Received: 05/24/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E-SIM
 Analytical Date: 05/30/23 16:21
 Analyst: AH

Extraction Method: EPA 3510C
 Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.03	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: FRIEDRICHSOHN SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS****Lab ID:** L2329262-02**Date Collected:** 05/24/23 12:30**Client ID:** MW-2-20230524**Date Received:** 05/24/23**Sample Location:** RT. 32, WATERFORD, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	78		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/01/23 23:41
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1784627-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/01/23 23:41
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1784627-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	85		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 05/30/23 14:58
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1784628-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 05/30/23 14:58
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 05/29/23 19:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1784628-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	113		10-120
4-Terphenyl-d14	83		41-149

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/09/23 15:55
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/08/23 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1788810-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 06/09/23 15:55
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 06/08/23 11:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1788810-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	41		23-120
2-Fluorobiphenyl	38		15-120
2,4,6-Tribromophenol	33		10-120
4-Terphenyl-d14	49		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1784627-2 WG1784627-3								
Bis(2-chloroethyl)ether	63		55		40-140	14		30
3,3'-Dichlorobenzidine	53		47		40-140	12		30
2,4-Dinitrotoluene	79		82		48-143	4		30
2,6-Dinitrotoluene	78		81		40-140	4		30
4-Chlorophenyl phenyl ether	70		73		40-140	4		30
4-Bromophenyl phenyl ether	77		76		40-140	1		30
Bis(2-chloroisopropyl)ether	58		55		40-140	5		30
Bis(2-chloroethoxy)methane	65		60		40-140	8		30
Hexachlorocyclopentadiene	70		67		40-140	4		30
Isophorone	66		65		40-140	2		30
Nitrobenzene	67		61		40-140	9		30
NDPA/DPA	75		74		40-140	1		30
n-Nitrosodi-n-propylamine	66		67		29-132	2		30
Bis(2-ethylhexyl)phthalate	86		86		40-140	0		30
Butyl benzyl phthalate	81		85		40-140	5		30
Di-n-butylphthalate	78		79		40-140	1		30
Di-n-octylphthalate	83		84		40-140	1		30
Diethyl phthalate	75		77		40-140	3		30
Dimethyl phthalate	82		83		40-140	1		30
Biphenyl	71		68		40-140	4		30
4-Chloroaniline	63		54		40-140	15		30
2-Nitroaniline	85		86		52-143	1		30
3-Nitroaniline	61		63		25-145	3		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1784627-2 WG1784627-3								
4-Nitroaniline	70		73		51-143	4		30
Dibenzofuran	77		74		40-140	4		30
1,2,4,5-Tetrachlorobenzene	72		64		2-134	12		30
Acetophenone	61		57		39-129	7		30
2,4,6-Trichlorophenol	82		83		30-130	1		30
p-Chloro-m-cresol	84		85		23-97	1		30
2-Chlorophenol	65		65		27-123	0		30
2,4-Dichlorophenol	80		80		30-130	0		30
2,4-Dimethylphenol	60		28	Q	30-130	73	Q	30
2-Nitrophenol	73		72		30-130	1		30
4-Nitrophenol	82	Q	82	Q	10-80	0		30
2,4-Dinitrophenol	77		91		20-130	17		30
4,6-Dinitro-o-cresol	90		87		20-164	3		30
Phenol	49		45		12-110	9		30
2-Methylphenol	62		58		30-130	7		30
3-Methylphenol/4-Methylphenol	74		68		30-130	8		30
2,4,5-Trichlorophenol	94		92		30-130	2		30
Carbazole	77		77		55-144	0		30
Atrazine	88		91		40-140	3		30
Benzaldehyde	60		56		40-140	7		30
Caprolactam	32		39		10-130	20		30
2,3,4,6-Tetrachlorophenol	80		82		40-140	2		30

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1784627-2 WG1784627-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	61		58		21-120
Phenol-d6	51		49		10-120
Nitrobenzene-d5	69		64		23-120
2-Fluorobiphenyl	81		72		15-120
2,4,6-Tribromophenol	101		92		10-120
4-Terphenyl-d14	72		76		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1784628-2 WG1784628-3								
Acenaphthene	73		75		40-140	3		40
2-Chloronaphthalene	72		72		40-140	0		40
Fluoranthene	80		86		40-140	7		40
Hexachlorobutadiene	66		65		40-140	2		40
Naphthalene	69		69		40-140	0		40
Benzo(a)anthracene	86		91		40-140	6		40
Benzo(a)pyrene	88		92		40-140	4		40
Benzo(b)fluoranthene	79		82		40-140	4		40
Benzo(k)fluoranthene	79		86		40-140	8		40
Chrysene	79		84		40-140	6		40
Acenaphthylene	81		81		40-140	0		40
Anthracene	81		85		40-140	5		40
Benzo(ghi)perylene	83		84		40-140	1		40
Fluorene	76		78		40-140	3		40
Phenanthrene	73		76		40-140	4		40
Dibenzo(a,h)anthracene	84		84		40-140	0		40
Indeno(1,2,3-cd)pyrene	83		84		40-140	1		40
Pyrene	78		85		40-140	9		40
2-Methylnaphthalene	74		74		40-140	0		40
Pentachlorophenol	88		96		40-140	9		40
Hexachlorobenzene	68		69		40-140	1		40
Hexachloroethane	71		69		40-140	3		40

Lab Control Sample Analysis Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1784628-2 WG1784628-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	67		66		21-120
Phenol-d6	55		56		10-120
Nitrobenzene-d5	88		84		23-120
2-Fluorobiphenyl	73		72		15-120
2,4,6-Tribromophenol	111		113		10-120
4-Terphenyl-d14	75		81		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1788810-2 WG1788810-3								
Bis(2-chloroethyl)ether	72		67		40-140	7		30
3,3'-Dichlorobenzidine	55		46		40-140	18		30
2,4-Dinitrotoluene	88		74		48-143	17		30
2,6-Dinitrotoluene	76		66		40-140	14		30
4-Chlorophenyl phenyl ether	64		56		40-140	13		30
4-Bromophenyl phenyl ether	63		54		40-140	15		30
Bis(2-chloroisopropyl)ether	82		78		40-140	5		30
Bis(2-chloroethoxy)methane	76		68		40-140	11		30
Hexachlorocyclopentadiene	56		52		40-140	7		30
Isophorone	63		59		40-140	7		30
Nitrobenzene	66		64		40-140	3		30
NDPA/DPA	77		64		40-140	18		30
n-Nitrosodi-n-propylamine	64		61		29-132	5		30
Bis(2-ethylhexyl)phthalate	124		109		40-140	13		30
Butyl benzyl phthalate	100		85		40-140	16		30
Di-n-butylphthalate	98		84		40-140	15		30
Di-n-octylphthalate	114		101		40-140	12		30
Diethyl phthalate	93		78		40-140	18		30
Dimethyl phthalate	75		64		40-140	16		30
Biphenyl	62		57		40-140	8		30
4-Chloroaniline	51		39	Q	40-140	27		30
2-Nitroaniline	78		67		52-143	15		30
3-Nitroaniline	78		60		25-145	26		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1788810-2 WG1788810-3								
4-Nitroaniline	84		68		51-143	21		30
Dibenzofuran	73		64		40-140	13		30
1,2,4,5-Tetrachlorobenzene	48		46		2-134	4		30
Acetophenone	58		56		39-129	4		30
2,4,6-Trichlorophenol	62		53		30-130	16		30
p-Chloro-m-cresol	69		58		23-97	17		30
2-Chlorophenol	72		70		27-123	3		30
2,4-Dichlorophenol	73		67		30-130	9		30
2,4-Dimethylphenol	58		42		30-130	32	Q	30
2-Nitrophenol	82		78		30-130	5		30
4-Nitrophenol	89	Q	74		10-80	18		30
2,4-Dinitrophenol	74		62		20-130	18		30
4,6-Dinitro-o-cresol	88		70		20-164	23		30
Phenol	51		49		12-110	4		30
2-Methylphenol	65		57		30-130	13		30
3-Methylphenol/4-Methylphenol	66		60		30-130	10		30
2,4,5-Trichlorophenol	65		56		30-130	15		30
Carbazole	83		72		55-144	14		30
Atrazine	80		65		40-140	21		30
Benzaldehyde	59		57		40-140	3		30
Caprolactam	34		29		10-130	16		30
2,3,4,6-Tetrachlorophenol	69		57		40-140	19		30

Lab Control Sample Analysis**Batch Quality Control****Project Name:** FRIEDRICHSOHN SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1788810-2 WG1788810-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		57		21-120
Phenol-d6	53		50		10-120
Nitrobenzene-d5	72		69		23-120
2-Fluorobiphenyl	60		57		15-120
2,4,6-Tribromophenol	82		70		10-120
4-Terphenyl-d14	66		57		41-149

PCBS

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-01
Client ID: MW-2S-20230524
Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 11:00
Date Received: 05/24/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/04/23 15:02
Analyst: ER

Extraction Method: EPA 3510C
Extraction Date: 06/02/23 12:21
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-02
Client ID: MW-2-20230524
Sample Location: RT. 32, WATERFORD, NY

Date Collected: 05/24/23 12:30
Date Received: 05/24/23
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/04/23 14:53
Analyst: ER

Extraction Method: EPA 3510C
Extraction Date: 06/02/23 12:21
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/23

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/02/23 10:13
Analyst: MEO

Extraction Method: EPA 3510C
Extraction Date: 06/01/23 16:06
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/23
Cleanup Method: EPA 3660B
Cleanup Date: 06/02/23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1786104-1						
Aroclor 1016	ND		ug/l	0.071	0.061	A
Aroclor 1221	ND		ug/l	0.071	0.061	A
Aroclor 1232	ND		ug/l	0.071	0.061	A
Aroclor 1242	ND		ug/l	0.071	0.061	A
Aroclor 1248	ND		ug/l	0.071	0.061	A
Aroclor 1254	ND		ug/l	0.071	0.061	A
Aroclor 1260	ND		ug/l	0.071	0.061	A
Aroclor 1262	ND		ug/l	0.071	0.061	A
Aroclor 1268	ND		ug/l	0.071	0.061	A
PCBs, Total	ND		ug/l	0.071	0.061	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	78		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1786104-2 WG1786104-3									
Aroclor 1016	80		77		40-140	3		50	A
Aroclor 1260	67		65		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		78		30-150	A
Decachlorobiphenyl	81		80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		74		30-150	B
Decachlorobiphenyl	86		82		30-150	B

METALS

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-01

Date Collected: 05/24/23 11:00

Client ID: MW-2S-20230524

Date Received: 05/24/23

Sample Location: RT. 32, WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3.60		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00328		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Barium, Total	0.08533		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Beryllium, Total	0.00024	J	mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00340		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Calcium, Total	37.0		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00894		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00557		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Copper, Total	0.01739		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Iron, Total	9.40		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Lead, Total	0.03439		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Magnesium, Total	10.7		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Manganese, Total	0.5985		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Mercury, Total	0.00017	J	mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 19:10	EPA 7470A	1,7470A	DMB
Nickel, Total	0.01010		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Potassium, Total	4.62		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Selenium, Total	0.00287	J	mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Silver, Total	0.00126		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Sodium, Total	209.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Vanadium, Total	0.00692		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Zinc, Total	0.05402		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 08:59	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 21:48	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**SAMPLE RESULTS**

Lab ID: L2329262-02

Date Collected: 05/24/23 12:30

Client ID: MW-2-20230524

Date Received: 05/24/23

Sample Location: RT. 32, WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.160		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Antimony, Total	0.00050	J	mg/l	0.00400	0.00042	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Arsenic, Total	0.00515		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Barium, Total	0.3841		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Cadmium, Total	0.00040		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Calcium, Total	68.2		mg/l	0.100	0.0394	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Chromium, Total	0.00147		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Cobalt, Total	0.00034	J	mg/l	0.00050	0.00016	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Copper, Total	0.00073	J	mg/l	0.00100	0.00038	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Iron, Total	0.147		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Lead, Total	0.00130		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Magnesium, Total	24.5		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Manganese, Total	0.7311		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Mercury, Total	ND		mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 19:13	EPA 7470A	1,7470A	DMB
Nickel, Total	0.00468		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Potassium, Total	8.37		mg/l	0.100	0.0309	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Sodium, Total	114.		mg/l	0.100	0.0293	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Thallium, Total	ND		mg/l	0.00100	0.00014	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Zinc, Total	0.00651	J	mg/l	0.01000	0.00341	1	06/06/23 08:11	06/07/23 09:04	EPA 3005A	1,6020B	SMV
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/04/23 21:52	EPA 3005A	1,6020B	WKP



Project Name: FRIEDRICHSON SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1785834-1										
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	06/01/23 10:35	06/02/23 01:25	1,6020B	EGW

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1786091-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Antimony, Total	ND		mg/l	0.00400	0.00042	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Arsenic, Total	0.00016	J	mg/l	0.00050	0.00016	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Calcium, Total	ND		mg/l	0.100	0.0394	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Iron, Total	ND		mg/l	0.0500	0.0191	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Manganese, Total	ND		mg/l	0.00100	0.00044	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Selenium, Total	0.00217	J	mg/l	0.00500	0.00173	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Sodium, Total	0.0637	J	mg/l	0.100	0.0293	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Thallium, Total	0.00015	J	mg/l	0.00100	0.00014	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/06/23 08:11	06/06/23 17:18	1,6020B	EGW



Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1786098-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	06/06/23 09:34	06/06/23 14:58	1,7470A	DMB

Prep Information

Digestion Method: EPA 7470A



Lab Control Sample Analysis**Batch Quality Control****Project Name:** FRIEDRICHSOHN SITE**Project Number:** 060017.000**Lab Number:** L2329262**Report Date:** 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1785834-2								
Iron, Dissolved	111		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1786091-2					
Aluminum, Total	105	-	80-120	-	
Antimony, Total	83	-	80-120	-	
Arsenic, Total	93	-	80-120	-	
Barium, Total	96	-	80-120	-	
Beryllium, Total	101	-	80-120	-	
Cadmium, Total	99	-	80-120	-	
Calcium, Total	103	-	80-120	-	
Chromium, Total	109	-	80-120	-	
Cobalt, Total	105	-	80-120	-	
Copper, Total	107	-	80-120	-	
Iron, Total	108	-	80-120	-	
Lead, Total	91	-	80-120	-	
Magnesium, Total	106	-	80-120	-	
Manganese, Total	104	-	80-120	-	
Nickel, Total	106	-	80-120	-	
Potassium, Total	106	-	80-120	-	
Selenium, Total	102	-	80-120	-	
Silver, Total	104	-	80-120	-	
Sodium, Total	112	-	80-120	-	
Thallium, Total	93	-	80-120	-	
Vanadium, Total	105	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1786091-2					
Zinc, Total	100	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1786098-2					
Mercury, Total	104	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1785834-3 WG1785834-4 QC Sample: L2328902-06 Client ID: MS Sample												
Iron, Dissolved	0.0743	1	1.11	104		1.08	100		75-125	3		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1786091-3 WG1786091-4 QC Sample: L2328902-06 Client ID: MS Sample									
Aluminum, Total	0.794	2	3.19	120	3.18	119	75-125	0	20
Antimony, Total	ND	0.5	0.4799	96	0.4485	90	75-125	7	20
Arsenic, Total	0.00628	0.12	0.1326	105	0.1231	97	75-125	7	20
Barium, Total	0.06908	2	2.146	104	2.031	98	75-125	6	20
Beryllium, Total	ND	0.05	0.05522	110	0.05184	104	75-125	6	20
Cadmium, Total	ND	0.053	0.05818	110	0.05378	101	75-125	8	20
Calcium, Total	40.0	10	55.3	153	Q 52.0	120	75-125	6	20
Chromium, Total	0.00200	0.2	0.2272	112	0.2193	109	75-125	4	20
Cobalt, Total	0.00099	0.5	0.5614	112	0.5384	107	75-125	4	20
Copper, Total	0.00337	0.25	0.2896	114	0.2770	109	75-125	4	20
Iron, Total	1.69	1	2.85	116	2.89	120	75-125	1	20
Lead, Total	0.00193	0.53	0.5226	98	0.4942	93	75-125	6	20
Magnesium, Total	8.30	10	20.4	121	18.9	106	75-125	8	20
Manganese, Total	0.8842	0.5	1.476	118	1.414	106	75-125	4	20
Nickel, Total	0.00827	0.5	0.5578	110	0.5459	108	75-125	2	20
Potassium, Total	2.35	10	13.8	114	13.0	106	75-125	6	20
Selenium, Total	0.00224J	0.12	0.150	125	0.136	113	75-125	10	20
Silver, Total	ND	0.05	0.05670	113	0.05274	105	75-125	7	20
Sodium, Total	114.	10	135	210	Q 124	100	75-125	8	20
Thallium, Total	0.00032J	0.12	0.1198	100	0.1146	96	75-125	4	20
Vanadium, Total	0.00212J	0.5	0.5548	111	0.5358	107	75-125	3	20

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1786091-3		WG1786091-4	QC Sample: L2328902-06		Client ID: MS Sample	
Zinc, Total	0.00770J	0.5	0.5682	114	0.5288	106	75-125	7	20
Total Metals - Mansfield Lab Associated sample(s): 01-02			QC Batch ID: WG1786098-3		WG1786098-4	QC Sample: L2328902-06		Client ID: MS Sample	
Mercury, Total	ND	0.005	0.00509	102	0.00508	102	75-125	0	20

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

**Lab Serial Dilution
Analysis
Batch Quality Control**

Lab Number: L2329262

Report Date: 06/09/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1786091-6 QC Sample: L2328902-06 Client ID: DUP Sample						
Aluminum, Total	0.794	0.839	mg/l	6		20
Barium, Total	0.06908	0.07008	mg/l	1		20
Calcium, Total	40.0	44.5	mg/l	11		20
Iron, Total	1.69	1.84	mg/l	9		20
Magnesium, Total	8.30	8.82	mg/l	6		20
Manganese, Total	0.8842	0.9371	mg/l	6		20
Sodium, Total	114.	120.	mg/l	5		20

INORGANICS & MISCELLANEOUS

Project Name: FRIEDRICHSON SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-01

Date Collected: 05/24/23 11:00

Client ID: MW-2S-20230524

Date Received: 05/24/23

Sample Location: RT. 32, WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	104.		mg CaCO3/L	2.00	NA	1	-	06/05/23 13:38	121,2320B	MKT
Nitrogen, Ammonia	0.052	J	mg/l	0.075	0.024	1	06/05/23 10:50	06/06/23 13:38	44,350.1	KEP
Nitrogen, Nitrate	6.0		mg/l	0.10	0.023	1	-	05/25/23 07:50	44,353.2	KAF
Sulfate	26.		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	0.74		mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW



Project Name: FRIEDRICHSON SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

SAMPLE RESULTS

Lab ID: L2329262-02

Date Collected: 05/24/23 12:30

Client ID: MW-2-20230524

Date Received: 05/24/23

Sample Location: RT. 32, WATERFORD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	164.		mg CaCO3/L	2.00	NA	1	-	06/05/23 13:41	121,2320B	MKT
Nitrogen, Ammonia	1.81		mg/l	0.075	0.024	1	06/05/23 10:50	06/06/23 13:40	44,350.1	KEP
Nitrogen, Nitrate	0.025	J	mg/l	0.10	0.023	1	-	05/25/23 08:04	44,353.2	KAF
Sulfate	44.		mg/l	20	2.7	2	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
Total Organic Carbon	0.46	J	mg/l	0.50	0.10	1	-	06/05/23 05:58	1,9060A	DEW



Project Name: FRIEDRICHSON SITE

Lab Number: L2329262

Project Number: 060017.000

Report Date: 06/09/23

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1783188-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.023	1	-	05/25/23 07:45	44,353.2	KAF
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1785830-1										
Sulfate	ND		mg/l	10	1.4	1	06/01/23 09:00	06/01/23 09:00	1,9038	MRW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1787073-1										
Total Organic Carbon	ND		mg/l	0.50	0.09	1	-	06/05/23 03:17	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1787075-1										
Total Organic Carbon	ND		mg/l	0.50	0.10	1	-	06/05/23 04:27	1,9060A	DEW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1787121-1										
Nitrogen, Ammonia	ND		mg/l	0.075	0.024	1	06/05/23 10:50	06/06/23 13:11	44,350.1	KEP
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1787193-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	06/05/23 12:49	121,2320B	MKT



Lab Control Sample Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1783188-2								
Nitrogen, Nitrate	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1785830-2								
Sulfate	90		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1787073-2								
Total Organic Carbon	106		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1787075-2								
Total Organic Carbon	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1787121-2								
Nitrogen, Ammonia	94		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1787193-2								
Alkalinity, Total	104		-		90-110	-		10

Matrix Spike Analysis

Batch Quality Control

Project Name: FRIEDRICHSOHN SITE

Project Number: 060017.000

Lab Number: L2329262

Report Date: 06/09/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1783188-4 QC Sample: L2329262-01 Client ID: MW-2S-20230524												
Nitrogen, Nitrate	6.0	4	10	100		-	-		83-113	-		6
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1785830-3 QC Sample: L2328087-01 Client ID: MS Sample												
Sulfate	740	1000	1700	99		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1787073-4 QC Sample: L2328902-06 Client ID: MS Sample												
Total Organic Carbon	4.7	16	23	113		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1787075-4 QC Sample: L2329532-01 Client ID: MS Sample												
Total Organic Carbon	0.90	16	17	102		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1787121-4 QC Sample: L2329262-02 Client ID: MW-2-20230524												
Nitrogen, Ammonia	1.81	4	5.79	100		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1787193-4 QC Sample: L2329184-07 Client ID: MS Sample												
Alkalinity, Total	5.80	100	123	117	Q	-	-		86-116	-		10

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L2329262
Report Date: 06/09/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1783188-3 QC Sample: L2329262-01 Client ID: MW-2S-20230524						
Nitrogen, Nitrate	6.0	6.0	mg/l	0		6
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1785830-4 QC Sample: L2328087-01 Client ID: DUP Sample						
Sulfate	740	740	mg/l	0		14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1787073-3 QC Sample: L2328902-06 Client ID: DUP Sample						
Total Organic Carbon	4.7	4.4	mg/l	7		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1787075-3 QC Sample: L2329532-01 Client ID: DUP Sample						
Total Organic Carbon	0.90	0.90	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1787121-3 QC Sample: L2329262-02 Client ID: MW-2-20230524						
Nitrogen, Ammonia	1.81	1.94	mg/l	7		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1787193-3 QC Sample: L2329184-07 Client ID: DUP Sample						
Alkalinity, Total	5.80	5.72	mg CaCO3/L	1		10

Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Serial_No:06092317:49
Lab Number: L2329262
Report Date: 06/09/23

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2329262-01A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L2329262-01B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L2329262-01C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L2329262-01D	Vial H2SO4 preserved	A	NA		4.4	Y	Absent		TOC-9060(28)
L2329262-01E	Vial H2SO4 preserved	A	NA		4.4	Y	Absent		TOC-9060(28)
L2329262-01F	Vial H2SO4 preserved	A	NA		4.4	Y	Absent		TOC-9060(28)
L2329262-01G	Plastic 250ml unpreserved/No Headspace	A	NA		4.4	Y	Absent		ALK-T-2320(14)
L2329262-01H	Plastic 250ml unpreserved	A	7	7	4.4	Y	Absent		SO4-9038(28),NO3-353(2)
L2329262-01I	Plastic 250ml unpreserved	A	<2	<2	4.4	Y	Absent		-
L2329262-01J	Plastic 250ml HNO3 preserved	A	<2	<2	4.4	Y	Absent		TL-6020T(180),BA-6020T(180),FE-6020T(180),SE-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),MG-6020T(180),HG-T(28),CO-6020T(180)
L2329262-01K	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-LVI(365)
L2329262-01L	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-LVI(365)
L2329262-01M	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2329262-01N	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2329262-01O	Plastic 500ml H2SO4 preserved	A	<2	<2	4.4	Y	Absent		NH3-350(28)
L2329262-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.4	Y	Absent		FE-6020S(180)
L2329262-02A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L2329262-02B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L2329262-02C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)

Project Name: FRIEDRICHSON SITE**Lab Number:** L2329262**Project Number:** 060017.000**Report Date:** 06/09/23**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2329262-02D	Vial H2SO4 preserved	A	NA		4.4	Y	Absent		TOC-9060(28)
L2329262-02E	Vial H2SO4 preserved	A	NA		4.4	Y	Absent		TOC-9060(28)
L2329262-02F	Vial H2SO4 preserved	A	NA		4.4	Y	Absent		TOC-9060(28)
L2329262-02G	Plastic 250ml unpreserved/No Headspace	A	NA		4.4	Y	Absent		ALK-T-2320(14)
L2329262-02H	Plastic 250ml unpreserved	A	7	7	4.4	Y	Absent		SO4-9038(28),NO3-353(2)
L2329262-02I	Plastic 250ml unpreserved	A	<2	<2	4.4	Y	Absent		-
L2329262-02J	Plastic 250ml HNO3 preserved	A	<2	<2	4.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),K-6020T(180),NI-6020T(180),CR-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),CD-6020T(180),AL-6020T(180),AG-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L2329262-02K	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-LVI(365)
L2329262-02L	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-LVI(365)
L2329262-02M	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2329262-02N	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2329262-02O	Plastic 500ml H2SO4 preserved	A	<2	<2	4.4	Y	Absent		NH3-350(28)
L2329262-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.4	Y	Absent		FE-6020S(180)
L2329262-03A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: FRIEDRICHSON SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

Data Qualifiers

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: FRIEDRICHSOHN SITE
Project Number: 060017.000

Lab Number: L2329262
Report Date: 06/09/23

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 19

Published Date: 4/2/2021 1:14:23 PM

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Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625/625.1:** alpha-Terpineol**EPA 8260C/8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D/8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.****EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

ALPHA Job #
L2329202

☒ Same as Client Info

☐ NJ ☒ NY
☐ Other:

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Attachment 7

Data Usability Summary Report



Geology

Hydrology

Remediation

Water Supply

June 26, 2023

Mr. John L. Favreau
CHA
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
Friedrichsohn Cooperage
May 2023 Ground Water Sampling Events

Dear Mr. Favreau:

The data usability summary reports (DUSRs) and data validation reviews are attached to this letter for the Friedrichsohn Cooperage, May 2023 ground water sampling events. The data were mostly acceptable for Alpha Analytica Labs, SDG numbers L2328902 and L2329262 with some issues that are identified and discussed in the validation summaries. There were data that were qualified rejected, unusable (R) in data pack L2329262. The reason for qualifying the data are outlined in the DUSR and QA/QC review. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

A list of common data validation acronyms is attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist CHA.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA:dca
attachments

z:\projects\2023\23600-23620\23611-friedrichsohn cooperage\temp-review\friedrichsohn-231.ltr.docx

L2328902



Geology

Hydrology

Remediation

Water Supply

**Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
1 Rinse Blank, and 1 Trip Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile, semi-volatiles, PCBs, TAL metals, ammonia, nitrate, sulfate, total organic carbon, and alkalinity analyses for 7 ground water samples, 1 field duplicate, and 1 rinse blank and the results of volatile analyses for 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive volatile result for chlorobenzene was qualified as “estimated, based high” (J+) in sample MW-103-20230523 because 2 of 2 percent recoveries for chlorobenzene were above QC limits in the aqueous MS/MSD sample.
- The “not detected” volatile result for bromomethane was qualified as “estimated” (UJ) for sample CHA-1-20230522 because 1 of 2 percent recoveries for bromomethane was below QC limits, but not below 30% in the associated aqueous LCS/LCSD.
- The positive semi-volatile results for caprolactam were qualified as “estimated” (J) for samples MW-102B-20230522, MW-100-20230522, and CHA-1-20230522 because %Ds for caprolactam were above the allowable maximum in the associated continuing calibrations.
- The positive semi-volatile results for diethyl phthalate were qualified as “estimated” (J) for samples MW-100-20230522, MW-103B-20230523, and CHA-1-20230522 because %D for diethyl phthalate was above the allowable maximum in the associated continuing calibration.

- Positive SIM semi-volatile result for 2-methylnaphthalene were qualified as “not detected” (U) for samples MW-102-20230522, MW-102B-20230522, MW-100-20230522, and RINSE-20230522 because the level reported in the sample was not significantly greater than (more than 5 times) the highest associated blank level.
- Positive SIM semi-volatile result for chrysene were qualified as “not detected” (U) for samples MW-103B-20230523, MW-103-20230523, and MW-104-20230523 because the level reported in the sample was not significantly greater than (more than 5 times) the highest associated blank level.
- The positive metal results for calcium were qualified as estimated (J) for all 7 ground water samples and the field duplicate because %D for calcium was above the allowable maximum in the associated aqueous serial dilution sample and the results were above the RL.
- The positive metal results for chromium were qualified as “not detected” (U) for samples MW-102-20230522, MW-100-20230522, MW-103-20230523, and CHA-1-20230522 because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.
- The positive metal results for nickel were qualified as “not detected” (U) for samples MW-102-20230522, MW-100-20230522, MW-103-20230523, MW-104-20230523, and CHA-1-20230522 because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.
- The positive metal results for the following metals were qualified as estimated (J) for samples MW-100-20230522 and CHA-1-20230522 because the relative percent differences for these 7 metals were above the allowable maximum in the aqueous field duplicate pair MW-100-20230522/CHA-1-20230522.

aluminum
iron

arsenic
lead

cobalt
zinc

copper

- The positive general chemistry results for ammonia were qualified as estimated (J) for samples MW-100-20230522 and CHA-1-20230522 because the relative percent difference for ammonia was above the allowable maximum in the aqueous field duplicate pair MW-100-20230522/CHA-1-20230522.
- The “not detected” general chemistry result for alkalinity was qualified as “estimated” (UJ) for sample RINSE-20230522 because the percent recovery for alkalinity was below QC limits, but not below 30% in the associated aqueous spike sample.

All data are considered usable with estimated (J, J+, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Qualified Data Section

Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N15
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 22:28
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N15
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 22:28
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.38	0.50	0.18	J
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N15
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 22:28
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 22:07
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	160	1.0	0.07	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 22:07
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	30	2.5	0.70	
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 22:07
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:46
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:46
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:46
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:25
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	1.0	2.5	0.70	J
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:25
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	4.1	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:25
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:04
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	1.8	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	0.13	1.0	0.07	J
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:04
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	4.2	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 21:04
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N10
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 20:44
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	2.1	2.5	0.70	J J+
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	1.9	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N10
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 20:44
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N10
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 20:44
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-07D
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N09
 Sample Amount : 4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 20:23
 Dilution Factor : 2.5
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	6.2	1.8	U
75-34-3	1,1-Dichloroethane	ND	6.2	1.8	U
67-66-3	Chloroform	ND	6.2	1.8	U
56-23-5	Carbon tetrachloride	ND	1.2	0.34	U
78-87-5	1,2-Dichloropropane	ND	2.5	0.34	U
124-48-1	Dibromochloromethane	ND	1.2	0.37	U
79-00-5	1,1,2-Trichloroethane	ND	3.8	1.2	U
127-18-4	Tetrachloroethene	ND	1.2	0.45	U
108-90-7	Chlorobenzene	15	6.2	1.8	
75-69-4	Trichlorofluoromethane	ND	6.2	1.8	U
107-06-2	1,2-Dichloroethane	ND	1.2	0.33	U
71-55-6	1,1,1-Trichloroethane	ND	6.2	1.8	U
75-27-4	Bromodichloromethane	ND	1.2	0.48	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.2	0.41	U
10061-01-5	cis-1,3-Dichloropropene	ND	1.2	0.36	U
75-25-2	Bromoform	ND	5.0	1.6	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.2	0.42	U
71-43-2	Benzene	7.7	1.2	0.40	
108-88-3	Toluene	ND	6.2	1.8	U
100-41-4	Ethylbenzene	ND	6.2	1.8	U
74-87-3	Chloromethane	ND	6.2	1.8	U
74-83-9	Bromomethane	ND	6.2	1.8	U
75-01-4	Vinyl chloride	190	2.5	0.18	
75-00-3	Chloroethane	ND	6.2	1.8	U
75-35-4	1,1-Dichloroethene	ND	1.2	0.42	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-07D
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N09
 Sample Amount : 4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 20:23
 Dilution Factor : 2.5
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	1.8	U
79-01-6	Trichloroethene	ND	1.2	0.44	U
95-50-1	1,2-Dichlorobenzene	ND	6.2	1.8	U
541-73-1	1,3-Dichlorobenzene	ND	6.2	1.8	U
106-46-7	1,4-Dichlorobenzene	ND	6.2	1.8	U
1634-04-4	Methyl tert butyl ether	ND	6.2	1.8	U
179601-23-1	p/m-Xylene	ND	6.2	1.8	U
95-47-6	o-Xylene	ND	6.2	1.8	U
156-59-2	cis-1,2-Dichloroethene	320	6.2	1.8	
100-42-5	Styrene	ND	6.2	1.8	U
75-71-8	Dichlorodifluoromethane	ND	12	2.5	U
67-64-1	Acetone	ND	12	3.6	U
75-15-0	Carbon disulfide	ND	12	2.5	U
78-93-3	2-Butanone	ND	12	4.8	U
108-10-1	4-Methyl-2-pentanone	ND	12	2.5	U
591-78-6	2-Hexanone	ND	12	2.5	U
74-97-5	Bromochloromethane	ND	6.2	1.8	U
106-93-4	1,2-Dibromoethane	ND	5.0	1.6	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	6.2	1.8	U
98-82-8	Isopropylbenzene	ND	6.2	1.8	U
87-61-6	1,2,3-Trichlorobenzene	ND	6.2	1.8	U
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	1.8	U
79-20-9	Methyl Acetate	ND	5.0	0.58	U
110-82-7	Cyclohexane	ND	25	0.68	U
123-91-1	1,4-Dioxane	ND	620	150	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-07D
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N09
 Sample Amount : 4 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 20:23
 Dilution Factor : 2.5
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	6.2	1.8	U
108-87-2	Methyl cyclohexane	ND	25	0.99	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 21:06
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 21:06
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 21:06
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 19:41
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 19:41
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 19:41
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-10
 Client ID : TRIP BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 00:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 19:20
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-10
 Client ID : TRIP BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 00:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 19:20
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-10
 Client ID : TRIP BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230531N06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 00:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 19:20
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 04:09
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 04:09
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 04:09
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:58
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:58
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	17.	10	3.3	J



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:58
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-03
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:35
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	2.2	5.0	0.38	J J
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-03
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:35
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	13.	10	3.3	J



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-03
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:35
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-04
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:12
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-04
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:12
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-04
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 06:12
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-05
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:48
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	1.5	5.0	0.38	J J
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-05
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:48
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-05
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:48
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-06
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/30/23 19:30
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-06
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/30/23 19:30
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-06
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/30/23 19:30
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-07
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-07
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/29/23 03:07
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-07
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-07
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/29/23 03:07
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-07
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-07
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/29/23 03:07
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-08
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:25
 Date Extracted : 05/27/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	1.8	5.0	0.38	J J
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-08
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:25
 Date Extracted : 05/27/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	10.	10	3.3	J



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-08
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:25
 Date Extracted : 05/27/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-09
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:01
 Date Extracted : 05/27/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-09
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:01
 Date Extracted : 05/27/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 28902-09
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 05:01
 Date Extracted : 05/27/23
 Dilution Factor : 1
 Analyst : ALS
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 19:39
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.08	0.10	0.05	J
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.05	0.10	0.02	J U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 19:55
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.45	0.10	0.05	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	0.05	0.10	0.01	J
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.09	0.10	0.02	J U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-03
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 20:12
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.31	0.10	0.05	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	0.02	0.10	0.01	J
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.06	0.10	0.02	J U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-04
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 20:29
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-05
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 20:45
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	0.05	0.10	0.01	J U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-06
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/28/23 14:23
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	0.02	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	0.01	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.01	0.10	0.01	J
218-01-9	Chrysene	0.04	0.10	0.01	J U
208-96-8	Acenaphthylene	0.01	0.10	0.01	J
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	0.07	0.80	0.01	J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-07
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-07
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 21:02
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : RP
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	0.03	0.10	0.01	J U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-08
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 21:19
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 28902-09
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 05/27/23 21:35
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : DV
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	0.03	0.10	0.01	J
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.07	0.10	0.02	J U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-19
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:07
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-20
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:16
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-20
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:16
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-PesticideII
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
53469-21-9	Aroclor 1242	0.099	0.071	0.061	
1336-36-3	PCBs, Total	0.099	0.071	0.061	



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-21
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:25
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-22
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:33
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-22
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:33
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-PesticideII
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
53469-21-9	Aroclor 1242	0.134	0.071	0.061	
1336-36-3	PCBs, Total	0.134	0.071	0.061	



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-23
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:42
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	0.220	0.071	0.061	
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	0.220	0.071	0.061	



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-13
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 19:16
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-13
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 19:16
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-PesticideII
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
53469-21-9	Aroclor 1242	1.11	0.071	0.061	
1336-36-3	PCBs, Total	1.11	0.071	0.061	



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-07
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-24
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:51
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	0.481	0.071	0.061	
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	0.481	0.071	0.061	



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-25
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 20:59
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230605c-37
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 06/06/23 01:14
 Date Extracted : 06/04/23
 Dilution Factor : 1
 Analyst : JM
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-06
Client ID : MW-103-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1785725.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 15:00
Date Received : 05/23/23
Date Analyzed : 06/02/23 01:00
Dilution Factor : 1
Analyst : EGW
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	0.0743	0.0500	0.0191	



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,6020B
 Lab File ID : WG1787017.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/04/23 20:19
 Dilution Factor : 1
 Analyst : WKP
 Instrument ID : ICPMSQ
 %Solids : N/A
 Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	0.0255	0.0500	0.0191	J



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-02
Client ID : MW-102B-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 14:00
Date Received : 05/23/23
Date Analyzed : 06/04/23 20:24
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	0.0977	0.0500	0.0191	



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,6020B
 Lab File ID : WG1787017.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 06/04/23 20:29
 Dilution Factor : 1
 Analyst : WKP
 Instrument ID : ICPMSQ
 %Solids : N/A
 Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-04
Client ID : MW-101B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 09:20
Date Received : 05/23/23
Date Analyzed : 06/04/23 20:33
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	1.22	0.0500	0.0191	



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/04/23 20:38
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	3.15	0.0500	0.0191	



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 06/04/23 21:33
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	0.0283	0.0500	0.0191	J



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 06/04/23 21:38
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	0.0269	0.0500	0.0191	J



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-09
Client ID : RINSE-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 15:15
Date Received : 05/23/23
Date Analyzed : 06/04/23 21:43
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	0.0293	0.0500	0.0191	J



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,6020B
 Lab File ID : WG1787552.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 06/06/23 17:45
 Dilution Factor : 1
 Analyst : EGW
 Instrument ID : ICPMSQ2
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.794	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00628	0.00050	0.00016	
7440-39-3	Barium, Total	0.06908	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	40.0	0.100	0.0394	J
7440-47-3	Chromium, Total	0.00200	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00099	0.00050	0.00016	
7440-50-8	Copper, Total	0.00337	0.00100	0.00038	
7439-89-6	Iron, Total	1.69	0.0500	0.0191	
7439-92-1	Lead, Total	0.00193	0.00100	0.00034	
7439-95-4	Magnesium, Total	8.30	0.0700	0.0242	
7439-96-5	Manganese, Total	0.8842	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00827	0.00200	0.00055	U
7440-09-7	Potassium, Total	2.35	0.100	0.0309	
7782-49-2	Selenium, Total	0.00224	0.00500	0.00173	J
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	114.	0.100	0.0293	
7440-28-0	Thallium, Total	0.00032	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.00212	0.00500	0.00157	J
7440-66-6	Zinc, Total	0.00770	0.01000	0.00341	J



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-01
Client ID : MW-102-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/07/23 07:37
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.139	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00443	0.00050	0.00016	
7440-39-3	Barium, Total	0.05332	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	77.4	0.100	0.0394	J
7440-47-3	Chromium, Total	0.00139	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00069	0.00050	0.00016	
7440-50-8	Copper, Total	0.00161	0.00100	0.00038	
7439-89-6	Iron, Total	3.43	0.0500	0.0191	
7439-92-1	Lead, Total	0.00072	0.00100	0.00034	J
7439-95-4	Magnesium, Total	10.6	0.0700	0.0242	
7439-96-5	Manganese, Total	0.9184	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00303	0.00200	0.00055	U
7440-09-7	Potassium, Total	3.29	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	22.5	0.100	0.0293	
7440-28-0	Thallium, Total	0.00015	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,6020B
 Lab File ID : WG1788064.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 06/07/23 07:42
 Dilution Factor : 1
 Analyst : SMV
 Instrument ID : ICPMSQ2
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	16.1	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00204	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.02041	0.00050	0.00016	
7440-39-3	Barium, Total	2.128	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00068	0.00050	0.00010	
7440-43-9	Cadmium, Total	0.00018	0.00020	0.00005	J
7440-70-2	Calcium, Total	52.0	0.100	0.0394	J
7440-47-3	Chromium, Total	0.04090	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.02392	0.00050	0.00016	
7440-50-8	Copper, Total	0.05746	0.00100	0.00038	
7439-89-6	Iron, Total	49.2	0.0500	0.0191	
7439-92-1	Lead, Total	0.03942	0.00100	0.00034	
7439-95-4	Magnesium, Total	29.7	0.0700	0.0242	
7439-96-5	Manganese, Total	1.860	0.00100	0.00044	
7440-02-0	Nickel, Total	0.05899	0.00200	0.00055	
7440-09-7	Potassium, Total	13.0	0.100	0.0309	
7782-49-2	Selenium, Total	0.00413	0.00500	0.00173	J
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	115.	0.100	0.0293	
7440-28-0	Thallium, Total	0.00058	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.03627	0.00500	0.00157	
7440-66-6	Zinc, Total	0.07380	0.01000	0.00341	



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-03
Client ID : MW-100-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 16:40
Date Received : 05/23/23
Date Analyzed : 06/07/23 09:09
Dilution Factor : 5
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-96-5	Manganese, Total	9.520	0.00500	0.00220	



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-03
Client ID : MW-100-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 16:40
Date Received : 05/23/23
Date Analyzed : 06/07/23 07:47
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	2.34	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00187	0.00050	0.00016	J
7440-39-3	Barium, Total	0.1197	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00013	0.00050	0.00010	J
7440-43-9	Cadmium, Total	0.00013	0.00020	0.00005	J
7440-70-2	Calcium, Total	153.	0.100	0.0394	J
7440-47-3	Chromium, Total	0.00349	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00455	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00526	0.00100	0.00038	J
7439-89-6	Iron, Total	4.64	0.0500	0.0191	J
7439-92-1	Lead, Total	0.00305	0.00100	0.00034	J
7439-95-4	Magnesium, Total	22.5	0.0700	0.0242	
7440-02-0	Nickel, Total	0.00659	0.00200	0.00055	U
7440-09-7	Potassium, Total	11.1	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	137.	0.100	0.0293	
7440-28-0	Thallium, Total	0.00015	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.00470	0.00500	0.00157	J
7440-66-6	Zinc, Total	0.01170	0.01000	0.00341	J



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,6020B
 Lab File ID : WG1788064.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 06/07/23 07:52
 Dilution Factor : 5
 Analyst : SMV
 Instrument ID : ICPMSQ2
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	69.7	0.0500	0.0164	
7440-36-0	Antimony, Total	0.00358	0.02000	0.00214	J
7440-38-2	Arsenic, Total	0.09524	0.00250	0.00082	
7440-39-3	Barium, Total	4.024	0.00250	0.00086	
7440-41-7	Beryllium, Total	0.00447	0.00250	0.00053	
7440-43-9	Cadmium, Total	0.00054	0.00100	0.00029	J
7440-70-2	Calcium, Total	82.8	0.500	0.197	J
7440-47-3	Chromium, Total	0.1340	0.00500	0.00089	
7440-48-4	Cobalt, Total	0.1294	0.00250	0.00081	
7440-50-8	Copper, Total	0.2350	0.00500	0.00192	
7439-89-6	Iron, Total	193.	0.250	0.0955	
7439-92-1	Lead, Total	0.1340	0.00500	0.00171	
7439-95-4	Magnesium, Total	53.2	0.350	0.121	
7439-96-5	Manganese, Total	14.65	0.00500	0.00220	
7440-02-0	Nickel, Total	0.1846	0.01000	0.00278	
7440-09-7	Potassium, Total	21.7	0.500	0.154	
7782-49-2	Selenium, Total	0.0152	0.0250	0.00865	J
7440-22-4	Silver, Total	ND	0.00200	0.00081	U
7440-23-5	Sodium, Total	174.	0.500	0.146	
7440-28-0	Thallium, Total	0.00138	0.00500	0.00071	J
7440-62-2	Vanadium, Total	0.1168	0.02500	0.00785	
7440-66-6	Zinc, Total	0.2788	0.05000	0.01705	



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/07/23 07:57
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	50.1	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00065	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.02532	0.00050	0.00016	
7440-39-3	Barium, Total	1.258	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00187	0.00050	0.00010	
7440-43-9	Cadmium, Total	0.00026	0.00020	0.00005	
7440-70-2	Calcium, Total	36.0	0.100	0.0394	J
7440-47-3	Chromium, Total	0.1295	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.05592	0.00050	0.00016	
7440-50-8	Copper, Total	0.1100	0.00100	0.00038	
7439-89-6	Iron, Total	120.	0.0500	0.0191	
7439-92-1	Lead, Total	0.07202	0.00100	0.00034	
7439-95-4	Magnesium, Total	37.6	0.0700	0.0242	
7439-96-5	Manganese, Total	3.514	0.00100	0.00044	
7440-02-0	Nickel, Total	0.1623	0.00200	0.00055	
7440-09-7	Potassium, Total	9.72	0.100	0.0309	
7782-49-2	Selenium, Total	0.00772	0.00500	0.00173	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	192.	0.100	0.0293	
7440-28-0	Thallium, Total	0.00035	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.09858	0.00500	0.00157	
7440-66-6	Zinc, Total	0.1631	0.01000	0.00341	



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 06/07/23 08:01
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	2.67	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00674	0.00050	0.00016	
7440-39-3	Barium, Total	0.1685	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00014	0.00050	0.00010	J
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	55.5	0.100	0.0394	J
7440-47-3	Chromium, Total	0.00731	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00227	0.00050	0.00016	
7440-50-8	Copper, Total	0.00687	0.00100	0.00038	
7439-89-6	Iron, Total	10.3	0.0500	0.0191	
7439-92-1	Lead, Total	0.00661	0.00100	0.00034	
7439-95-4	Magnesium, Total	11.9	0.0700	0.0242	
7439-96-5	Manganese, Total	3.809	0.00100	0.00044	
7440-02-0	Nickel, Total	0.01016	0.00200	0.00055	U
7440-09-7	Potassium, Total	2.77	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	162.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00537	0.00500	0.00157	
7440-66-6	Zinc, Total	0.01174	0.01000	0.00341	



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 06/07/23 09:13
Dilution Factor : 5
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-96-5	Manganese, Total	9.410	0.00500	0.00220	



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 06/07/23 08:06
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	4.88	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00311	0.00050	0.00016	J
7440-39-3	Barium, Total	0.1334	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00025	0.00050	0.00010	J
7440-43-9	Cadmium, Total	0.00016	0.00020	0.00005	J
7440-70-2	Calcium, Total	158.	0.100	0.0394	J
7440-47-3	Chromium, Total	0.00659	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00644	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00978	0.00100	0.00038	J
7439-89-6	Iron, Total	8.88	0.0500	0.0191	J
7439-92-1	Lead, Total	0.00593	0.00100	0.00034	J
7439-95-4	Magnesium, Total	23.7	0.0700	0.0242	
7440-02-0	Nickel, Total	0.01063	0.00200	0.00055	U
7440-09-7	Potassium, Total	11.5	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	138.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00911	0.00500	0.00157	
7440-66-6	Zinc, Total	0.01683	0.01000	0.00341	J



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-09
Client ID : RINSE-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 15:15
Date Received : 05/23/23
Date Analyzed : 06/07/23 08:11
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.00470	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00085	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	0.0603	0.100	0.0394	J
7440-47-3	Chromium, Total	0.00130	0.00100	0.00017	
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.0225	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	0.00185	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00230	0.00200	0.00055	
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	0.0366	0.100	0.0293	J
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-01
Client ID : MW-102-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/06/23 18:43
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-02
 Client ID : MW-102B-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,7470A
 Lab File ID : WG1787582.pdf
 Sample Amount : 25ml
 Digestion Method : EPA 7470A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 14:00
 Date Received : 05/23/23
 Date Analyzed : 06/06/23 18:46
 Dilution Factor : 1
 Analyst : DMB
 Instrument ID : NIC1
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	0.00015	0.00020	0.00009	J



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,7470A
 Lab File ID : WG1787582.pdf
 Sample Amount : 25ml
 Digestion Method : EPA 7470A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 06/06/23 18:50
 Dilution Factor : 1
 Analyst : DMB
 Instrument ID : NIC1
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,7470A
 Lab File ID : WG1787582.pdf
 Sample Amount : 25ml
 Digestion Method : EPA 7470A

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 06/06/23 18:53
 Dilution Factor : 1
 Analyst : DMB
 Instrument ID : NIC1
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	0.00043	0.00020	0.00009	



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/06/23 18:56
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	0.00012	0.00020	0.00009	J



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-06
Client ID : MW-103-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 15:00
Date Received : 05/23/23
Date Analyzed : 06/06/23 15:05
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 06/06/23 19:00
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 06/06/23 19:03
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-09
Client ID : RINSE-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 15:15
Date Received : 05/23/23
Date Analyzed : 06/06/23 19:06
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-01
Client ID : MW-102-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230608-C4
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/08/23 15:52
Dilution Factor : 1
Analyst : AAA
Instrument ID : LACHAT5
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	0.230	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-02
Client ID : MW-102B-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230608-C1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 14:00
Date Received : 05/23/23
Date Analyzed : 06/08/23 14:52
Dilution Factor : 1
Analyst : AAA
Instrument ID : LACHAT5
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	2.69	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-03
 Client ID : MW-100-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 44,350.1
 Lab File ID : NH320230608-C1
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 16:40
 Date Received : 05/23/23
 Date Analyzed : 06/08/23 14:53
 Dilution Factor : 1
 Analyst : AAA
 Instrument ID : LACHAT5
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	0.770	0.075	0.024	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-04
Client ID : MW-101B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230608-C2
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 09:20
Date Received : 05/23/23
Date Analyzed : 06/08/23 15:07
Dilution Factor : 1
Analyst : AAA
Instrument ID : LACHAT5
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	2.18	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230608-C2
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/08/23 15:08
Dilution Factor : 1
Analyst : AAA
Instrument ID : LACHAT5
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	0.861	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-06
Client ID : MW-103-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230606-D
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 15:00
Date Received : 05/23/23
Date Analyzed : 06/06/23 10:39
Dilution Factor : 1
Analyst : KEP
Instrument ID : LACHAT
%Solids : N/A
Date Digested : 06/04/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	0.488	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-07
 Client ID : MW-104-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 44,350.1
 Lab File ID : NH320230606-D
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 16:30
 Date Received : 05/23/23
 Date Analyzed : 06/06/23 10:44
 Dilution Factor : 1
 Analyst : KEP
 Instrument ID : LACHAT
 %Solids : N/A
 Date Digested : 06/04/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	1.60	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230606-D
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 06/06/23 10:45
Dilution Factor : 2
Analyst : KEP
Instrument ID : LACHAT
%Solids : N/A
Date Digested : 06/04/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	0.342	0.150	0.048	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-09
Client ID : RINSE-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230606-D
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 15:15
Date Received : 05/23/23
Date Analyzed : 06/06/23 10:46
Dilution Factor : 1
Analyst : KEP
Instrument ID : LACHAT
%Solids : N/A
Date Digested : 06/04/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 44,353.2
 Lab File ID : NO3230524-B1
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/24/23 09:19
 Dilution Factor : 1
 Analyst : KAF
 Instrument ID : LACHAT
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	ND	0.10	0.023	U



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-02
Client ID : MW-102B-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230524-B1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 14:00
Date Received : 05/23/23
Date Analyzed : 05/24/23 09:20
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.078	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-03
Client ID : MW-100-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230524-B1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 16:40
Date Received : 05/23/23
Date Analyzed : 05/24/23 09:22
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.047	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-04
 Client ID : MW-101B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 44,353.2
 Lab File ID : NO3230524-B1
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 09:20
 Date Received : 05/23/23
 Date Analyzed : 05/24/23 09:23
 Dilution Factor : 1
 Analyst : KAF
 Instrument ID : LACHAT
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.15	0.10	0.023	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230524-B1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 05/24/23 09:24
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.096	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 44,353.2
 Lab File ID : NO3230524-B1
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 05/24/23 09:25
 Dilution Factor : 1
 Analyst : KAF
 Instrument ID : LACHAT
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.049	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230524-B1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 05/24/23 09:33
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.036	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230524-B1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 05/24/23 09:35
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.033	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-09
Client ID : RINSE-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230524-B1
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 15:15
Date Received : 05/23/23
Date Analyzed : 05/24/23 09:36
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.036	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-01
Client ID : MW-102-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 1
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	3.0	0.50	0.09	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-02
Client ID : MW-102B-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 14:00
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 1
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	3.3	0.50	0.09	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-03
Client ID : MW-100-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 16:40
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 2
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	5.4	1.0	0.19	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-04
Client ID : MW-101B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 09:20
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 1
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	1.4	0.50	0.09	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 2
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	7.0	1.0	0.19	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-06
Client ID : MW-103-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 15:00
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 2
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	4.7	1.0	0.19	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 2
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	5.4	1.0	0.19	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,9060A
 Lab File ID : wg1787073.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 06/05/23 03:17
 Dilution Factor : 2
 Analyst : DEW
 Instrument ID :
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	5.3	1.0	0.19	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-09
Client ID : RINSE-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 15:15
Date Received : 05/23/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 1
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	0.21	0.50	0.09	J



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-01
 Client ID : MW-102-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,9038
 Lab File ID : WG1785273.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 05/31/23 09:00
 Dilution Factor : 2.5
 Analyst : MRW/S
 Instrument ID : SPEC6
 %Solids : N/A
 Date Digested : 05/31/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	66.	25	3.4	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-02
Client ID : MW-102B-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9038
Lab File ID : WG1785813.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 14:00
Date Received : 05/23/23
Date Analyzed : 06/01/23 09:00
Dilution Factor : 1
Analyst : MRW/S
Instrument ID : SPEC6
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	31.	10	1.4	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-03
Client ID : MW-100-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9038
Lab File ID : WG1785813.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 16:40
Date Received : 05/23/23
Date Analyzed : 06/01/23 09:00
Dilution Factor : 2.5
Analyst : MRW/S
Instrument ID : SPEC6
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	89.	25	3.4	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-04
Client ID : MW-101B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9038
Lab File ID : WG1785813.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 09:20
Date Received : 05/23/23
Date Analyzed : 06/01/23 09:00
Dilution Factor : 1
Analyst : MRW/S
Instrument ID : SPEC6
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	21.	10	1.4	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-05
 Client ID : MW-103B-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,9038
 Lab File ID : WG1785813.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 11:45
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 09:00
 Dilution Factor : 1
 Analyst : MRW/S
 Instrument ID : SPEC6
 %Solids : N/A
 Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	28.	10	1.4	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-06
 Client ID : MW-103-20230523
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,9038
 Lab File ID : WG1785813.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/23/23 15:00
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 09:00
 Dilution Factor : 1
 Analyst : MRW/S
 Instrument ID : SPEC6
 %Solids : N/A
 Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	34.	10	1.4	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9038
Lab File ID : WG1785813.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 06/01/23 09:00
Dilution Factor : 1
Analyst : MRW/S
Instrument ID : SPEC6
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	26.	10	1.4	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-08
Client ID : CHA-1-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 1,9038
Lab File ID : WG1786507.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 18:00
Date Received : 05/23/23
Date Analyzed : 06/02/23 13:20
Dilution Factor : 5
Analyst : MRW/S
Instrument ID : SPEC6
%Solids : N/A
Date Digested : 06/02/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	91.	50	6.8	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,9038
 Lab File ID : WG1785813.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 06/01/23 09:00
 Dilution Factor : 1
 Analyst : MRW/S
 Instrument ID : SPEC6
 %Solids : N/A
 Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	ND	10	1.4	U



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-01
Client ID : MW-102-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230602.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/02/23 09:17
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	191.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-02
Client ID : MW-102B-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230602.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 14:00
Date Received : 05/23/23
Date Analyzed : 06/02/23 09:23
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	376.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-03
Client ID : MW-100-20230522
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230602.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/22/23 16:40
Date Received : 05/23/23
Date Analyzed : 06/02/23 09:32
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	386.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-04
Client ID : MW-101B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230605.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 09:20
Date Received : 05/23/23
Date Analyzed : 06/05/23 10:56
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	349.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-05
Client ID : MW-103B-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230605.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 11:45
Date Received : 05/23/23
Date Analyzed : 06/05/23 11:42
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	349.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-06
Client ID : MW-103-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230605.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 15:00
Date Received : 05/23/23
Date Analyzed : 06/05/23 12:02
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	214.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2328902-07
Client ID : MW-104-20230523
Sample Location :
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230605.csv
Sample Amount :
Digestion Method :

Lab Number : L2328902
Project Number : 060017.000
Date Collected : 05/23/23 16:30
Date Received : 05/23/23
Date Analyzed : 06/05/23 12:22
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	237.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-08
 Client ID : CHA-1-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 121,2320B
 Lab File ID : 230602.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 18:00
 Date Received : 05/23/23
 Date Analyzed : 06/02/23 09:42
 Dilution Factor : 1
 Analyst : MKT
 Instrument ID : METTLER
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	396.	2.00	NA	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2328902-09
 Client ID : RINSE-20230522
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 121,2320B
 Lab File ID : 230602.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : 05/22/23 15:15
 Date Received : 05/23/23
 Date Analyzed : 06/02/23 09:52
 Dilution Factor : 1
 Analyst : MKT
 Instrument ID : METTLER
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	ND	2.00	NA	U UJ



VOC Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
1 Rinse Blank, and 1 Trip Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRF for acetone was below the method minimum, but not below 0.010 for VOA108 on 05-18-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 05-31-23 (V08230531N01). The RRFs for bromomethane, acetone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 06-01-23 (V08230601N01). The %D for bromomethane was above the method maximum on 05-31-23 (V08230531N01). The %D for bromomethane was above the method maximum on 06-01-23 (V08230601N01). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds), as required.

The %D for bromomethane was above the allowable maximum (20%) on 05-31-23 (V08230531N01). The %D for bromomethane was above the allowable maximum (20%) on 06-01-23 (V08230601N01). Positive results for bromomethane should be considered estimated (J) in associated samples.

Blanks: The analyses of the method, trip, and rinse blanks reported target compounds as not detected.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, rinse blank, and trip blank.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum; 2 of 2 percent recoveries (%Rs) for chlorobenzene were above QC limits for aqueous MS/MSD sample MW-103-20230523. The positive result for chlorobenzene should be considered estimated biased high (J+) in sample MW-103-20230523.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1786055-3/4.

The RPDs for target compounds were below the allowable maximum, but 1 of 2 %Rs for bromomethane was below QC limits, but not below 30% for aqueous samples WG1786504-3/4. Positive results for bromomethane should be considered estimated, biased low (J+) and “not detected” results estimated (UJ) in associated aqueous samples.

Field Duplicates: The analyses of aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Laboratory Control Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : **WG1786504-3** Analysis Date : 06/01/23 16:35 File ID : V08230601N01
 LCSD Sample ID : **WG1786504-4** Analysis Date : 06/01/23 16:56 File ID : V08230601N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	10	100	10	10	100	0	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	10	100	10	10	100	0	70-130	20
Dibromochloromethane	10	9.5	95	10	10	100	5	63-130	20
1,1,2-Trichloroethane	10	10	100	10	10	100	0	70-130	20
Tetrachloroethene	10	9.7	97	10	10	100	3	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
Trichlorofluoromethane	10	11	110	10	11	110	0	62-150	20
1,2-Dichloroethane	10	11	110	10	11	110	0	70-130	20
1,1,1-Trichloroethane	10	10	100	10	11	110	10	67-130	20
Bromodichloromethane	10	9.8	98	10	10	100	2	67-130	20
trans-1,3-Dichloropropene	10	9.1	91	10	9.5	95	4	70-130	20
cis-1,3-Dichloropropene	10	9.1	91	10	9.0	90	1	70-130	20
Bromoform	10	8.8	88	10	9.2	92	4	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	10	100	0	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	9.7	97	10	10	100	3	70-130	20
Ethylbenzene	10	9.4	94	10	9.7	97	3	70-130	20
Chloromethane	10	9.6	96	10	9.9	99	3	64-130	20
Bromomethane	10	3.7	37 Q	10	4.3	43	15	39-139	20
Vinyl chloride	10	10	100	10	11	110	10	55-140	20
Chloroethane	10	11	110	10	11	110	0	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : WG1786504-3 Analysis Date : 06/01/23 16:35 File ID : V08230601N01
 LCSD Sample ID : WG1786504-4 Analysis Date : 06/01/23 16:56 File ID : V08230601N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Trichloroethene	10	9.2	92	10	9.9	99	7	70-130	20
1,2-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	9.5	95	10	9.8	98	3	63-130	20
p/m-Xylene	20	19	95	20	20	100	5	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	9.7	97	3	70-130	20
Styrene	20	20	100	20	20	100	0	70-130	20
Dichlorodifluoromethane	10	10	100	10	10	100	0	36-147	20
Acetone	10	12	120	10	12	120	0	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	11	110	10	12	120	9	63-138	20
4-Methyl-2-pentanone	10	8.8	88	10	9.6	96	9	59-130	20
2-Hexanone	10	9.0	90	10	9.9	99	10	57-130	20
Bromochloromethane	10	9.8	98	10	9.8	98	0	70-130	20
1,2-Dibromoethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromo-3-chloropropane	10	9.9	99	10	11	110	11	41-144	20
Isopropylbenzene	10	9.4	94	10	9.4	94	0	70-130	20
1,2,3-Trichlorobenzene	10	9.5	95	10	9.9	99	4	70-130	20
1,2,4-Trichlorobenzene	10	9.3	93	10	9.8	98	5	70-130	20
Methyl Acetate	10	11	110	10	11	110	0	70-130	20
Cyclohexane	10	10	100	10	11	110	10	70-130	20
1,4-Dioxane	500	440	88	500	460	92	4	56-162	20
Freon-113	10	11	110	10	11	110	0	70-130	20
Methyl cyclohexane	10	9.2	92	10	9.0	90	2	70-130	20



Matrix Spike Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : MW-103-20230523
 Lab Sample ID : L2328902-06
 Matrix Spike : WG1786055-6
 Matrix Spike Dup : WG1786055-7

Lab Number : L2328902
 Project Number : 060017.000
 Matrix (Level) : WATER (LOW)
 Analysis Date : 05/31/23 20:44
 MS Analysis Date : 06/01/23 02:17
 MSD Analysis Date : 06/01/23 02:37

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Methylene chloride	ND	10	11	110	10	12	120	9	70-130	20
1,1-Dichloroethane	ND	10	12	120	10	12	120	0	70-130	20
Chloroform	ND	10	12	120	10	12	120	0	70-130	20
Carbon tetrachloride	ND	10	13	130	10	13	130	0	63-132	20
1,2-Dichloropropane	ND	10	12	120	10	12	120	0	70-130	20
Dibromochloromethane	ND	10	11	110	10	11	110	0	63-130	20
1,1,2-Trichloroethane	ND	10	12	120	10	11	110	9	70-130	20
Tetrachloroethene	ND	10	11	110	10	12	120	9	70-130	20
Chlorobenzene	2.1J	10	14	140 Q	10	14	140 Q	0	75-130	20
Trichlorofluoromethane	ND	10	13	130	10	13	130	0	62-150	20
1,2-Dichloroethane	ND	10	12	120	10	12	120	0	70-130	20
1,1,1-Trichloroethane	ND	10	12	120	10	13	130	8	67-130	20
Bromodichloromethane	ND	10	11	110	10	11	110	0	67-130	20
trans-1,3-Dichloropropene	ND	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	ND	10	9.5	95	10	10	100	5	70-130	20
Bromoform	ND	10	9.7	97	10	9.5	95	2	54-136	20
1,1,2,2-Tetrachloroethane	ND	10	12	120	10	11	110	9	67-130	20
Benzene	1.9	10	14	121	10	14	121	0	70-130	20
Toluene	ND	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	ND	10	11	110	10	11	110	0	70-130	20
Chloromethane	ND	10	12	120	10	12	120	0	64-130	20
Bromomethane	ND	10	4.5	45	10	5.5	55	20	39-139	20



Matrix Spike Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : MW-103-20230523
 Lab Sample ID : L2328902-06
 Matrix Spike : WG1786055-6
 Matrix Spike Dup : WG1786055-7

Lab Number : L2328902
 Project Number : 060017.000
 Matrix (Level) : WATER (LOW)
 Analysis Date : 05/31/23 20:44
 MS Analysis Date : 06/01/23 02:17
 MSD Analysis Date : 06/01/23 02:37

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Vinyl chloride	ND	10	13	130	10	13	130	0	55-140	20
Chloroethane	ND	10	12	120	10	13	130	8	55-138	20
1,1-Dichloroethene	ND	10	12	120	10	13	130	8	61-145	20
trans-1,2-Dichloroethene	ND	10	11	110	10	12	120	9	70-130	20
Trichloroethene	ND	10	11	110	10	11	110	0	70-130	20
1,2-Dichlorobenzene	ND	10	11	110	10	11	110	0	70-130	20
1,3-Dichlorobenzene	ND	10	11	110	10	11	110	0	70-130	20
1,4-Dichlorobenzene	ND	10	11	110	10	11	110	0	70-130	20
Methyl tert butyl ether	ND	10	10	100	10	11	110	10	63-130	20
p/m-Xylene	ND	20	23	115	20	23	115	0	70-130	20
o-Xylene	ND	20	22	110	20	22	110	0	70-130	20
cis-1,2-Dichloroethene	ND	10	11	110	10	12	120	9	70-130	20
Styrene	ND	20	22	110	20	22	110	0	70-130	20
Dichlorodifluoromethane	ND	10	12	120	10	13	130	8	36-147	20
Acetone	ND	10	12	120	10	13	130	8	58-148	20
Carbon disulfide	ND	10	12	120	10	12	120	0	51-130	20
2-Butanone	ND	10	10	100	10	11	110	10	63-138	20
4-Methyl-2-pentanone	ND	10	9.7	97	10	10	100	3	59-130	20
2-Hexanone	ND	10	9.8	98	10	9.7	97	1	57-130	20
Bromochloromethane	ND	10	12	120	10	12	120	0	70-130	20
1,2-Dibromoethane	ND	10	12	120	10	12	120	0	70-130	20
1,2-Dibromo-3-chloropropane	ND	10	11	110	10	11	110	0	41-144	20



Matrix Spike Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : MW-103-20230523
 Lab Sample ID : L2328902-06
 Matrix Spike : WG1786055-6
 Matrix Spike Dup : WG1786055-7

Lab Number : L2328902
 Project Number : 060017.000
 Matrix (Level) : WATER (LOW)
 Analysis Date : 05/31/23 20:44
 MS Analysis Date : 06/01/23 02:17
 MSD Analysis Date : 06/01/23 02:37

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Isopropylbenzene	ND	10	11	110	10	11	110	0	70-130	20
1,2,3-Trichlorobenzene	ND	10	11	110	10	10	100	10	70-130	20
1,2,4-Trichlorobenzene	ND	10	10	100	10	10	100	0	70-130	20
Methyl Acetate	ND	10	11	110	10	11	110	0	70-130	20
Cyclohexane	ND	10	12	120	10	12	120	0	70-130	20
1,4-Dioxane	ND	500	430	86	500	470	94	9	56-162	20
Freon-113	ND	10	13	130	10	13	130	0	70-130	20
Methyl cyclohexane	ND	10	11	110	10	11	110	0	70-130	20



Initial Calibration Summary

Form 6

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Calibration dates : 05/18/23 10:51 05/18/23 13:59

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL20021

Calibration Files

L11 =V08230518A04.d L1 =V08230518A06.d L2 =V08230518A08.d L3 =V08230518A09.d L4 =V08230518A10.d
 L6 =V08230518A11.d L8 =V08230518A12.d L10 =V08230518A13.d

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.268	0.315	0.297	0.275	0.277	0.259	0.273	0.281	6.84
3) TP Chloromethane		0.368	0.417	0.381	0.368	0.370	0.362	0.358	0.375	5.36
4) TC Vinyl chloride	0.269	0.270	0.349	0.329	0.311	0.313	0.301	0.306	0.306	8.84
5) TP Bromomethane		0.278	0.277	0.214	0.193	0.195	0.197	0.204	0.223	17.14
6) TP Chloroethane		0.173	0.225	0.213	0.210	0.212	0.204	0.199	0.205	8.01
7) TP Trichlorofluor		0.336	0.436	0.424	0.404	0.409	0.386	0.408	0.400	8.10
8) TP Ethyl ether		0.106	0.133	0.127	0.124	0.126	0.126	0.124	0.124	6.85
10) TC 1,1-Dichloroet		0.209	0.251	0.242	0.230	0.232	0.226	0.232	0.232	5.73
11) TP Carbon disulfide		0.756	0.929	0.865	0.834	0.846	0.826	0.842	0.843	6.11
12) TP Freon-113		0.174	0.247	0.246	0.239	0.241	0.227	0.239	0.231	11.15
13) TP Iodomethane			0.194	0.225	0.254	0.274	0.275	0.264	0.248	13.01
14) TP Acrolein			0.039	0.037	0.039	0.037	0.036	0.037	0.037	3.51
15) TP Methylene chlo		0.290	0.323	0.289	0.278	0.277	0.276	0.271	0.286	6.12
17) TP Acetone			0.090	0.069	0.063	0.064	0.064	0.062	0.069	15.54
18) TP trans-1,2-Dich		0.262	0.304	0.266	0.255	0.262	0.257	0.257	0.266	6.45
19) TP Methyl acetate			0.198	0.167	0.165	0.164	0.161	0.157	0.168	8.80
20) TP Methyl tert butyl ether		0.626	0.710	0.668	0.671	0.689	0.688	0.676	0.675	3.85
21) TP tert-Butyl alc		0.031	0.027	0.026	0.025	0.025	0.025	0.024	0.026	7.94
22) TP Diisopropyl ether		0.832	1.034	0.966	1.009	1.071	1.085	1.082	1.011	8.92
23) TP 1,1-Dichloroet		0.547	0.618	0.559	0.542	0.537	0.530	0.528	0.552	5.64
24) TP Halothane		0.161	0.191	0.184	0.183	0.188	0.183	0.186	0.182	5.39
25) TP Acrylonitrile			0.132	0.085	0.080	0.081	0.078	0.077	*L	0.9996
26) TP Ethyl tert-but		0.885	1.020	0.943	0.865	0.991	0.936	0.939	0.940	5.76
27) TP Vinyl acetate		0.732	0.717	0.539	0.547	0.650	0.570	0.553	0.615	13.52
28) TP cis-1,2-Dichlo		0.294	0.330	0.298	0.290	0.291	0.291	0.288	0.297	4.96
29) TP 2,2-Dichloropr		0.396	0.453	0.454	0.413	0.425	0.413	0.411	0.424	5.25
30) TP Bromochloromet		0.135	0.141	0.134	0.129	0.132	0.130	0.124	0.132	4.01
31) TP Cyclohexane		0.458	0.487	0.504	0.482	0.510	0.484	0.509	0.491	3.82
32) TC Chloroform		0.505	0.586	0.522	0.497	0.497	0.497	0.493	0.514	6.48
33) TP Ethyl acetate		0.238	0.235	0.220	0.215	0.224	0.219	0.215	0.224	4.05
34) TP Carbon tetrachloride	0.263	0.275	0.339	0.334	0.340	0.363	0.358	0.373	0.331	12.24
35) TP Tetrahydrofuran			0.076	0.062	0.059	0.062	0.061	0.058	0.063	10.31
36) S Dibromofluoromethane	0.292	0.292	0.291	0.288	0.292	0.291	0.287	0.290	0.290	0.64
37) TP 1,1,1-Trichlor		0.378	0.417	0.405	0.411	0.423	0.414	0.420	0.410	3.67
39) TP 2-Butanone			0.127	0.099	0.097	0.098	0.098	0.094	0.102	11.72



Initial Calibration Summary

Form 6

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Calibration dates : 05/18/23 10:51 05/18/23 13:59

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL20021

Calibration Files

L11 =V08230518A04.d L1 =V08230518A06.d L2 =V08230518A08.d L3 =V08230518A09.d L4 =V08230518A10.d
 L6 =V08230518A11.d L8 =V08230518A12.d L10 =V08230518A13.d

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr	0.263	0.386	0.370	0.367	0.377	0.368	0.378	0.358	11.91	
41) TP Benzene	0.926	0.954	1.186	1.105	1.086	1.105	1.095	1.096	1.069	8.03
42) TP Tertiary-Amyl Methyl Ether	0.741	0.825	0.727	0.739	0.774	0.777	0.777	0.766	4.35	
43) S 1,2-Dichloroethane-d4	0.341	0.342	0.345	0.339	0.331	0.334	0.332	0.325	0.336	2.05
44) TP 1,2-Dichloroet	0.364	0.413	0.381	0.383	0.387	0.381	0.376	0.384	3.94	
47) TP Methyl cyclohe	0.293	0.421	0.396	0.423	0.452	0.434	0.462	0.412	13.70	
48) TP Trichloroethene	0.414	0.293	0.310	0.299	0.286	0.294	0.291	0.293	0.310	13.70
50) TP Dibromomethane	0.147	0.179	0.164	0.162	0.163	0.162	0.161	0.162	5.77	
51) TC 1,2-Dichloropr	0.272	0.328	0.314	0.309	0.313	0.312	0.311	0.308	5.54	
53) TP 2-Chloroethyl	0.143	0.163	0.159	0.154	0.159	0.160	0.161	0.157	4.25	
54) TP Bromodichlorom	0.375	0.422	0.386	0.382	0.399	0.400	0.398	0.395	3.89	
57) TP 1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	4.15	
58) TP cis-1,3-Dichloropropene	0.405	0.410	0.500	0.464	0.460	0.476	0.476	0.477	0.459	7.32
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.280	1.303	1.326	1.378	1.366	1.347	1.347	1.334	1.335	2.40
61) TC Toluene	0.674	0.887	0.846	0.830	0.815	0.818	0.799	0.810	8.19	
62) TP 4-Methyl-2-pen	0.079	0.104	0.105	0.108	0.109	0.109	0.105	0.103	10.19	
63) TP Tetrachloroethene	0.285	0.338	0.331	0.324	0.319	0.314	0.312	0.318	5.35	
65) TP trans-1,3-Dichloropropene	0.384	0.410	0.493	0.477	0.489	0.498	0.503	0.492	0.468	9.66
67) TP Ethyl methacry	0.395	0.413	0.394	0.404	0.406	0.411	0.394	0.402	2.04	
68) TP 1,1,2-Trichlor	0.224	0.254	0.235	0.231	0.229	0.230	0.223	0.232	4.42	
69) TP Chlorodibromom	0.250	0.302	0.293	0.303	0.312	0.318	0.314	0.299	7.80	
70) TP 1,3-Dichloropr	0.446	0.524	0.486	0.484	0.475	0.478	0.465	0.480	5.00	
71) TP 1,2-Dibromoethane	0.208	0.256	0.223	0.210	0.217	0.223	0.226	0.223	7.12	
72) TP 2-Hexanone	0.210	0.211	0.191	0.190	0.193	0.197	0.187	0.197	4.91	
73) TP Chlorobenzene	0.805	0.988	0.945	0.911	0.893	0.896	0.869	0.901	6.42	
74) TC Ethylbenzene	1.374	1.693	1.574	1.548	1.549	1.558	1.529	1.547	6.05	
75) TP 1,1,1,2-Tetrac	0.230	0.307	0.311	0.310	0.310	0.315	0.308	0.299	10.18	
76) TP p/m Xylene	0.494	0.618	0.612	0.598	0.594	0.592	0.580	0.584	7.11	
77) TP o Xylene	0.501	0.625	0.588	0.583	0.576	0.581	0.567	0.574	6.46	
78) TP Styrene	0.859	1.030	0.981	0.977	0.971	0.973	0.941	0.962	5.46	
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform	0.281	0.288	0.292	0.312	0.328	0.344	0.333	0.311	7.95	
82) TP Isopropylbenzene	2.667	3.128	2.797	2.776	2.802	2.842	2.737	2.821	5.18	
83) S 4-Bromofluorobenzene	0.972	1.006	1.002	0.992	0.999	0.961	0.992	0.982	0.988	1.57
84) TP Bromobenzene	0.672	0.735	0.656	0.670	0.671	0.683	0.638	0.675	4.44	



Initial Calibration Summary

Form 6

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Calibration dates : 05/18/23 10:51 05/18/23 13:59

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL20021

Calibration Files

L11 =V08230518A04.d L1 =V08230518A06.d L2 =V08230518A08.d L3 =V08230518A09.d L4 =V08230518A10.d
 L6 =V08230518A11.d L8 =V08230518A12.d L10 =V08230518A13.d

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	3.164	3.693	3.377	3.340	3.428	3.459	3.311	3.396	4.77	
86) TP 1,4-Dichlorobu	1.096	0.994	0.869	0.846	0.873	0.911	0.876	0.923	9.75	
87) TP 1,1,2,2-Tetrac	0.568	0.628	0.558	0.598	0.616	0.626	0.583	0.597	4.72	
88) TP 4-Ethyltoluene	2.659	2.965	2.655	2.676	2.756	2.818	2.696	2.747	4.11	
89) TP 2-Chlorotoluene	2.182	2.609	2.311	2.311	2.371	2.452	2.331	2.367	5.65	
90) TP 1,3,5-Trimethy	2.296	2.641	2.422	2.443	2.460	2.490	2.344	2.442	4.53	
91) TP 1,2,3-Trichlor	0.510	0.519	0.478	0.474	0.479	0.495	0.463	0.488	4.18	
92) TP trans-1,4-Dich	0.182	0.168	0.153	0.160	0.170	0.181	0.176	0.170	6.30	
93) TP 4-Chlorotoluene	2.201	2.403	2.187	2.175	2.214	2.256	2.121	2.222	4.02	
94) TP tert-Butylbenzene	1.877	2.172	1.959	1.876	1.833	1.883	1.822	1.917	6.29	
97) TP 1,2,4-Trimethy	2.308	2.554	2.352	2.343	2.386	2.450	2.324	2.388	3.64	
98) TP sec-Butylbenzene	2.672	3.311	2.967	2.874	2.878	2.889	2.757	2.907	6.97	
99) TP p-Isopropyltol	2.347	2.687	2.455	2.405	2.440	2.459	2.375	2.453	4.54	
100) TP 1,3-Dichlorobe	1.135	1.399	1.287	1.288	1.299	1.312	1.233	1.279	6.28	
101) TP 1,4-Dichlorobe	1.317	1.435	1.282	1.288	1.306	1.325	1.241	1.314	4.60	
102) TP p-Diethylbenzene	1.408	1.636	1.500	1.479	1.485	1.521	1.481	1.501	4.58	
103) TP n-Butylbenzene	2.252	2.593	2.328	2.256	2.251	2.284	2.207	2.310	5.63	
104) TP 1,2-Dichlorobe	1.128	1.291	1.211	1.215	1.231	1.245	1.157	1.211	4.49	
105) TP 1,2,4,5-Tetram	2.220	2.636	2.511	2.589	2.570	2.580	2.480	2.512	5.52	
106) TP 1,2-Dibromo-3-	0.063	0.083	0.069	0.068	0.070	0.073	0.073	0.071	8.47	
107) TP 1,3,5-Trichlor	0.912	1.056	0.939	0.941	0.931	0.941	0.915	0.948	5.19	
108) TP Hexachlorobuta	0.407	0.482	0.422	0.416	0.414	0.409	0.396	0.421	6.66	
109) TP 1,2,4-Trichlor	0.824	0.941	0.880	0.858	0.864	0.872	0.845	0.869	4.23	
110) TP Naphthalene	1.865	1.962	1.860	1.860	1.829	1.878	1.757	1.859	3.29	
111) TP 1,2,3-Trichlor	0.747	0.870	0.781	0.796	0.792	0.812	0.765	0.795	4.93	



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230531N01
 Sample No : WG1786055-2
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 17:36
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	86	0
Dichlorodifluoromethane	0.281	0.304	-	-8.2	20	88	0
Chloromethane	0.375	0.415	-	-10.7	20	94	0
Vinyl chloride	0.306	0.336	-	-9.8	20	88	0
Bromomethane	0.223	0.119	-	46.6*	20	48	0
Chloroethane	0.205	0.233	-	-13.7	20	94	0
Trichlorofluoromethane	0.4	0.442	-	-10.5	20	90	0
Ethyl ether	0.124	0.122	-	1.6	20	83	0
1,1-Dichloroethene	0.232	0.251	-	-8.2	20	89	0
Carbon disulfide	0.843	0.908	-	-7.7	20	90	0
Freon-113	0.231	0.255	-	-10.4	20	89	0
Iodomethane	0.248	0.058	-	76.6*	20	22	0
Acrolein	0.037	0.045	-	-21.6*	20	105	-.01
Methylene chloride	0.286	0.3	-	-4.9	20	89	0
Acetone	0.069	0.069	-	0	20	87	-.01
trans-1,2-Dichloroethene	0.266	0.283	-	-6.4	20	92	0
Methyl acetate	0.168	0.172	-	-2.4	20	89	0
Methyl tert-butyl ether	0.675	0.646	-	4.3	20	83	-.01
tert-Butyl alcohol	0.026	0.023	-	11.5	20	78	-.02
Diisopropyl ether	1.011	1.026	-	-1.5	20	92	-.01
1,1-Dichloroethane	0.552	0.611	-	-10.7	20	94	0
Halothane	0.182	0.199	-	-9.3	20	93	0
Acrylonitrile	10	9.874	-	1.3	20	88	0
Ethyl tert-butyl ether	0.94	0.928	-	1.3	20	85	0
Vinyl acetate	0.615	0.672	-	-9.3	20	107	-.01
cis-1,2-Dichloroethene	0.297	0.306	-	-3	20	89	-.02
2,2-Dichloropropane	0.424	0.481	-	-13.4	20	91	-.01
Bromochloromethane	0.132	0.139	-	-5.3	20	90	0
Cyclohexane	0.491	0.532	-	-8.4	20	91	0
Chloroform	0.514	0.56	-	-8.9	20	92	-.01
Ethyl acetate	0.224	0.237	-	-5.8	20	93	-.01
Carbon tetrachloride	0.331	0.365	-	-10.3	20	94	0
Tetrahydrofuran	0.063	0.055	-	12.7	20	76	0
Dibromofluoromethane	0.29	0.315	-	-8.6	20	94	-.01
1,1,1-Trichloroethane	0.41	0.454	-	-10.7	20	97	0
2-Butanone	0.102	0.101	-	1	20	88	-.01
1,1-Dichloropropene	0.358	0.37	-	-3.4	20	86	-.01
Benzene	1.069	1.119	-	-4.7	20	87	-.01
tert-Amyl methyl ether	0.766	0.657	-	14.2	20	78	0
1,2-Dichloroethane-d4	0.336	0.372	-	-10.7	20	95	0
1,2-Dichloroethane	0.384	0.427	-	-11.2	20	96	0
Methyl cyclohexane	0.412	0.405	-	1.7	20	88	0
Trichloroethene	0.31	0.288	-	7.1	20	83	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230531N01
 Sample No : WG1786055-2
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 17:36
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.162	0.165	-	-1.9	20	87	0
1,2-Dichloropropane	0.308	0.327	-	-6.2	20	90	-.01
2-Chloroethyl vinyl ether	0.157	0.125	-	20.4*	20	68	0
Bromodichloromethane	0.395	0.399	-	-1	20	89	0
1,4-Dioxane	0.00192	0.00163*	-	15.1	20	73	0
cis-1,3-Dichloropropene	0.459	0.428	-	6.8	20	79	0
Chlorobenzene-d5	1	1	-	0	20	87	0
Toluene-d8	1.335	1.346	-	-0.8	20	84	0
Toluene	0.81	0.807	-	0.4	20	83	0
4-Methyl-2-pentanone	0.103	0.088	-	14.6	20	72	-.01
Tetrachloroethene	0.318	0.331	-	-4.1	20	87	0
trans-1,3-Dichloropropene	0.468	0.426	-	9	20	77	0
Ethyl methacrylate	0.402	0.311	-	22.6*	20	68	0
1,1,2-Trichloroethane	0.232	0.235	-	-1.3	20	86	0
Chlorodibromomethane	0.299	0.286	-	4.3	20	85	0
1,3-Dichloropropane	0.48	0.477	-	0.6	20	85	0
1,2-Dibromoethane	0.223	0.228	-	-2.2	20	89	0
2-Hexanone	0.197	0.166	-	15.7	20	75	0
Chlorobenzene	0.901	0.928	-	-3	20	85	0
Ethylbenzene	1.547	1.521	-	1.7	20	84	0
1,1,1,2-Tetrachloroethane	0.299	0.32	-	-7	20	89	0
p/m Xylene	0.584	0.592	-	-1.4	20	84	0
o Xylene	0.574	0.575	-	-0.2	20	85	0
Styrene	0.962	0.973	-	-1.1	20	86	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	87	0
Bromoform	0.311	0.271	-	12.9	20	80	0
Isopropylbenzene	2.821	2.749	-	2.6	20	85	0
4-Bromofluorobenzene	0.988	0.972	-	1.6	20	85	0
Bromobenzene	0.675	0.659	-	2.4	20	87	0
n-Propylbenzene	3.396	3.423	-	-0.8	20	88	0
1,4-Dichlorobutane	0.923	0.929	-	-0.7	20	93	0
1,1,2,2-Tetrachloroethane	0.597	0.595	-	0.3	20	92	0
4-Ethyltoluene	2.747	2.76	-	-0.5	20	90	0
2-Chlorotoluene	2.367	2.475	-	-4.6	20	93	0
1,3,5-Trimethylbenzene	2.442	2.531	-	-3.6	20	91	0
1,2,3-Trichloropropane	0.488	0.475	-	2.7	20	86	0
trans-1,4-Dichloro-2-buten	0.17	0.145	-	14.7	20	82	0
4-Chlorotoluene	2.222	2.241	-	-0.9	20	89	0
tert-Butylbenzene	1.917	1.91	-	0.4	20	85	0
1,2,4-Trimethylbenzene	2.388	2.461	-	-3.1	20	91	0
sec-Butylbenzene	2.907	3.001	-	-3.2	20	88	0
p-Isopropyltoluene	2.453	2.488	-	-1.4	20	88	0
1,3-Dichlorobenzene	1.279	1.333	-	-4.2	20	90	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230531N01
 Sample No : WG1786055-2
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 17:36
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.314	1.347	-	-2.5	20	91	0
p-Diethylbenzene	1.501	1.54	-	-2.6	20	89	0
n-Butylbenzene	2.31	2.538	-	-9.9	20	95	0
1,2-Dichlorobenzene	1.211	1.24	-	-2.4	20	89	0
1,2,4,5-Tetramethylbenzene	2.512	2.298	-	8.5	20	79	0
1,2-Dibromo-3-chloropropan	0.071	0.069	-	2.8	20	87	0
1,3,5-Trichlorobenzene	0.948	0.996	-	-5.1	20	92	0
Hexachlorobutadiene	0.421	0.446	-	-5.9	20	92	0
1,2,4-Trichlorobenzene	0.869	0.843	-	3	20	83	0
Naphthalene	1.859	1.598	-	14	20	75	0
1,2,3-Trichlorobenzene	0.795	0.782	-	1.6	20	87	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230601N01
 Sample No : WG1786504-2
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 06/01/23 16:35
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	87	0
Dichlorodifluoromethane	0.281	0.293	-	-4.3	20	86	0
Chloromethane	0.375	0.36	-	4	20	82	0
Vinyl chloride	0.306	0.319	-	-4.2	20	85	0
Bromomethane	0.223	0.083	-	62.8*	20	34	0
Chloroethane	0.205	0.224	-	-9.3	20	91	0
Trichlorofluoromethane	0.4	0.427	-	-6.7	20	88	0
Ethyl ether	0.124	0.124	-	0	20	85	0
1,1-Dichloroethene	0.232	0.241	-	-3.9	20	87	0
Carbon disulfide	0.843	0.844	-	-0.1	20	85	0
Freon-113	0.231	0.254	-	-10	20	90	0
Iodomethane	0.248	0.093	-	62.5*	20	36	0
Acrolein	0.037	0.043	-	-16.2	20	102	0
Methylene chloride	0.286	0.292	-	-2.1	20	88	0
Acetone	0.069	0.079	-	-14.5	20	100	-.01
trans-1,2-Dichloroethene	0.266	0.269	-	-1.1	20	88	0
Methyl acetate	0.168	0.187	-	-11.3	20	98	0
Methyl tert-butyl ether	0.675	0.643	-	4.7	20	84	0
tert-Butyl alcohol	0.026	0.026	-	0	20	87	0
Diisopropyl ether	1.011	1.007	-	0.4	20	91	0
1,1-Dichloroethane	0.552	0.582	-	-5.4	20	91	0
Halothane	0.182	0.185	-	-1.6	20	88	0
Acrylonitrile	10	10.182	-	-1.8	20	92	0
Ethyl tert-butyl ether	0.94	0.908	-	3.4	20	84	0
Vinyl acetate	0.615	0.613	-	0.3	20	99	0
cis-1,2-Dichloroethene	0.297	0.296	-	0.3	20	87	-.01
2,2-Dichloropropane	0.424	0.451	-	-6.4	20	87	0
Bromochloromethane	0.132	0.13	-	1.5	20	85	0
Cyclohexane	0.491	0.519	-	-5.7	20	90	0
Chloroform	0.514	0.54	-	-5.1	20	90	0
Ethyl acetate	0.224	0.264	-	-17.9	20	105	-.01
Carbon tetrachloride	0.331	0.352	-	-6.3	20	92	0
Tetrahydrofuran	0.063	0.075	-	-19	20	106	0
Dibromofluoromethane	0.29	0.302	-	-4.1	20	91	-.01
1,1,1-Trichloroethane	0.41	0.431	-	-5.1	20	93	0
2-Butanone	0.102	0.111	-	-8.8	20	97	0
1,1-Dichloropropene	0.358	0.346	-	3.4	20	82	0
Benzene	1.069	1.07	-	-0.1	20	85	0
tert-Amyl methyl ether	0.766	0.65	-	15.1	20	78	0
1,2-Dichloroethane-d4	0.336	0.383	-	-14	20	99	0
1,2-Dichloroethane	0.384	0.43	-	-12	20	98	0
Methyl cyclohexane	0.412	0.379	-	8	20	83	0
Trichloroethene	0.31	0.285	-	8.1	20	83	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230601N01
 Sample No : WG1786504-2
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 06/01/23 16:35
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.162	0.167	-	-3.1	20	89	0
1,2-Dichloropropane	0.308	0.322	-	-4.5	20	90	0
2-Chloroethyl vinyl ether	0.157	0.119	-	24.2*	20	66	0
Bromodichloromethane	0.395	0.387	-	2	20	87	0
1,4-Dioxane	0.00192	0.00169*	-	12	20	77	0
cis-1,3-Dichloropropene	0.459	0.418	-	8.9	20	79	0
Chlorobenzene-d5	1	1	-	0	20	86	0
Toluene-d8	1.335	1.354	-	-1.4	20	85	0
Toluene	0.81	0.788	-	2.7	20	80	0
4-Methyl-2-pentanone	0.103	0.09	-	12.6	20	74	0
Tetrachloroethene	0.318	0.307	-	3.5	20	80	0
trans-1,3-Dichloropropene	0.468	0.427	-	8.8	20	77	0
Ethyl methacrylate	0.402	0.319	-	20.6*	20	70	0
1,1,2-Trichloroethane	0.232	0.244	-	-5.2	20	89	0
Chlorodibromomethane	0.299	0.284	-	5	20	84	0
1,3-Dichloropropane	0.48	0.499	-	-4	20	88	0
1,2-Dibromoethane	0.223	0.24	-	-7.6	20	93	0
2-Hexanone	0.197	0.176	-	10.7	20	79	0
Chlorobenzene	0.901	0.898	-	0.3	20	82	0
Ethylbenzene	1.547	1.457	-	5.8	20	80	0
1,1,1,2-Tetrachloroethane	0.299	0.314	-	-5	20	87	0
p/m Xylene	0.584	0.568	-	2.7	20	80	0
o Xylene	0.574	0.561	-	2.3	20	82	0
Styrene	0.962	0.958	-	0.4	20	84	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	85	0
Bromoform	0.311	0.273	-	12.2	20	80	0
Isopropylbenzene	2.821	2.644	-	6.3	20	81	0
4-Bromofluorobenzene	0.988	0.981	-	0.7	20	84	0
Bromobenzene	0.675	0.642	-	4.9	20	84	0
n-Propylbenzene	3.396	3.319	-	2.3	20	84	0
1,4-Dichlorobutane	0.923	0.929	-	-0.7	20	91	0
1,1,2,2-Tetrachloroethane	0.597	0.605	-	-1.3	20	93	0
4-Ethyltoluene	2.747	2.642	-	3.8	20	85	0
2-Chlorotoluene	2.367	2.388	-	-0.9	20	88	0
1,3,5-Trimethylbenzene	2.442	2.449	-	-0.3	20	86	0
1,2,3-Trichloropropane	0.488	0.509	-	-4.3	20	91	0
trans-1,4-Dichloro-2-buten	0.17	0.152	-	10.6	20	85	0
4-Chlorotoluene	2.222	2.15	-	3.2	20	84	0
tert-Butylbenzene	1.917	1.885	-	1.7	20	82	0
1,2,4-Trimethylbenzene	2.388	2.377	-	0.5	20	86	0
sec-Butylbenzene	2.907	2.902	-	0.2	20	84	0
p-Isopropyltoluene	2.453	2.378	-	3.1	20	83	0
1,3-Dichlorobenzene	1.279	1.311	-	-2.5	20	87	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230601N01
 Sample No : WG1786504-2
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 06/01/23 16:35
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.314	1.314	-	0	20	88	0
p-Diethylbenzene	1.501	1.445	-	3.7	20	82	0
n-Butylbenzene	2.31	2.417	-	-4.6	20	89	0
1,2-Dichlorobenzene	1.211	1.207	-	0.3	20	85	0
1,2,4,5-Tetramethylbenzene	2.512	2.227	-	11.3	20	76	0
1,2-Dibromo-3-chloropropan	0.071	0.07	-	1.4	20	87	0
1,3,5-Trichlorobenzene	0.948	0.965	-	-1.8	20	88	0
Hexachlorobutadiene	0.421	0.416	-	1.2	20	84	0
1,2,4-Trichlorobenzene	0.869	0.808	-	7	20	78	0
Naphthalene	1.859	1.596	-	14.1	20	73	0
1,2,3-Trichlorobenzene	0.795	0.759	-	4.5	20	83	0

* Value outside of QC limits.



SVOC Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8270D Semi-Volatiles
Data for Alpha Analytical, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 for SV106 on 04-06-23. The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 for DAKOTA on 04-13-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimum, but not below 0.010 on 05-28-23 (WG1784536-3). The RRF for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimum, but not below 0.010 on 05-30-23 (WG1784870-3). The RRF for 2-chloronaphthalene was below the method minimums, but not below 0.010 on 05-30-23 (WG1785094-3). The RRF for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimum, but not below 0.010 on 05-31-23 (WG1785627-3). The %Ds for 6 compounds (highlighted on attached Form 7) were above the method maximum on 05-28-23 (WG1784536-3). The %Ds for 6 compounds (highlighted on attached Form 7) were above the method maximum on 05-30-23 (WG1784870-3). The %Ds for 10 compounds (highlighted on attached Form 7) were above the method maximum on 05-30-23 (WG1785094-3). The %Ds for 7 compounds (highlighted on attached Form 7) were above the method maximum on 05-31-23 (WG1785627-3). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for 6 compounds (highlighted on attached Form 7) were above the allowable maximum (20%) on 05-28-23 (WG1784536-3). The %Ds for acetophenone and caprolactam were above the allowable maximum (20%) on 05-28-23 (WG1784536-4). The %D for atrazine was above the allowable maximum (20%) on 05-28-23 (WG1784536-5). The %Ds for 6 compounds (highlighted on attached Form 7) were above the allowable maximum (20%) on 05-30-23 (WG1784870-3). The %Ds for acetophenone and caprolactam were above the allowable maximum (20%) on 05-30-23 (WG1784870-4). The %Ds for 10 compounds (highlighted on attached Form 7) were above the allowable maximum (20%) on 05-30-23 (WG1785094-3). The %Ds for acetophenone and caprolactam were above the allowable maximum (20%) on 05-30-23 (WG1785094-4). The %Ds for 7 compounds (highlighted on attached Form 7) were above the allowable maximum (20%) on 05-31-23 (WG1785627-3). The %D for caprolactam was above the allowable maximum (20%) on 05-31-23 (WG1785627-4). The %D for atrazine was above the allowable maximum (20%) on 05-31-23 (WG1785627-5). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method and rinse blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and rinse blank.

Matrix Spike/Matrix Spike Duplicate: The percent recoveries for target compounds were within QC limits, but relative percent differences for 7 compounds (highlighted on attached Form 3) were above the allowable maximum for aqueous MS/MSD sample MW-103-20230523. Sample MW-103-20230523 reported these compounds as “not detected”; therefore, no action is taken.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous samples WG1784151-2/3.

Field Duplicates: The relative percent difference for caprolactam was above the allowable maximum (20%) for aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 (attached table). Positive results for caprolactam should be considered estimated (J) in samples MW-100-20230522 and CHA-1-20230522.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Matrix Spike Sample Summary

Form 3

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : MW-103-20230523
 Lab Sample ID : L2328902-06
 Matrix Spike : WG1784151-4
 Matrix Spike Dup : WG1784151-5

Lab Number : L2328902
 Project Number : 060017.000
 Matrix (Level) : WATER (LOW)
 Analysis Date : 05/30/23 19:30
 MS Analysis Date : 05/30/23 19:53
 MSD Analysis Date : 05/30/23 20:15

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Bis(2-chloroethyl)ether	ND	18.2	10.	55	18.2	13.	72	26	40-140	30
3,3'-Dichlorobenzidine	ND	18.2	8.4	46	18.2	8.9	49	6	40-140	30
2,4-Dinitrotoluene	ND	18.2	12.	66	18.2	14.	77	15	48-143	30
2,6-Dinitrotoluene	ND	18.2	12.	66	18.2	14.	77	15	40-140	30
4-Chlorophenyl phenyl ether	ND	18.2	11.	61	18.2	13.	72	17	40-140	30
4-Bromophenyl phenyl ether	ND	18.2	11.	61	18.2	13.	72	17	40-140	30
Bis(2-chloroisopropyl)ether	ND	18.2	11.	61	18.2	15.	83	31	Q 40-140	30
Bis(2-chloroethoxy)methane	ND	18.2	11.	61	18.2	15.	83	31	Q 40-140	30
Hexachlorocyclopentadiene	ND	18.2	10.J	55	18.2	14.J	77	33	Q 40-140	30
Isophorone	ND	18.2	11.	61	18.2	15.	83	31	Q 40-140	30
Nitrobenzene	ND	18.2	11.	61	18.2	15.	83	31	Q 40-140	30
NDPA/DPA	ND	18.2	11.	61	18.2	13.	72	17	40-140	30
n-Nitrosodi-n-propylamine	ND	18.2	12.	66	18.2	15.	83	22	29-132	30
Bis(2-ethylhexyl)phthalate	ND	18.2	13.	72	18.2	16.	88	21	40-140	30
Butyl benzyl phthalate	ND	18.2	12.	66	18.2	15.	83	22	40-140	30
Di-n-butylphthalate	ND	18.2	12.	66	18.2	15.	83	22	40-140	30
Di-n-octylphthalate	ND	18.2	12.	66	18.2	16.	88	29	40-140	30
Diethyl phthalate	ND	18.2	12.	66	18.2	14.	77	15	40-140	30
Dimethyl phthalate	ND	18.2	12.	66	18.2	14.	77	15	40-140	30
Biphenyl	ND	18.2	11.	61	18.2	13.	72	17	40-140	30
4-Chloroaniline	ND	18.2	11.	61	18.2	13.	72	17	40-140	30
2-Nitroaniline	ND	18.2	13.	72	18.2	16.	88	21	52-143	30



Matrix Spike Sample Summary

Form 3

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : MW-103-20230523
 Lab Sample ID : L2328902-06
 Matrix Spike : WG1784151-4
 Matrix Spike Dup : WG1784151-5

Lab Number : L2328902
 Project Number : 060017.000
 Matrix (Level) : WATER (LOW)
 Analysis Date : 05/30/23 19:30
 MS Analysis Date : 05/30/23 19:53
 MSD Analysis Date : 05/30/23 20:15

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
3-Nitroaniline	ND	18.2	9.6	53	18.2	11.	61	14	25-145	30
4-Nitroaniline	ND	18.2	12.	66	18.2	13.	72	8	51-143	30
Dibenzofuran	ND	18.2	11.	61	18.2	13.	72	17	40-140	30
1,2,4,5-Tetrachlorobenzene	ND	18.2	9.6J	53	18.2	13.	72	30	2-134	30
Acetophenone	ND	18.2	9.7	53	18.2	13.	72	29	39-129	30
2,4,6-Trichlorophenol	ND	18.2	12.	66	18.2	14.	77	15	30-130	30
p-Chloro-m-cresol	ND	18.2	14.	77	18.2	17.	94	19	23-97	30
2-Chlorophenol	ND	18.2	11.	61	18.2	14.	77	24	27-123	30
2,4-Dichlorophenol	ND	18.2	13.	72	18.2	16.	88	21	30-130	30
2,4-Dimethylphenol	ND	18.2	11.	61	18.2	14.	77	24	30-130	30
2-Nitrophenol	ND	18.2	12.	66	18.2	16.	88	29	30-130	30
4-Nitrophenol	ND	18.2	12.	66	18.2	14.	77	15	10-80	30
2,4-Dinitrophenol	ND	18.2	14.J	77	18.2	18.J	99	25	20-130	30
4,6-Dinitro-o-cresol	ND	18.2	14.	77	18.2	16.	88	13	20-164	30
Phenol	ND	18.2	6.9	38	18.2	9.6	53	33 Q	12-110	30
2-Methylphenol	ND	18.2	10.	55	18.2	14.	77	33 Q	30-130	30
3-Methylphenol/4-Methylphenol	ND	18.2	12.	66	18.2	14.	77	15	30-130	30
2,4,5-Trichlorophenol	ND	18.2	13.	72	18.2	16.	88	21	30-130	30
Carbazole	ND	18.2	12.	66	18.2	14.	77	15	55-144	30
Atrazine	ND	18.2	13.	72	18.2	16.	88	21	40-140	30
Benzaldehyde	ND	18.2	10.	55	18.2	13.	72	26	40-140	30
Caprolactam	ND	18.2	5.4J	30	18.2	6.7J	37	21	10-130	30



Matrix Spike Sample Summary

Form 3

Semivolatiles

Client	: CHA Companies	Lab Number	: L2328902
Project Name	: FRIEDRICHSOHN SITE	Project Number	: 060017.000
Client Sample ID	: MW-103-20230523	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2328902-06	Analysis Date	: 05/30/23 19:30
Matrix Spike	: WG1784151-4	MS Analysis Date	: 05/30/23 19:53
Matrix Spike Dup	: WG1784151-5	MSD Analysis Date	: 05/30/23 20:15

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
2,3,4,6-Tetrachlorophenol	ND	18.2	12.	66	18.2	14.	77	15	40-140	30



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1) I IS1_1,4-Dichlorobenzene-d4	-----ISTD-----											
2) t N-Nitrosodimethylamine	1.187	0.943	0.874	0.849	0.963	0.882	0.963	0.975	0.990	0.920	0.955	9.88
3) t Pyridine	1.482	1.418	1.519	1.440	1.605	1.460	1.520	1.608	1.625	1.498	1.517	4.83
4) S 2-Fluorophenol	1.145	1.231	0.965	1.187	1.160	1.164	1.198	1.244	1.251	1.178	1.172	6.95
5) T Aniline	2.024	1.998	1.965	2.128	2.236	2.015	2.164	2.252	2.292	2.148	2.122	5.49
6) t 2-Chlorophenol	1.146	1.266	1.087	1.175	1.292	1.175	1.197	1.253	1.262	1.191	1.204	5.27
7) S Phenol-d6	1.524	1.618	1.485	1.578	1.725	1.528	1.595	1.680	1.703	1.561	1.600	5.08
8) T Phenol	1.685	1.889	1.628	1.695	1.696	1.667	1.730	1.789	1.818	1.684	1.728	4.63
9) T bis(2-Chloroethyl)ether	1.305	1.318	1.291	1.270	1.342	1.269	1.319	1.357	1.334	1.260	1.306	2.55
10) T 1,3-Dichlorobenzene	1.583	1.364	1.380	1.432	1.461	1.342	1.381	1.472	1.463	1.382	1.426	5.02
11) T 1,4-Dichlorobenzene	1.565	1.392	1.407	1.452	1.495	1.413	1.472	1.495	1.533	1.423	1.465	3.93
12) T 1,2-Dichlorobenzene	1.310	1.625	1.335	1.324	1.403	1.387	1.343	1.436	1.469	1.359	1.399	6.73
13) t Benzyl alcohol	1.296	1.359	1.099	1.250	1.314	1.266	1.341	1.360	1.408	1.313	1.301	6.53
14) T bis(2-chloroisopropyl)ether	1.692	1.638	1.422	1.410	1.500	1.511	1.523	1.513	1.519	1.376	1.510	6.45
15) T 2-Methylphenol	0.987	1.263	1.156	1.254	1.305	1.195	1.238	1.318	1.317	1.220	1.225	8.07
16) T Hexachloroethane	0.653	0.499	0.490	0.541	0.565	0.497	0.535	0.554	0.582	0.527	0.544	8.95
17) T n-Nitrosodi-n-propylamine	1.438	1.114	0.996	0.995	1.059	1.114	1.112	1.142	1.170	1.050	1.119	11.29
18) T 3-Methylphenol/4-Methylphenol	1.065	1.254	1.241	1.272	1.288	1.272	1.374	1.376	1.411	1.296	1.285	7.52
19) S Nitrobenzene-d5	1.445	1.520	1.333	1.360	1.438	1.347	1.480	1.519	1.552	1.419	1.441	5.36
20) T Nitrobenzene	1.502	1.680	1.268	1.395	1.475	1.399	1.477	1.570	1.601	1.483	1.485	7.83
21) T Isophorone	3.298	3.162	2.714	2.850	3.069	2.867	2.990	3.068	3.147	2.847	3.001	6.00
22) T 2-Nitrophenol				0.550	0.595	0.510	0.548	0.586	0.607	0.547	0.563	6.03
23) T 2,4-Dimethylphenol	1.366	1.392	1.332	1.341	1.513	1.324	1.442	1.513	1.510	1.397	1.413	5.40
24) T bis(2-Chloroethoxy)methane	1.747	1.784	1.584	1.690	1.602	1.558	1.660	1.637	1.702	1.524	1.649	5.07
25) T 2,4-Dichlorophenol		1.125	1.113	1.204	1.190	1.078	1.163	1.203	1.239	1.139	1.162	4.47
26) T 1,2,4-Trichlorobenzene	1.417	1.435	1.218	1.246	1.459	1.335	1.412	1.431	1.424	1.356	1.373	6.08
27) I IS2_1,4-Dichlorobenzene-d4	-----ISTD-----											
28) T Benzaldehyde		1.295	1.174	1.181	1.348	1.380	1.196	1.293	1.312	1.162	1.260	6.56
29) T Acetophenone		2.343	2.394	2.296	2.336	2.507	2.215	2.326	2.408	2.078	2.322	5.25
30) T m-Toluidine		1.334	1.631	2.013	2.106	2.321	2.098	2.201	2.297	2.025	2.003	16.10
31) T 2-Chloroaniline		1.615	1.738	1.680	1.806	1.903	1.701	1.770	1.823	1.601	1.737	5.71
32) I IS3_1,4-Dichlorobenzene-d4	-----ISTD-----											
33) T n-Decane	1.791	1.404	1.326	1.426	1.407	1.508	1.396	1.284	1.334	1.308	1.418	10.35
34) I IS1_Naphthalene-d8	-----ISTD-----											
35) T Naphthalene	1.124	1.145	1.077	1.132	1.103	1.058	1.090	1.112	1.113	1.142	1.110	2.53
36) T Benzoic Acid					0.123	0.163	0.211	0.238	0.266	0.270	*L	0.9991



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

	Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) T	4-Chloroaniline		0.182	0.155	0.152	0.159	0.162	0.154	0.157	0.160	0.166	0.161	5.61
38) T	Hexachlorobutadiene		0.286	0.284	0.314	0.304	0.271	0.290	0.305	0.314	0.319	0.299	5.52
39) T	p-Chloro-m-cresol		0.296	0.345	0.339	0.366	0.345	0.354	0.366	0.367	0.377	0.351	6.93
40) T	2-Methylnaphthalene	0.750	0.740	0.699	0.704	0.702	0.670	0.701	0.710	0.734	0.744	0.715	3.54
41) T	1-Methylnaphthalene	0.313	0.349	0.292	0.322	0.298	0.292	0.303	0.304	0.307	0.315	0.310	5.44
42) T	Hexachlorocyclopentadiene	0.293	0.362	0.317	0.351	0.357	0.338	0.357	0.356	0.380	0.399	0.351	8.47
43) T	2,4,6-Trichlorophenol			0.254	0.282	0.299	0.278	0.287	0.294	0.310	0.325	0.291	7.39
44) T	2,4,5-Trichlorophenol			0.310	0.304	0.315	0.295	0.313	0.326	0.324	0.329	0.315	3.74
45) S	2-Fluorobiphenyl	1.069	0.962	0.950	0.987	1.001	0.931	0.992	0.982	1.015	1.049	0.994	4.30
46) T	2-Chloronaphthalene	0.798	0.740	0.799	0.763	0.785	0.732	0.766	0.783	0.800	0.806	0.777	3.37
47) T	2-Nitroaniline			0.203	0.203	0.222	0.222	0.219	0.227	0.240	0.235	0.222	5.97
48) T	1,4-Dinitrobenzene						0.098	0.113	0.111	0.115	0.111	0.110	6.12
49) T	1,3-Dinitrobenzene						0.112	0.119	0.121	0.126	0.126	0.121	4.76
50) T	Dimethyl phthalate	0.918	0.949	0.932	0.924	0.947	0.881	0.893	0.875	0.882	0.880	0.908	3.21
51) T	Acenaphthylene	1.350	1.197	1.168	1.238	1.215	1.177	1.201	1.245	1.261	1.260	1.231	4.31
52) T	2,6-Dinitrotoluene			0.171	0.176	0.181	0.183	0.182	0.196	0.193	0.188	0.184	4.60
53) T	1,2-Dinitrobenzene				0.073	0.073	0.076	0.081	0.076	0.083	0.081	0.078	5.05
54) I	IS2_Naphthalene-d8	-----ISTD-----											
55) T	a-Terpineol		0.349	0.346	0.323	0.365	0.379	0.354	0.353	0.373	0.307	0.350	6.54
56) T	3-Chloroaniline			0.199	0.191	0.200	0.221	0.198	0.193	0.211	0.176	0.199	6.78
57) T	2,6-Dichlorophenol			0.326	0.332	0.360	0.376	0.354	0.363	0.382	0.335	0.354	5.91
58) T	1-chloro-2-nitrobenzene		0.151	0.138	0.147	0.167	0.178	0.166	0.167	0.173	0.148	0.159	8.54
59) T	Caprolactam			0.146	0.175	0.182	0.190	0.194	0.183	0.187	0.157	0.177	9.54
60) T	1,2,4,5-Tetrachlorobenzene	0.558	0.592	0.536	0.524	0.539	0.562	0.556	0.537	0.564	0.483	0.545	5.34
61) T	Biphenyl	1.038	1.000	1.087	1.014	1.056	1.108	1.090	1.071	1.096	0.941	1.050	4.99
62) I	IS1_Acenaphthene-d10	-----ISTD-----											
63) T	3-Nitroaniline			0.297	0.286	0.323	0.307	0.306	0.304	0.322	0.319	0.308	4.15
64) T	Acenaphthene	1.153	1.211	1.217	1.196	1.117	1.121	1.091	1.115	1.158	1.171	1.155	3.79
65) T	2,4-Dinitrophenol					0.157	0.170	0.163	0.164	0.184	0.181	0.170	6.28
66) T	Dibenzofuran	1.718	1.942	1.750	1.836	1.811	1.840	1.769	1.821	1.897	1.882	1.827	3.78
67) T	2,4-Dinitrotoluene			0.363	0.338	0.361	0.385	0.369	0.372	0.419	0.428	0.379	7.95
68) T	4-Nitrophenol				0.209	0.226	0.241	0.235	0.255	0.274	0.270	0.244	9.59
69) T	2,3,5,6-Tetrachlorophenol			0.394	0.435	0.424	0.440	0.418	0.432	0.463	0.471	0.434	5.66
70) T	2,3,4,6-Tetrachlorophenol			0.390	0.447	0.426	0.433	0.450	0.441	0.477	0.475	0.443	6.29
71) T	Diethyl phthalate	1.526	1.361	1.366	1.356	1.418	1.318	1.243	1.228	1.328	1.361	1.351	6.24
72) T	Fluorene	1.356	1.523	1.488	1.477	1.461	1.466	1.444	1.420	1.504	1.502	1.464	3.32



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73) T 4-Chlorophenyl-phenylether	0.812	0.799	0.771	0.787	0.763	0.795	0.759	0.765	0.793	0.794	0.784	2.32
74) T 4-Nitroaniline			0.295	0.296	0.309	0.301	0.289	0.300	0.331	0.330	0.306	5.17
75) T 4,6-Dinitro-o-cresol			0.210	0.211	0.200	0.191	0.200	0.227	0.229	0.210	0.210	6.76
76) T NDPA/DPA	1.322	1.328	1.169	1.239	1.230	1.208	1.149	1.143	1.190	1.203	1.218	5.29
77) T Azobenzene	1.619	1.634	1.625	1.585	1.574	1.521	1.466	1.480	1.539	1.504	1.555	3.95
78) S 2,4,6-Tribromophenol		0.216	0.192	0.225	0.214	0.226	0.217	0.221	0.234	0.241	0.221	6.25
79) T 4-Bromophenyl-phenylether	0.571	0.491	0.481	0.491	0.514	0.498	0.502	0.482	0.507	0.506	0.504	5.13
80) T Hexachlorobenzene	0.567	0.618	0.573	0.538	0.523	0.523	0.527	0.524	0.552	0.553	0.550	5.49
81) T Pentachlorophenol			0.271	0.274	0.269	0.317	0.330	0.353	0.354	0.310	12.34	
82) I IS2_Acenaphthene-d10	-----ISTD-----											
83) T Dichloran		0.158	0.213	0.216	0.224	0.217	0.239	0.236	0.258	0.234	0.222	12.57
84) T Pentachloronitrobenzene		0.163	0.200	0.193	0.233	0.229	0.249	0.246	0.260	0.237	0.223	14.08
85) I IS3_Acenaphthene-d10	-----ISTD-----											
86) T Atrazine		0.402	0.542	0.454	0.501	0.510	0.476	0.482	0.502	0.496	0.485	8.16
87) I IS1_Phenanthrene-d10	-----ISTD-----											
88) T Phenanthrene	1.070	1.003	0.972	0.984	0.990	0.951	0.985	0.977	1.039	1.038	1.001	3.67
89) T Anthracene	1.157	0.948	0.998	1.027	1.017	1.034	1.028	1.005	1.082	1.073	1.037	5.45
90) T Carbazole	0.798	0.924	0.969	0.924	0.887	0.911	0.933	0.930	0.970	0.948	0.920	5.38
91) T Di-n-butylphthalate		1.054	1.041	1.062	1.049	1.083	1.063	1.129	1.104	1.073	2.80	
92) T Fluoranthene	1.205	1.224	1.239	1.243	1.271	1.269	1.287	1.262	1.375	1.366	1.274	4.41
93) T Benzidine		0.799	0.822	0.824	0.835	0.827	0.859	0.855	0.832	2.48		
94) T Pyrene	1.393	1.292	1.262	1.304	1.311	1.287	1.336	1.313	1.420	1.410	1.333	4.15
95) S 4-Terphenyl-d14	1.039	0.931	0.981	0.976	0.992	0.992	1.021	1.013	1.082	1.088	1.012	4.77
96) T Butyl benzyl phthalate		0.426	0.464	0.440	0.463	0.470	0.466	0.493	0.483	0.463	4.61	
97) I IS2_Phenanthrene-d10	-----ISTD-----											
98) T Diphenamid		0.507	0.519	0.536	0.555	0.541	0.569	0.574	0.503	0.538	5.03	
99) I IS3_Phenanthrene-d10	-----ISTD-----											
100) T n-Octadecane		0.380	0.400	0.409	0.398	0.416	0.388	0.389	0.389	0.398	0.396	2.80
101) T Parathion		0.097	0.094	0.094	0.097	0.103	0.110	0.099	6.31			
102) T 3,3'-Dimethylbenzidine		0.810	0.883	0.866	0.907	0.932	0.972	0.895	6.25			
103) I IS1_Chrysene-d12	-----ISTD-----											
104) T Benzo[a]anthracene	1.408	1.297	1.308	1.404	1.364	1.335	1.347	1.337	1.421	1.417	1.364	3.39
105) T 3,3'-Dichlorobenzidine		0.485	0.541	0.532	0.516	0.508	0.530	0.554	0.559	0.528	4.68	
106) T Chrysene	1.229	1.327	1.222	1.341	1.309	1.219	1.218	1.258	1.314	1.296	1.273	3.86
107) T bis(2-Ethylhexyl)phthalate		0.785	0.665	0.745	0.705	0.715	0.675	0.687	0.710	0.696	0.709	5.20
108) T Di-n-octylphthalate		1.131	1.252	1.258	1.215	1.215	1.217	1.275	1.238	1.225	3.59	



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109) T Benzo(b)fluoranthene	1.347	1.349	1.198	1.407	1.385	1.345	1.330	1.276	1.388	1.317	1.334	4.58
110) T Benzo(k)fluoranthene	1.155	1.183	1.237	1.182	1.193	1.107	1.151	1.229	1.213	1.263	1.191	3.88
111) T Benzo(a)pyrene	1.078	1.089	1.154	1.150	1.178	1.086	1.118	1.128	1.155	1.138	1.127	3.01
112) I IS1_Perylene-d12	-----ISTD-----											
113) T Indeno(1,2,3-cd)pyrene	0.895	0.930	0.950	0.958	0.892	0.895	0.915	0.924	0.855	0.860	0.908	3.78
114) T Dibenzo[a,h]anthracene	1.002	0.894	0.903	0.951	0.953	0.950	0.981	0.953	0.915	0.903	0.940	3.80
115) T Benzo(g,h,i)perylene	1.033	0.905	0.941	1.004	0.963	0.945	0.960	0.922	0.836	0.748	0.926	8.88



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1) I IS1_1,4-Dichlorobenzene-d4	-----ISTD-----											
2) t N-Nitrosodimethylamine		0.548	0.717	0.739	0.740	0.728	0.733	0.742	0.803	0.841	*L	0.9975
3) t Pyridine		0.548	0.958	1.071	1.249	0.932	1.065	1.192	1.240	1.294	*L	0.9955
4) S 2-Fluorophenol	0.933	0.866	0.977	1.070	1.041	1.032	1.052	1.068	1.139	1.150	1.033	8.47
5) T Aniline	1.890	1.522	1.638	1.827	1.811	1.793	1.800	1.795	1.882	1.944	1.790	6.95
6) t 2-Chlorophenol	1.032	1.123	1.072	1.267	1.215	1.225	1.215	1.252	1.265	1.288	1.195	7.41
7) S Phenol-d6	1.112	1.228	1.214	1.354	1.302	1.344	1.325	1.415	1.437	1.505	1.324	8.80
8) T Phenol	1.395	1.468	1.430	1.646	1.600	1.496	1.508	1.551	1.616	1.676	1.539	6.14
9) T bis(2-Chloroethyl)ether	0.895	1.148	1.079	1.150	1.122	1.013	1.029	1.060	1.058	1.109	1.066	7.16
10) T 1,3-Dichlorobenzene	1.458	1.394	1.455	1.463	1.451	1.401	1.393	1.413	1.456	1.469	1.435	2.14
11) T 1,4-Dichlorobenzene	1.505	1.417	1.477	1.489	1.493	1.371	1.421	1.412	1.462	1.470	1.452	3.01
12) T 1,2-Dichlorobenzene	1.419	1.442	1.380	1.471	1.429	1.406	1.362	1.369	1.391	1.389	1.406	2.46
13) t Benzyl alcohol	0.774	0.890	0.931	0.918	0.976	0.959	0.915	0.967	0.992	1.044	0.936	7.71
14) T bis(2-chloroisopropyl)ether	1.732	1.783	1.706	1.958	1.860	1.769	1.714	1.784	1.742	1.796	1.785	4.26
15) T 2-Methylphenol	0.768	1.072	1.002	1.041	1.013	1.034	1.015	1.040	1.070	1.107	1.016	9.14
16) T Hexachloroethane	0.661	0.565	0.498	0.546	0.555	0.528	0.532	0.532	0.543	0.548	0.551	7.75
17) T n-Nitrosodi-n-propylamine	0.570	0.835	0.767	0.893	0.849	0.806	0.839	0.855	0.862	0.903	0.818	11.68
18) T 3-Methylphenol/4-Methylphenol	0.768	0.849	1.066	1.122	1.143	1.064	1.063	1.107	1.138	1.176	1.050	12.75
19) S Nitrobenzene-d5	1.334	1.159	1.236	1.354	1.273	1.246	1.238	1.249	1.269	1.329	1.269	4.56
20) T Nitrobenzene	1.162	1.276	1.152	1.279	1.307	1.197	1.186	1.251	1.236	1.288	1.234	4.51
21) T Isophorone	1.951	1.920	2.057	2.350	2.279	2.171	2.207	2.240	2.264	2.389	2.183	7.31
22) T 2-Nitrophenol	0.460	0.456	0.547	0.584	0.549	0.617	0.599	0.618	0.661	0.676	0.577	13.06
23) T 2,4-Dimethylphenol	1.026	1.047	1.051	1.178	1.146	1.121	1.087	1.115	1.133	1.198	1.110	5.15
24) T bis(2-Chloroethoxy)methane	1.542	1.401	1.426	1.489	1.398	1.385	1.364	1.358	1.367	1.430	1.416	4.17
25) T 2,4-Dichlorophenol	0.949	0.937	0.945	1.098	1.080	0.990	1.068	1.094	1.112	1.163	1.044	7.77
26) T 1,2,4-Trichlorobenzene	1.294	1.381	1.197	1.360	1.280	1.304	1.221	1.221	1.236	1.269	1.276	4.76
27) I IS2_1,4-Dichlorobenzene-d4	-----ISTD-----											
28) T Benzaldehyde	1.153	0.824	0.990	0.991	1.037	1.136	1.126	1.113	1.082	1.008	1.046	9.48
29) T Acetophenone	1.813	1.661	1.714	1.792	1.850	1.967	1.918	1.977	1.881	1.740	1.831	5.84
30) T m-Toluidine	0.472	0.864	1.395	1.607	1.633	1.864	1.863	1.871	1.818	1.689	*L	0.9975
31) T 2-Chloroaniline	1.585	1.504	1.624	1.727	1.680	1.836	1.816	1.828	1.736	1.598	1.693	6.78
32) I IS3_1,4-Dichlorobenzene-d4	-----ISTD-----											
33) T n-Decane	1.438	1.152	1.216	1.252	1.221	1.272	1.155	1.198	1.219	1.190	1.231	6.63
34) I IS1_Naphthalene-d8	-----ISTD-----											
35) T Naphthalene	1.018	0.994	0.965	0.975	0.990	0.956	0.955	0.963	0.945	0.949	0.971	2.40
36) T Benzoic Acid					0.080	0.130	0.171	0.189	0.228	0.243	*L	0.9968



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) T 4-Chloroaniline	0.092	0.110	0.118	0.124	0.116	0.108	0.114	0.123	0.118	0.123	0.115	8.30
38) T Hexachlorobutadiene	0.207	0.179	0.215	0.194	0.200	0.194	0.197	0.199	0.196	0.195	0.198	4.77
39) T p-Chloro-m-cresol	0.223	0.182	0.240	0.256	0.261	0.257	0.266	0.277	0.281	0.293	0.254	12.65
40) T 2-Methylnaphthalene	0.571	0.609	0.587	0.649	0.667	0.619	0.642	0.651	0.649	0.668	0.631	5.29
41) T 1-Methylnaphthalene	0.228	0.185	0.212	0.217	0.231	0.222	0.211	0.226	0.222	0.229	0.218	6.15
42) T Hexachlorocyclopentadiene	0.218	0.216	0.219	0.254	0.237	0.240	0.249	0.249	0.251	0.258	0.239	6.77
43) T 2,4,6-Trichlorophenol		0.128	0.188	0.201	0.222	0.214	0.228	0.231	0.237	0.251	*L	0.9985
44) T 2,4,5-Trichlorophenol		0.164	0.198	0.228	0.241	0.242	0.241	0.259	0.261	0.268	0.234	14.32
45) S 2-Fluorobiphenyl	0.836	0.721	0.803	0.796	0.821	0.782	0.778	0.781	0.768	0.784	0.787	3.97
46) T 2-Chloronaphthalene	0.707	0.647	0.685	0.706	0.709	0.684	0.693	0.706	0.686	0.699	0.692	2.67
47) T 2-Nitroaniline	0.142	0.175	0.177	0.199	0.211	0.202	0.214	0.218	0.225	0.238	0.200	14.09
48) T 1,4-Dinitrobenzene			0.072	0.080	0.095	0.094	0.092	0.104	0.101	0.109	0.093	13.08
49) T 1,3-Dinitrobenzene				0.104	0.097	0.099	0.109	0.115	0.115	0.122	0.109	8.38
50) T Dimethyl phthalate	0.742	0.733	0.762	0.842	0.871	0.817	0.809	0.845	0.815	0.854	0.809	5.95
51) T Acenaphthylene	0.967	0.966	0.975	1.090	1.124	1.061	1.068	1.087	1.060	1.096	1.049	5.58
52) T 2,6-Dinitrotoluene	0.132	0.173	0.131	0.165	0.177	0.174	0.168	0.184	0.176	0.192	0.167	12.21
53) T 1,2-Dinitrobenzene			0.049	0.064	0.069	0.067	0.064	0.067	0.070	0.073	0.065	11.19
54) I IS2_Naphthalene-d8	-----ISTD-----											
55) T a-Terpeneol	0.271	0.269	0.269	0.258	0.282	0.291	0.278	0.292	0.289	0.266	0.277	4.21
56) T 3-Chloroaniline	0.096	0.121	0.150	0.133	0.145	0.158	0.149	0.148	0.144	0.133	0.138	13.05
57) T 2,6-Dichlorophenol	0.193	0.251	0.259	0.263	0.274	0.294	0.305	0.314	0.316	0.292	0.276	13.50
58) T 1-chloro-2-nitrobenzene	0.162	0.134	0.138	0.152	0.149	0.156	0.151	0.155	0.151	0.139	0.149	6.10
59) T Caprolactam				0.114	0.134	0.150	0.161	0.164	0.161	0.157	0.149	12.30
60) T 1,2,4,5-Tetrachlorobenzene	0.440	0.404	0.388	0.397	0.400	0.419	0.403	0.409	0.396	0.365	0.402	4.86
61) T Biphenyl	0.913	0.868	0.913	0.891	0.899	0.944	0.936	0.927	0.895	0.824	0.901	3.93
62) I IS1_Acenaphthene-d10	-----ISTD-----											
63) T 3-Nitroaniline	0.255	0.255	0.315	0.319	0.315	0.338	0.332	0.346	0.355	0.353	0.318	11.46
64) T Acenaphthene	1.114	1.114	1.030	1.121	1.116	1.078	1.064	1.075	1.109	1.072	1.089	2.76
65) T 2,4-Dinitrophenol					0.138	0.155	0.160	0.174	0.197	0.202	*L	0.9974
66) T Dibenzofuran	1.784	1.750	1.693	1.854	1.765	1.728	1.685	1.710	1.723	1.681	1.737	3.07
67) T 2,4-Dinitrotoluene	0.318	0.352	0.345	0.381	0.389	0.413	0.411	0.429	0.445	0.434	0.392	10.84
68) T 4-Nitrophenol				0.230	0.258	0.255	0.260	0.282	0.289	0.285	*L	0.9994
69) T 2,3,5,6-Tetrachlorophenol			0.263	0.332	0.338	0.348	0.356	0.375	0.397	0.389	*L	0.9993
70) T 2,3,4,6-Tetrachlorophenol			0.285	0.328	0.357	0.355	0.361	0.377	0.389	0.385	*L	0.9997
71) T Diethyl phthalate	1.487	1.484	1.390	1.484	1.457	1.469	1.452	1.473	1.493	1.474	1.466	2.03
72) T Fluorene	1.429	1.361	1.373	1.403	1.440	1.408	1.371	1.407	1.419	1.393	1.400	1.85



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73) T 4-Chlorophenyl-phenylether	0.652	0.753	0.696	0.687	0.698	0.664	0.657	0.673	0.666	0.659	0.681	4.44
74) T 4-Nitroaniline	0.240	0.253	0.283	0.321	0.331	0.329	0.340	0.349	0.357	0.357	0.316	13.50
75) T 4,6-Dinitro-o-cresol				0.170	0.179	0.205	0.212	0.229	0.250	0.248	*L	0.9987
76) T NDPA/DPA	1.256	1.121	1.143	1.219	1.197	1.219	1.180	1.204	1.221	1.187	1.195	3.31
77) T Azobenzene	1.103	1.257	1.199	1.316	1.306	1.310	1.261	1.282	1.281	1.240	1.256	5.13
78) S 2,4,6-Tribromophenol		0.179	0.210	0.240	0.229	0.230	0.233	0.246	0.257	0.259	0.232	10.80
79) T 4-Bromophenyl-phenylether	0.324	0.395	0.454	0.464	0.422	0.429	0.417	0.431	0.458	0.457	0.425	9.86
80) T Hexachlorobenzene	0.543	0.499	0.530	0.560	0.544	0.507	0.522	0.533	0.543	0.538	0.532	3.46
81) T Pentachlorophenol				0.246	0.251	0.261	0.297	0.315	0.346	0.349	*L	0.9981
82) I IS2_Acenaphthene-d10	-----ISTD-----											
83) T Dichloran			0.169	0.179	0.163	0.181	0.211	0.231	0.233	0.232	*L	0.9977
84) T Pentachloronitrobenzene	0.219	0.221	0.165	0.175	0.190	0.205	0.206	0.225	0.217	0.209	0.203	9.97
85) I IS3_Acenaphthene-d10	-----ISTD-----											
86) T Atrazine	0.362	0.313	0.346	0.320	0.327	0.375	0.391	0.357	0.403	0.439	0.363	10.98
87) I IS1_Phenanthrene-d10	-----ISTD-----											
88) T Phenanthrene	1.058	1.104	1.057	1.019	1.046	0.997	1.017	1.022	1.002	0.979	1.030	3.56
89) T Anthracene	1.013	0.995	0.965	0.988	1.028	0.988	1.011	1.012	0.996	0.982	0.998	1.85
90) T Carbazole	0.873	0.949	0.893	0.912	0.977	0.950	0.980	0.978	0.954	0.939	0.941	3.92
91) T Di-n-butylphthalate	1.074	1.038	1.046	1.095	1.115	1.076	1.150	1.151	1.178	1.155	1.108	4.45
92) T Fluoranthene	1.160	1.162	1.153	1.217	1.252	1.182	1.229	1.230	1.255	1.237	1.208	3.29
93) T Benzidine				0.711	0.748	0.676	0.827	0.837	0.873	0.869	0.791	10.00
94) T Pyrene	1.206	1.319	1.272	1.268	1.349	1.256	1.277	1.290	1.273	1.258	1.277	3.00
95) S 4-Terphenyl-d14	0.976	0.954	0.960	0.979	1.026	0.964	0.985	0.979	0.980	0.974	0.978	2.01
96) T Butyl benzyl phthalate	0.411	0.426	0.461	0.496	0.497	0.487	0.533	0.534	0.592	0.599	0.504	12.46
97) I IS2_Phenanthrene-d10	-----ISTD-----											
98) T Diphenamid	0.492	0.457	0.445	0.464	0.475	0.521	0.542	0.559	0.543	0.515	0.501	8.02
99) I IS3_Phenanthrene-d10	-----ISTD-----											
100) T n-Octadecane	0.381	0.394	0.346	0.362	0.387	0.402	0.411	0.387	0.396	0.390	0.386	4.90
101) T Parathion			0.083	0.077	0.086	0.096	0.107	0.097	0.123	0.128	*Q	0.9983
102) T 3,3'-Dimethylbenzidine		0.198	0.425	0.486	0.524	0.652	0.721	0.688	0.859	0.856	*Q	0.9978
103) I IS1_Chrysene-d12	-----ISTD-----											
104) T Benzo[a]anthracene	1.244	1.246	1.228	1.206	1.255	1.254	1.245	1.279	1.307	1.274	1.254	2.23
105) T 3,3'-Dichlorobenzidine	0.464	0.433	0.404	0.442	0.464	0.477	0.501	0.529	0.553	0.554	0.482	10.61
106) T Chrysene	1.204	1.121	1.194	1.193	1.225	1.203	1.174	1.208	1.178	1.143	1.184	2.66
107) T bis(2-Ethylhexyl)phthalate	0.621	0.587	0.619	0.671	0.694	0.708	0.744	0.769	0.805	0.785	0.700	10.79
108) T Di-n-octylphthalate			1.020	1.118	1.110	1.207	1.317	1.381	1.521	1.493	1.271	14.64



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2328902
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109) T Benzo(b)fluoranthene	1.270	1.437	1.229	1.327	1.308	1.327	1.424	1.438	1.454	1.394	1.361	5.80
110) T Benzo(k)fluoranthene	1.230	1.156	1.246	1.300	1.322	1.347	1.303	1.394	1.356	1.335	1.299	5.41
111) T Benzo(a)pyrene	1.077	1.099	1.122	1.128	1.148	1.194	1.241	1.287	1.275	1.257	1.183	6.58
112) I IS1_Perylene-d12	-----ISTD-----											
113) T Indeno(1,2,3-cd)pyrene	1.010	0.946	0.999	0.997	0.998	1.063	1.092	1.153	1.182	1.164	1.060	7.86
114) T Dibenzo[a,h]anthracene	1.050	1.040	1.065	1.091	1.140	1.095	1.143	1.176	1.158	1.154	1.111	4.42
115) T Benzo(g,h,i)perylene	1.137	1.014	1.057	1.073	1.163	1.107	1.170	1.182	1.155	1.157	1.122	5.01



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : ABN0530B
 Sample No : WG1785094-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 19:32
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	109	0
n-Nitrosodimethylamine	0.955	0.911	-	4.6	20	112	0
Pyridine	1.517	1.436	-	5.3	20	107	0
2-Fluorophenol	1.172	1.306	-	-11.4	20	122	0
Aniline	2.122	2.263	-	-6.6	20	122	0
2-Chlorophenol	1.204	1.358	-	-12.8	20	126	0
Phenol-d6	1.6	1.673	-	-4.6	20	119	0
Phenol	1.728	1.816	-	-5.1	20	118	0
Bis(2-chloroethyl)ether	1.306	1.41	-	-8	20	121	0
1,3-Dichlorobenzene	1.426	1.569	-	-10	20	127	0
1,4-Dichlorobenzene	1.465	1.6	-	-9.2	20	123	0
1,2-Dichlorobenzene	1.399	1.52	-	-8.6	20	119	0
Benzyl alcohol	1.301	1.306	-	-0.4	20	112	0
Bis(2-chloroisopropyl)ethe	1.51	1.786	-	-18.3	20	128	0
2-Methylphenol	1.225	1.334	-	-8.9	20	121	0
Hexachloroethane	0.544	0.628	-	-15.4	20	137	0
n-Nitrosodi-n-propylamine	1.119	1.195	-	-6.8	20	117	0
3-Methylphenol/4-Methylphe	1.285	1.432	-	-11.4	20	122	0
Nitrobenzene-d5	1.441	1.648	-	-14.4	20	133	0
Nitrobenzene	1.485	1.698	-	-14.3	20	132	0
Isophorone	3.001	3.158	-	-5.2	20	120	0
2-Nitrophenol	0.563	0.762	-	-35.3*	20	162	0
2,4-Dimethylphenol	1.413	1.542	-	-9.1	20	127	0
Bis(2-chloroethoxy)methane	1.649	1.845	-	-11.9	20	129	0
2,4-Dichlorophenol	1.162	1.35	-	-16.2	20	136	0
1,2,4-Trichlorobenzene	1.373	1.468	-	-6.9	20	120	0
IS1_Naphthalene-d8	1	1	-	0	20	116	0
Naphthalene	1.11	1.133	-	-2.1	20	124	0
Benzoic Acid	5	6.806	-	-36.1*	20	194	0
4-Chloroaniline	0.161	0.163	-	-1.2	20	116	0
Hexachlorobutadiene	0.299	0.309	-	-3.3	20	132	0
p-Chloro-m-cresol	0.351	0.371	-	-5.7	20	125	0
2-Methylnaphthalene	0.715	0.741	-	-3.6	20	128	0
1-Methylnaphthalene	0.31	0.317	-	-2.3	20	126	0
Hexachlorocyclopentadiene	0.351	0.405	-	-15.4	20	139	0
2,4,6-Trichlorophenol	0.291	0.317	-	-8.9	20	132	0
2,4,5-Trichlorophenol	0.315	0.327	-	-3.8	20	128	0
2-Fluorobiphenyl	0.994	0.971	-	2.3	20	121	0
2-Chloronaphthalene	0.777	0.81	-	-4.2	20	128	0
2-Nitroaniline	0.222	0.267	-	-20.3*	20	139	0
1,4-Dinitrobenzene	0.11	0.142	-	-29.1*	20	168	0
1,3-Dinitrobenzene	0.121	0.151	-	-24.8*	20	155	0
Dimethyl phthalate	0.908	1.073	-	-18.2	20	141	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : ABN0530B
 Sample No : WG1785094-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 19:32
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.231	1.221	-	0.8	20	120	0
2,6-Dinitrotoluene	0.184	0.215	-	-16.8	20	136	0
1,2-Dinitrobenzene	0.078	0.098	-	-25.6*	20	150	0
IS1_Acenaphthene-d10	1	1	-	0	20	121	0
3-Nitroaniline	0.308	0.372	-	-20.8*	20	146	0
Acenaphthene	1.155	1.216	-	-5.3	20	131	0
2,4-Dinitrophenol	0.17	0.244	-	-43.5*	20	174	0
Dibenzofuran	1.827	1.971	-	-7.9	20	129	0
2,4-Dinitrotoluene	0.379	0.489	-	-29*	20	153	0
4-Nitrophenol	0.244	0.389	-	-59.4*	20	194	0
2,3,5,6-Tetrachlorophenol	0.434	0.516	-	-18.9	20	142	0
2,3,4,6-Tetrachlorophenol	0.443	0.489	-	-10.4	20	136	0
Diethyl phthalate	1.351	1.702	-	-26*	20	156	0
Fluorene	1.464	1.475	-	-0.8	20	122	0
4-Chlorophenyl phenyl ethe	0.784	0.834	-	-6.4	20	127	0
4-Nitroaniline	0.306	0.365	-	-19.3	20	147	0
4,6-Dinitro-o-cresol	0.21	0.312	-	-48.6*	20	189	0
NDPA/DPA	1.218	1.359	-	-11.6	20	136	0
Azobenzene	1.555	1.589	-	-2.2	20	126	0
2,4,6-Tribromophenol	0.221	0.253	-	-14.5	20	135	0
4-Bromophenyl phenyl ether	0.504	0.517	-	-2.6	20	125	0
Hexachlorobenzene	0.55	0.583	-	-6	20	135	0
Pentachlorophenol	0.31	0.375	-	-21*	20	169	0
IS1_Phenanthrene-d10	1	1	-	0	20	120	0
Phenanthrene	1.001	1.072	-	-7.1	20	135	0
Anthracene	1.037	1.068	-	-3	20	124	0
Carbazole	0.92	0.924	-	-0.4	20	122	0
Di-n-butylphthalate	1.073	1.281	-	-19.4	20	146	0
Fluoranthene	1.274	1.306	-	-2.5	20	124	0
Benzidine	0.832	0.865	-	-4	20	126	0
Pyrene	1.333	1.34	-	-0.5	20	125	0
4-Terphenyl-d14	1.012	1.022	-	-1	20	124	0
Butyl benzyl phthalate	0.463	0.57	-	-23.1*	20	148	0
IS1_Chrysene-d12	1	1	-	0	20	108	0
Benzo(a)anthracene	1.364	1.451	-	-6.4	20	118	0
3,3'-Dichlorobenzidine	0.528	0.549	-	-4	20	115	0
Chrysene	1.273	1.399	-	-9.9	20	124	0
Bis(2-ethylhexyl)phthalate	0.709	0.952	-	-34.3*	20	144	0
Di-n-octylphthalate	1.225	1.604	-	-30.9*	20	143	0
Benzo(b)fluoranthene	1.334	1.316	-	1.3	20	106	0
Benzo(k)fluoranthene	1.191	1.306	-	-9.7	20	128	0
Benzo(a)pyrene	1.127	1.163	-	-3.2	20	116	0
IS1_Perylene-d12	1	1	-	0	20	103	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : SV106
 Lab File ID : ABN0530B
 Sample No : WG1785094-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 19:32
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	0.908	0.956	-	-5.3	20	110	0
Dibenzo(a,h)anthracene	0.94	1.071	-	-13.9	20	116	0
Benzo(ghi)perylene	0.926	1.07	-	-15.6	20	117	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : AP90530B
 Sample No : WG1785094-4
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 19:56
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	88	0
Benzaldehyde	1.26	1.502	-	-19.2	20	96	0
Acetophenone	2.322	3.139	-	-35.2*	20	110	0
m-Toluidine	2.003	2.591	-	-29.4*	20	98	0
2-Chloroaniline	1.737	2.478	-	-42.7*	20	115	0
IS2_Naphthalene-d8	1	1	-	0	20	96	0
a-Terpineol	0.35	0.458	-	-30.9*	20	116	0
3-Chloroaniline	0.199	0.258	-	-29.6*	20	112	0
2,6-Dichlorophenol	0.354	0.477	-	-34.7*	20	122	0
1-chloro-2-nitrobenzene	0.159	0.232	-	-45.9*	20	125	0
Caprolactam	0.177	0.224	-	-26.6*	20	113	0
1,2,4,5-Tetrachlorobenzene	0.545	0.666	-	-22.2*	20	114	0
Biphenyl	1.05	1.37	-	-30.5*	20	119	0
IS2_Acenaphthene-d10	1	1	-	0	20	98	0
Dichloran	0.222	0.336	-	-51.4*	20	152	0
Pentachloronitrobenzene	0.223	0.419	-	-87.9*	20	180	0
IS2_Phenanthrene-d10	1	1	-	0	20	93	0
Diphenamid	0.538	0.726	-	-34.9*	20	122	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : ABN0531N
 Sample No : WG1785627-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 21:32
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	101	0
n-Nitrosodimethylamine	0.955	0.956	-	-0.1	20	110	0
Pyridine	1.517	1.727	-	-13.8	20	120	0
2-Fluorophenol	1.172	1.398	-	-19.3	20	122	0
Aniline	2.122	2.298	-	-8.3	20	115	0
2-Chlorophenol	1.204	1.41	-	-17.1	20	121	0
Phenol-d6	1.6	1.755	-	-9.7	20	116	0
Phenol	1.728	1.947	-	-12.7	20	118	0
Bis(2-chloroethyl)ether	1.306	1.526	-	-16.8	20	122	0
1,3-Dichlorobenzene	1.426	1.652	-	-15.8	20	125	0
1,4-Dichlorobenzene	1.465	1.681	-	-14.7	20	120	0
1,2-Dichlorobenzene	1.399	1.652	-	-18.1	20	121	0
Benzyl alcohol	1.301	1.271	-	2.3	20	102	0
Bis(2-chloroisopropyl)ethe	1.51	1.949	-	-29.1*	20	131	0
2-Methylphenol	1.225	1.331	-	-8.7	20	113	0
Hexachloroethane	0.544	0.666	-	-22.4*	20	136	0
n-Nitrosodi-n-propylamine	1.119	1.087	-	2.9	20	99	0
3-Methylphenol/4-Methylphe	1.285	1.445	-	-12.5	20	115	0
Nitrobenzene-d5	1.441	1.653	-	-14.7	20	124	0
Nitrobenzene	1.485	1.667	-	-12.3	20	121	0
Isophorone	3.001	2.939	-	2.1	20	104	0
2-Nitrophenol	0.563	0.742	-	-31.8*	20	147	0
2,4-Dimethylphenol	1.413	1.464	-	-3.6	20	112	0
Bis(2-chloroethoxy)methane	1.649	1.776	-	-7.7	20	115	0
2,4-Dichlorophenol	1.162	1.238	-	-6.5	20	116	0
1,2,4-Trichlorobenzene	1.373	1.431	-	-4.2	20	109	0
IS1_Naphthalene-d8	1	1	-	0	20	111	0
Naphthalene	1.11	1.075	-	3.2	20	113	0
Benzoic Acid	5	6.238	-	-24.8*	20	164	0
4-Chloroaniline	0.161	0.145	-	9.9	20	99	0
Hexachlorobutadiene	0.299	0.286	-	4.3	20	117	0
p-Chloro-m-cresol	0.351	0.335	-	4.6	20	108	0
2-Methylnaphthalene	0.715	0.678	-	5.2	20	112	0
1-Methylnaphthalene	0.31	0.278	-	10.3	20	106	0
Hexachlorocyclopentadiene	0.351	0.359	-	-2.3	20	118	0
2,4,6-Trichlorophenol	0.291	0.267	-	8.2	20	107	0
2,4,5-Trichlorophenol	0.315	0.288	-	8.6	20	109	0
2-Fluorobiphenyl	0.994	0.873	-	12.2	20	104	0
2-Chloronaphthalene	0.777	0.737	-	5.1	20	112	0
2-Nitroaniline	0.222	0.221	-	0.5	20	110	0
1,4-Dinitrobenzene	0.11	0.104	-	5.5	20	118	0
1,3-Dinitrobenzene	0.121	0.127	-	-5	20	126	0
Dimethyl phthalate	0.908	0.884	-	2.6	20	111	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : ABN0531N
 Sample No : WG1785627-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 21:32
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.231	1.026	-	16.7	20	97	0
2,6-Dinitrotoluene	0.184	0.178	-	3.3	20	108	0
1,2-Dinitrobenzene	0.078	0.075	-	3.8	20	110	0
IS1_Acenaphthene-d10	1	1	-	0	20	102	0
3-Nitroaniline	0.308	0.344	-	-11.7	20	114	0
Acenaphthene	1.155	1.184	-	-2.5	20	107	0
2,4-Dinitrophenol	0.17	0.204	-	-20	20	122	0
Dibenzofuran	1.827	1.908	-	-4.4	20	105	0
2,4-Dinitrotoluene	0.379	0.444	-	-17.2	20	117	0
4-Nitrophenol	0.244	0.347	-	-42.2*	20	146	0
2,3,5,6-Tetrachlorophenol	0.434	0.47	-	-8.3	20	109	0
2,3,4,6-Tetrachlorophenol	0.443	0.469	-	-5.9	20	110	0
Diethyl phthalate	1.351	1.509	-	-11.7	20	116	0
Fluorene	1.464	1.422	-	2.9	20	99	0
4-Chlorophenyl phenyl ethe	0.784	0.787	-	-0.4	20	101	0
4-Nitroaniline	0.306	0.336	-	-9.8	20	114	0
4,6-Dinitro-o-creso	0.21	0.27	-	-28.6*	20	138	0
NDPA/DPA	1.218	1.268	-	-4.1	20	107	0
Azobenzene	1.555	1.403	-	9.8	20	94	0
2,4,6-Tribromophenol	0.221	0.233	-	-5.4	20	105	0
4-Bromophenyl phenyl ether	0.504	0.488	-	3.2	20	99	0
Hexachlorobenzene	0.55	0.495	-	10	20	96	0
Pentachlorophenol	0.31	0.323	-	-4.2	20	122	0
IS1_Phenanthrene-d10	1	1	-	0	20	93	0
Phenanthrene	1.001	1.051	-	-5	20	102	0
Anthracene	1.037	1.064	-	-2.6	20	95	0
Carbazole	0.92	0.918	-	0.2	20	93	0
Di-n-butylphthalate	1.073	1.274	-	-18.7	20	113	0
Fluoranthene	1.274	1.275	-	-0.1	20	93	0
Benzidine	0.832	0.871	-	-4.7	20	98	0
Pyrene	1.333	1.349	-	-1.2	20	97	0
4-Terphenyl-d14	1.012	1.011	-	0.1	20	95	0
Butyl benzyl phthalate	0.463	0.578	-	-24.8*	20	116	0
IS1_Chrysene-d12	1	1	-	0	20	91	0
Benzo(a)anthracene	1.364	1.406	-	-3.1	20	95	0
3,3'-Dichlorobenzidine	0.528	0.541	-	-2.5	20	95	0
Chrysene	1.273	1.321	-	-3.8	20	98	0
Bis(2-ethylhexyl)phthalate	0.709	0.98	-	-38.2*	20	124	0
Di-n-octylphthalate	1.225	1.73	-	-41.2*	20	129	0
Benzo(b)fluoranthene	1.334	1.433	-	-7.4	20	96	0
Benzo(k)fluoranthene	1.191	1.392	-	-16.9	20	114	0
Benzo(a)pyrene	1.127	1.24	-	-10	20	103	0
IS1_Perylene-d12	1	1	-	0	20	89	0

* Value outside of QC limits.



Calibration Verification Summary
Form 7
Semivolatiles

Client : CHA Companies
Project Name : FRIEDRICHSOHN SITE
Instrument ID : SV106
Lab File ID : ABN0531N
Sample No : WG1785627-3
Channel :

Lab Number : L2328902
Project Number : 060017.000
Calibration Date : 05/31/23 21:32
Init. Calib. Date(s) : 04/06/23 04/06/23
Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	0.908	1.033	-	-13.8	20	103	0
Dibenzo(a,h)anthracene	0.94	1.154	-	-22.8*	20	108	0
Benzo(ghi)perylene	0.926	1.143	-	-23.4*	20	108	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : AP90531N
 Sample No : WG1785627-4
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 21:55
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	110	0
Benzaldehyde	1.26	1.161	-	7.9	20	93	0
Acetophenone	2.322	2.785	-	-19.9	20	123	0
m-Toluidine	2.003	2.144	-	-7	20	102	0
2-Chloroaniline	1.737	2.256	-	-29.9*	20	131	0
IS2_Naphthalene-d8	1	1	-	0	20	110	0
a-Terpineol	0.35	0.449	-	-28.3*	20	130	0
3-Chloroaniline	0.199	0.225	-	-13.1	20	112	0
2,6-Dichlorophenol	0.354	0.443	-	-25.1*	20	130	0
1-chloro-2-nitrobenzene	0.159	0.219	-	-37.7*	20	135	0
Caprolactam	0.177	0.221	-	-24.9*	20	128	0
1,2,4,5-Tetrachlorobenzene	0.545	0.621	-	-13.9	20	122	0
Biphenyl	1.05	1.226	-	-16.8	20	122	0
IS2_Acenaphthene-d10	1	1	-	0	20	102	0
Dichloran	0.222	0.305	-	-37.4*	20	144	0
Pentachloronitrobenzene	0.223	0.348	-	-56.1*	20	156	0
IS2_Phenanthrene-d10	1	1	-	0	20	100	0
Diphenamid	0.538	0.613	-	-13.9	20	110	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : SV106
 Lab File ID : ADP0531N
 Sample No : WG1785627-5
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/31/23 22:18
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	121	0
n-Decane	1.418	1.177	-	17	20	94	0
IS3_Acenaphthene-d10	1	1	-	0	20	116	0
Atrazine	0.485	0.384	-	20.8*	20	87	0
IS3_Phenanthrene-d10	1	1	-	0	20	111	0
n-Octadecane	0.396	0.351	-	11.4	20	94	0
Parathion	0.099	0.1	-	-1	20	118	0
3,3'-Dimethylbenzidine	0.895	0.64	-	28.5*	20	80	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0528
 Sample No : WG1784536-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/28/23 19:17
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	89	0
n-Nitrosodimethylamine	5	4.609	-	7.8	20	87	0
Pyridine	5	4.975	-	0.5	20	112	0
2-Fluorophenol	1.033	1.096	-	-6.1	20	95	0
Aniline	1.79	1.76	-	1.7	20	87	0
2-Chlorophenol	1.195	1.322	-	-10.6	20	96	0
Phenol-d6	1.324	1.396	-	-5.4	20	92	0
Phenol	1.539	1.494	-	2.9	20	89	0
Bis(2-chloroethyl)ether	1.066	1.126	-	-5.6	20	99	0
1,3-Dichlorobenzene	1.435	1.506	-	-4.9	20	96	0
1,4-Dichlorobenzene	1.452	1.554	-	-7	20	101	0
1,2-Dichlorobenzene	1.406	1.514	-	-7.7	20	96	0
Benzyl alcohol	0.936	1.104	-	-17.9	20	102	0
Bis(2-chloroisopropyl)ethe	1.785	1.975	-	-10.6	20	99	0
2-Methylphenol	1.016	1.144	-	-12.6	20	98	0
Hexachloroethane	0.551	0.648	-	-17.6	20	109	0
n-Nitrosodi-n-propylamine	0.818	0.919	-	-12.3	20	101	0
3-Methylphenol/4-Methylphe	1.05	1.224	-	-16.6	20	102	0
Nitrobenzene-d5	1.269	1.443	-	-13.7	20	103	0
Nitrobenzene	1.234	1.406	-	-13.9	20	104	0
Isophorone	2.183	2.435	-	-11.5	20	100	0
2-Nitrophenol	0.577	0.709	-	-22.9*	20	102	0
2,4-Dimethylphenol	1.11	1.311	-	-18.1	20	104	0
Bis(2-chloroethoxy)methane	1.416	1.505	-	-6.3	20	97	0
2,4-Dichlorophenol	1.044	1.252	-	-19.9	20	112	0
1,2,4-Trichlorobenzene	1.276	1.4	-	-9.7	20	95	0
IS1_Naphthalene-d8	1	1	-	0	20	92	0
Naphthalene	0.971	1.017	-	-4.7	20	98	0
Benzoic Acid	5	6.702	-	-34*	20	151	0
4-Chloroaniline	0.115	0.121	-	-5.2	20	103	0
Hexachlorobutadiene	0.198	0.214	-	-8.1	20	101	0
p-Chloro-m-cresol	0.254	0.291	-	-14.6	20	104	0
2-Methylnaphthalene	0.631	0.698	-	-10.6	20	104	0
1-Methylnaphthalene	0.218	0.248	-	-13.8	20	102	0
Hexachlorocyclopentadiene	0.239	0.266	-	-11.3	20	102	0
2,4,6-Trichlorophenol	5	5.492	-	-9.8	20	109	0
2,4,5-Trichlorophenol	0.234	0.278	-	-18.8	20	105	0
2-Fluorobiphenyl	0.787	0.843	-	-7.1	20	99	0
2-Chloronaphthalene	0.692	0.748	-	-8.1	20	100	0
2-Nitroaniline	0.2	0.226	-	-13	20	103	0
1,4-Dinitrobenzene	0.093	0.09	-	3.2	20	88	0
1,3-Dinitrobenzene	0.109	0.119	-	-9.2	20	110	0
Dimethyl phthalate	0.809	0.912	-	-12.7	20	102	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0528
 Sample No : WG1784536-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/28/23 19:17
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.114	-	-6.2	20	96	0
2,6-Dinitrotoluene	0.167	0.183	-	-9.6	20	97	0
1,2-Dinitrobenzene	0.065	0.07	-	-7.7	20	96	0
IS1_Acenaphthene-d10	1	1	-	0	20	89	0
3-Nitroaniline	0.318	0.369	-	-16	20	97	0
Acenaphthene	1.089	1.206	-	-10.7	20	99	0
2,4-Dinitrophenol	5	6.327	-	-26.5*	20	118	0
Dibenzofuran	1.737	1.985	-	-14.3	20	102	0
2,4-Dinitrotoluene	0.392	0.46	-	-17.3	20	99	0
4-Nitrophenol	5	6.448	-	-29*	20	120	0
2,3,5,6-Tetrachlorophenol	5	6.059	-	-21.2*	20	113	0
2,3,4,6-Tetrachlorophenol	5	5.841	-	-16.8	20	107	0
Diethyl phthalate	1.466	1.727	-	-17.8	20	104	0
Fluorene	1.4	1.555	-	-11.1	20	98	0
4-Chlorophenyl phenyl ethe	0.681	0.736	-	-8.1	20	98	0
4-Nitroaniline	0.316	0.371	-	-17.4	20	100	0
4,6-Dinitro-o-cresol	5	6.141	-	-22.8*	20	115	0
NDPA/DPA	1.195	1.274	-	-6.6	20	93	0
Azobenzene	1.256	1.499	-	-19.3	20	101	0
2,4,6-Tribromophenol	0.232	0.296	-	-27.6*	20	114	0
4-Bromophenyl phenyl ether	0.425	0.496	-	-16.7	20	102	0
Hexachlorobenzene	0.532	0.629	-	-18.2	20	110	0
Pentachlorophenol	5	5.727	-	-14.5	20	115	0
IS1_Phenanthrene-d10	1	1	-	0	20	90	0
Phenanthrene	1.03	1.075	-	-4.4	20	97	0
Anthracene	0.998	1.054	-	-5.6	20	96	0
Carbazole	0.941	1.018	-	-8.2	20	96	0
Di-n-butylphthalate	1.108	1.285	-	-16	20	107	0
Fluoranthene	1.208	1.289	-	-6.7	20	98	0
Benzidine	0.791	0.848	-	-7.2	20	113	0
Pyrene	1.277	1.344	-	-5.2	20	96	0
4-Terphenyl-d14	0.978	1.041	-	-6.4	20	97	0
Butyl benzyl phthalate	0.504	0.586	-	-16.3	20	108	0
IS1_Chrysene-d12	1	1	-	0	20	84	0
Benzo(a)anthracene	1.254	1.354	-	-8	20	91	0
3,3'-Dichlorobenzidine	0.482	0.53	-	-10	20	94	0
Chrysene	1.184	1.353	-	-14.3	20	95	0
Bis(2-ethylhexyl)phthalate	0.7	0.904	-	-29.1*	20	108	0
Di-n-octylphthalate	1.271	1.558	-	-22.6*	20	109	0
Benzo(b)fluoranthene	1.361	1.483	-	-9	20	94	0
Benzo(k)fluoranthene	1.299	1.37	-	-5.5	20	86	0
Benzo(a)pyrene	1.183	1.252	-	-5.8	20	89	0
IS1_Perylene-d12	1	1	-	0	20	80	0

* Value outside of QC limits.



Calibration Verification Summary
Form 7
Semivolatiles

Client : CHA Companies
Project Name : FRIEDRICHSOHN SITE
Instrument ID : DAKOTA
Lab File ID : ABN0528
Sample No : WG1784536-3
Channel :

Lab Number : L2328902
Project Number : 060017.000
Calibration Date : 05/28/23 19:17
Init. Calib. Date(s) : 04/13/23 04/13/23
Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	1.097	-	-3.5	20	82	0
Dibenzo(a,h)anthracene	1.111	1.19	-	-7.1	20	86	0
Benzo(ghi)perylene	1.122	1.192	-	-6.2	20	86	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : AP90528
 Sample No : WG1784536-4
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/28/23 19:39
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	85	0
Benzaldehyde	1.046	1.213	-	-16	20	91	0
Acetophenone	1.831	2.444	-	-33.5*	20	106	0
m-Toluidine	5	5.868	-	-17.4	20	93	0
2-Chloroaniline	1.693	2.307	-	-36.3*	20	107	0
IS2_Naphthalene-d8	1	1	-	0	20	83	0
a-Terpineol	0.277	0.374	-	-35*	20	106	0
3-Chloroaniline	0.138	0.191	-	-38.4*	20	100	0
2,6-Dichlorophenol	0.276	0.436	-	-58*	20	122	0
1-chloro-2-nitrobenzene	0.149	0.211	-	-41.6*	20	112	0
Caprolactam	0.149	0.219	-	-47*	20	121	0
1,2,4,5-Tetrachlorobenzene	0.402	0.561	-	-39.6*	20	110	0
Biphenyl	0.901	1.244	-	-38.1*	20	109	0
IS2_Acenaphthene-d10	1	1	-	0	20	86	0
Dichloran	5	6.839	-	-36.8*	20	139	0
Pentachloronitrobenzene	0.203	0.305	-	-50.2*	20	128	0
IS2_Phenanthrene-d10	1	1	-	0	20	96	0
Diphenamid	0.501	0.683	-	-36.3*	20	126	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ADP0528
 Sample No : WG1784536-5
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/28/23 20:01
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	71	0
n-Decane	1.231	1.177	-	4.4	20	66	0
IS3_Acenaphthene-d10	1	1	-	0	20	73	0
Atrazine	0.363	0.437	-	-20.4*	20	85	0
IS3_Phenanthrene-d10	1	1	-	0	20	78	0
n-Octadecane	0.386	0.401	-	-3.9	20	78	0
Parathion	5	5.545	-	-10.9	20	86	0
3,3'-Dimethylbenzidine	5	5.37	-	-7.4	20	84	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0530
 Sample No : WG1784870-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 09:48
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
n-Nitrosodimethylamine	5	5.147	-	-2.9	20	89	0
Pyridine	5	5.995	-	-19.9	20	123	0
2-Fluorophenol	1.033	1.245	-	-20.5*	20	97	0
Aniline	1.79	1.891	-	-5.6	20	85	0
2-Chlorophenol	1.195	1.393	-	-16.6	20	92	0
Phenol-d6	1.324	1.468	-	-10.9	20	88	0
Phenol	1.539	1.628	-	-5.8	20	88	0
Bis(2-chloroethyl)ether	1.066	1.15	-	-7.9	20	91	0
1,3-Dichlorobenzene	1.435	1.628	-	-13.4	20	94	0
1,4-Dichlorobenzene	1.452	1.671	-	-15.1	20	98	0
1,2-Dichlorobenzene	1.406	1.586	-	-12.8	20	91	0
Benzyl alcohol	0.936	1.077	-	-15.1	20	90	0
Bis(2-chloroisopropyl)ethe	1.785	2	-	-12	20	91	0
2-Methylphenol	1.016	1.188	-	-16.9	20	92	0
Hexachloroethane	0.551	0.622	-	-12.9	20	95	0
n-Nitrosodi-n-propylamine	0.818	0.956	-	-16.9	20	95	0
3-Methylphenol/4-Methylphe	1.05	1.263	-	-20.3*	20	96	0
Nitrobenzene-d5	1.269	1.452	-	-14.4	20	94	0
Nitrobenzene	1.234	1.474	-	-19.4	20	99	0
Isophorone	2.183	2.534	-	-16.1	20	94	0
2-Nitrophenol	0.577	0.726	-	-25.8*	20	95	0
2,4-Dimethylphenol	1.11	1.385	-	-24.8*	20	100	0
Bis(2-chloroethoxy)methane	1.416	1.517	-	-7.1	20	88	0
2,4-Dichlorophenol	1.044	1.292	-	-23.8*	20	105	0
1,2,4-Trichlorobenzene	1.276	1.49	-	-16.8	20	92	0
IS1_Naphthalene-d8	1	1	-	0	20	84	0
Naphthalene	0.971	1.031	-	-6.2	20	91	0
Benzoic Acid	5	6.826	-	-36.5*	20	142	0
4-Chloroaniline	0.115	0.123	-	-7	20	96	0
Hexachlorobutadiene	0.198	0.209	-	-5.6	20	91	0
p-Chloro-m-cresol	0.254	0.295	-	-16.1	20	97	0
2-Methylnaphthalene	0.631	0.674	-	-6.8	20	92	0
1-Methylnaphthalene	0.218	0.239	-	-9.6	20	91	0
Hexachlorocyclopentadiene	0.239	0.262	-	-9.6	20	92	0
2,4,6-Trichlorophenol	5	5.338	-	-6.8	20	98	0
2,4,5-Trichlorophenol	0.234	0.266	-	-13.7	20	93	0
2-Fluorobiphenyl	0.787	0.84	-	-6.7	20	91	0
2-Chloronaphthalene	0.692	0.753	-	-8.8	20	93	0
2-Nitroaniline	0.2	0.23	-	-15	20	96	0
1,4-Dinitrobenzene	0.093	0.097	-	-4.3	20	87	0
1,3-Dinitrobenzene	0.109	0.116	-	-6.4	20	98	0
Dimethyl phthalate	0.809	0.884	-	-9.3	20	91	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0530
 Sample No : WG1784870-3
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 09:48
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.125	-	-7.2	20	89	0
2,6-Dinitrotoluene	0.167	0.184	-	-10.2	20	90	0
1,2-Dinitrobenzene	0.065	0.067	-	-3.1	20	85	0
IS1_Acenaphthene-d10	1	1	-	0	20	84	0
3-Nitroaniline	0.318	0.357	-	-12.3	20	89	0
Acenaphthene	1.089	1.129	-	-3.7	20	88	0
2,4-Dinitrophenol	5	5.956	-	-19.1	20	103	0
Dibenzofuran	1.737	1.858	-	-7	20	90	0
2,4-Dinitrotoluene	0.392	0.442	-	-12.8	20	90	0
4-Nitrophenol	5	6.31	-	-26.2*	20	112	0
2,3,5,6-Tetrachlorophenol	5	5.649	-	-13	20	100	0
2,3,4,6-Tetrachlorophenol	5	5.713	-	-14.3	20	99	0
Diethyl phthalate	1.466	1.586	-	-8.2	20	91	0
Fluorene	1.4	1.489	-	-6.4	20	89	0
4-Chlorophenyl phenyl ethe	0.681	0.688	-	-1	20	87	0
4-Nitroaniline	0.316	0.36	-	-13.9	20	92	0
4,6-Dinitro-o-cresol	5	6.102	-	-22*	20	108	0
NDPA/DPA	1.195	1.236	-	-3.4	20	85	0
Azobenzene	1.256	1.437	-	-14.4	20	92	0
2,4,6-Tribromophenol	0.232	0.274	-	-18.1	20	100	0
4-Bromophenyl phenyl ether	0.425	0.442	-	-4	20	87	0
Hexachlorobenzene	0.532	0.574	-	-7.9	20	95	0
Pentachlorophenol	5	5.541	-	-10.8	20	105	0
IS1_Phenanthrene-d10	1	1	-	0	20	80	0
Phenanthrene	1.03	1.056	-	-2.5	20	85	0
Anthracene	0.998	1.049	-	-5.1	20	85	0
Carbazole	0.941	1.025	-	-8.9	20	86	0
Di-n-butylphthalate	1.108	1.2	-	-8.3	20	89	0
Fluoranthene	1.208	1.285	-	-6.4	20	87	0
Benzidine	0.791	0.858	-	-8.5	20	102	0
Pyrene	1.277	1.365	-	-6.9	20	87	0
4-Terphenyl-d14	0.978	1.008	-	-3.1	20	84	0
Butyl benzyl phthalate	0.504	0.561	-	-11.3	20	92	0
IS1_Chrysene-d12	1	1	-	0	20	78	0
Benzo(a)anthracene	1.254	1.358	-	-8.3	20	84	0
3,3'-Dichlorobenzidine	0.482	0.535	-	-11	20	88	0
Chrysene	1.184	1.326	-	-12	20	86	0
Bis(2-ethylhexyl)phthalate	0.7	0.821	-	-17.3	20	90	0
Di-n-octylphthalate	1.271	1.411	-	-11	20	91	0
Benzo(b)fluoranthene	1.361	1.54	-	-13.2	20	90	0
Benzo(k)fluoranthene	1.299	1.421	-	-9.4	20	82	0
Benzo(a)pyrene	1.183	1.321	-	-11.7	20	86	0
IS1_Perylene-d12	1	1	-	0	20	77	0

* Value outside of QC limits.



Calibration Verification Summary
Form 7
Semivolatiles

Client : CHA Companies
Project Name : FRIEDRICHSOHN SITE
Instrument ID : DAKOTA
Lab File ID : ABN0530
Sample No : WG1784870-3
Channel :

Lab Number : L2328902
Project Number : 060017.000
Calibration Date : 05/30/23 09:48
Init. Calib. Date(s) : 04/13/23 04/13/23
Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	1.068	-	-0.8	20	78	0
Dibenzo(a,h)anthracene	1.111	1.21	-	-8.9	20	85	0
Benzo(ghi)perylene	1.122	1.222	-	-8.9	20	85	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : AP90530
 Sample No : WG1784870-4
 Channel :

Lab Number : L2328902
 Project Number : 060017.000
 Calibration Date : 05/30/23 10:10
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	80	0
Benzaldehyde	1.046	1.175	-	-12.3	20	83	0
Acetophenone	1.831	2.444	-	-33.5*	20	100	0
m-Toluidine	5	5.831	-	-16.6	20	87	0
2-Chloroaniline	1.693	2.202	-	-30.1*	20	96	0
IS2_Naphthalene-d8	1	1	-	0	20	80	0
a-Terpineol	0.277	0.361	-	-30.3*	20	99	0
3-Chloroaniline	0.138	0.184	-	-33.3*	20	93	0
2,6-Dichlorophenol	0.276	0.431	-	-56.2*	20	117	0
1-chloro-2-nitrobenzene	0.149	0.185	-	-24.2*	20	94	0
Caprolactam	0.149	0.219	-	-47*	20	116	0
1,2,4,5-Tetrachlorobenzene	0.402	0.513	-	-27.6*	20	97	0
Biphenyl	0.901	1.168	-	-29.6*	20	98	0
IS2_Acenaphthene-d10	1	1	-	0	20	82	0
Dichloran	5	6.576	-	-31.5*	20	128	0
Pentachloronitrobenzene	0.203	0.287	-	-41.4*	20	116	0
IS2_Phenanthrene-d10	1	1	-	0	20	87	0
Diphenamid	0.501	0.649	-	-29.5*	20	108	0

* Value outside of QC limits.



SVOC SIM Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8270D SIM Semi-Volatiles
Data for Alpha Analytical, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (20%), as required.

Blanks: Method blank WG1784152-1BLANK contained a trace of 2-methylnaphthalene (0.04 ug/L). Rinse blank RINSE-20230522 contained a trace of chrysene (0.03 ug/L). Positive results for these compounds that are less than 5 times the highest blank level should be considered not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three acid extractable surrogate recoveries for samples MW-100-20230522 and MW-103B-20230523 was above control limits. No action is taken on one surrogate recovery per fraction outside control limits, provided no recovery is not less than 10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-103-20230523.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum and percent recoveries were within QC limits for aqueous samples WG1784152-2/3.

Field Duplicates: The analyses of aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 reported target compounds either as not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compound and surrogate results were within GC/MS quantitation limits.

Surrogate Recovery Summary

Form 2

Semivolatiles

Client: CHA Companies
Project Name: FRIEDRICHSOHN SITE

Lab Number: L2328902
Project Number: 060017.000
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-102-20230522 (L2328902-01)	58	46	94	81	101	82	0
MW-102B-20230522 (L2328902-02)	67	53	108	90	112	63	0
MW-100-20230522 (L2328902-03)	69	55	113	94	125*	84	1
MW-101B-20230523 (L2328902-04)	68	56	105	89	114	63	0
MW-103B-20230523 (L2328902-05)	72	58	115	96	137*	93	1
MW-103-20230523 (L2328902-06)	48	40	81	73	110	73	0
MW-104-20230523 (L2328902-07)	49	43	85	71	98	65	0
CHA-1-20230522 (L2328902-08)	53	42	86	74	99	74	0
RINSE-20230522 (L2328902-09)	63	49	102	86	109	87	0
WG1784152-1BLANK	46	35	73	63	89	70	0
WG1784152-2LCS	58	49	86	70	104	67	0
WG1784152-3LCSD	58	50	87	71	102	66	0
MW-103-20230523MS	52	45	79	66	96	63	0
MW-103-20230523MSD	63	55	96	77	113	69	0

QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL
(10-120) PHL = PHENOL-D6
(23-120) NBZ = NITROBENZENE-D5
(15-120) FBP = 2-FLUOROBIPHENYL
(10-120) TBP = 2,4,6-TRIBROMOPHENOL
(41-149) TPH = 4-TERPHENYL-D14

* Values outside of QC limits

FORM II NYTCL-8270-SIM-LVI



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : WG1784152-1
 Client ID : **WG1784152-1BLANK**
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 784152-1
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2328902
 Project Number : 060017.000
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 05/27/23 15:48
 Date Extracted : 05/26/23
 Dilution Factor : 1
 Analyst : JJW
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.04	0.10	0.02	J
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



PCB Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of 8082A PCB Data
for Alpha Analytical Labs
SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: The samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of the method and rinse blanks reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits on both columns for the ground water samples and rinse blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor 1016 and aroclor 1260 were below the allowable maximums and percent recoveries were within QC limits for aqueous MS/MSD sample MW-103-20230523.

Laboratory Control Sample: The relative percent differences for aroclor 1016 and aroclor 1260 were below the allowable maximums and percent recoveries were within QC limits for aqueous samples WG1787051-2/3.

Field Duplicates: The analyses of aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 reported target aroclors as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Initial Calibration: The average %RSDs for target aroclors were below the allowable maximum (20%) on both columns, as required.

Continuing Calibration: The average %Ds for aroclor 1016 and aroclor 1260 were below the allowable maximum (20%) for both columns, as required

PCB Identification Summary: Checked surrogate and aroclor results were within quantitation limits. The RPDs for dual column quantitation of detected aroclors in the samples were below the allowable maximum (25%), as required.

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Metals Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Metals Data
for Alpha Analytical Labs
SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

Blanks: The analyses of initial and continuing calibration and method blanks reported target metals as either not detected or below the reporting limits, as required. Rinse blank RINSE-20230522 contained barium (0.00085 mg/L), chromium (0.00130 mg/L), manganese (0.00185 mg/L), and nickel (0.00230mg/L). Positive results for these metals that are less than 5X the rinse blank level should be reported as not detected (U) in associated samples.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for target metals were within control limits (75-125%) for aqueous MS/MSD sample MW-103-20230523.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (20%) for aqueous MS/MSD sample MW-103-20230523, as required.

Field Duplicates: The relative percent difference for 9 metals were above the allowable maximum (20%) for aqueous field duplicate pair MW-100-2023052/CHA-1-2023052 (attached table). Positive results for these 9 metals should be considered estimated (J) in samples MW-100-20230523 and CHA-1-20230523.

Laboratory Control Sample: The percent recoveries for target metals were within control limits for aqueous samples WG1785834-2, WG1786091-2, and WG1786098-2.

Serial Dilution: The %D for calcium were above the allowable maximum (10%) for aqueous serial dilution sample MW-100-20230523. Positive results for calcium that are above the RL should be considered estimated (J) in associated aqueous samples.

Total vs Dissolved: The dissolved results for iron were less than the total results plus 10%, as required.

Form 8 Serial Dilutions

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : **MW-103-20230523**
 Lab Sample ID : L2328902-06
 Serial Dilution ID : WG1786091-6

Lab Number : L2328902
 Project Number : 060017.000
 Matrix : WATER
 Analysis Date : 06/06/23 17:45
 Analysis Date : 06/06/23 17:40

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Aluminum, Total	0.794	0.839	6	20
Barium, Total	0.06908	0.07008	1	20
Calcium, Total	40.0	44.5	11	20
Iron, Total	1.69	1.84	9	20
Magnesium, Total	8.30	8.82	6	20
Manganese, Total	0.8842	0.9371	6	20
Sodium, Total	114.	120.	5	20



General Chemistry

Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Alkalinity Data for
Alpha Analytical Labs, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported alkalinity as not detected.

Spike Sample Recovery: The percent recovery (%R) for alkalinity was within QC limits (86-116%) for aqueous spike sample MW-103-20230523.

The %R for alkalinity was below QC limits (86-116%) for aqueous spike sample RINSE-20230522. The “not detected” result for alkalinity should be considered estimated (UJ) in sample RINSE-20230522.

Laboratory Duplicates: The relative percent difference for alkalinity was below the allowable maximum (20%) for aqueous duplicate sample MW-103-20230523, as required.

Field Duplicates: The relative percent difference for alkalinity was below the allowable maximum (20%) for aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 (attached table), as required.

Laboratory Control Sample: The percent recoveries for alkalinity were within QC limits (90-110%) for aqueous samples WG1786334-2 and WG1787166-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Ammonia Data for
Alpha Analytical Labs, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported ammonia as not detected.

Spike Sample Recovery: The percent recovery for ammonia was within QC limits (90-110%) for aqueous spike sample MW-103-20230523.

Laboratory Duplicates: The relative percent difference for ammonia was below the allowable maximum (20%) for aqueous duplicate sample MW-103-20230523, as required.

Field Duplicates: The relative percent difference for ammonia was above the allowable maximum (20%) for aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 (attached table). Positive results for ammonia should be considered estimated (J) in samples MW-100-20230522 and CHA-1-20230522.

Laboratory Control Sample: The percent recoveries for ammonia were within QC limits (90-110%) for aqueous samples WG1786940-2 and WG1787885-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Nitrate Data for
Alpha Analytical Labs, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported nitrate as either as not detected or below the RL.

Spike Sample Recovery: The percent recovery for nitrate was within QC limits (83-113%) for aqueous spike sample MW-103-20230523.

Laboratory Duplicates: The relative percent difference for nitrate was below the allowable maximum (20%) for aqueous duplicate sample MW-103-20230523, as required.

Field Duplicates: The analyses of aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 reported nitrate as below the lowest standard; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for nitrate was within QC limits (90-110%) for aqueous sample WG1782717-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Sulfate Data for
Alpha Analytical Labs, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported sulfate as not detected.

Spike Sample Recovery: The percent recovery for sulfate was within QC limits (55-147%) for aqueous spike sample MW-103-20230523.

Laboratory Duplicates: The relative percent difference for sulfate was below the allowable maximum (20%) for aqueous duplicate sample MW-103-20230523, as required.

Field Duplicates: The relative percent difference for sulfate was below the allowable maximum (20%) for aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 (attached table), as required.

Laboratory Control Sample: The percent recoveries for sulfate were within QC limits (90-110%) for aqueous samples WG1785273-2, WG1785813-2, and WG1786507-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Total Organic Carbon Data (TOC) for
Alpha Analytical Labs, SDG Number: L2328902**

**7 Ground Water Samples, 1 Field Duplicate,
and 1 Rinse Blank
Collected May 22-23, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported TOC as either not detected or below the RL.

Spike Sample Recovery: The percent recovery for TOC was within QC limits (80-120%) for aqueous spike sample MW-103-20230523.

Laboratory Duplicates: The relative percent difference for TOC was below the allowable maximum (20%) for aqueous duplicate sample MW-103-20230523, as required.

Field Duplicates: The relative percent difference for TOC was below the allowable maximum (20%) for aqueous field duplicate pair MW-100-20230522/CHA-1-20230522 (attached table), as required.

Laboratory Control Sample: The percent recovery for TOC was within QC limits (90-110%) for aqueous sample WG1787073-2.

Form 5a Matrix Spike

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : **RINSE-20230522**
 Lab Sample ID : L2328902-09
 Matrix Spike : WG1786334-4
 Matrix Spike Dup :

Lab Number : L2328902
 Project Number : 060017.000
 Matrix : WATER
 MS Analysis Date : 06/02/23 09:54
 MSD Analysis Date :

Parameter	Sample Conc. (mg CaCO3/L)	Matrix Spike Sample		%R	Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (mg CaCO3/L)	Spike Conc. (mg CaCO3/L)		Spike Added (mg CaCO3/L)	Spike Conc. (mg CaCO3/L)	%R			
Alkalinity, Total	ND	100	76.8	77 Q					86-116	10



Field Duplicate Calculation Section

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. L2328902

S1= MW-100-20230522

S2= CHA-1-20230522

<u>Analyte</u>	<u>S1</u>	<u>S2</u>	<u>RPD (%)</u>	
Diethyl phthalate	2.2	1.8	NC	
Caprolactam	13	10	26%	*
Naphthalene (SIM)	0.31	ND	NC	
Acenaphthylene (SIM)	0.02	ND	NC	
2-Methylnaphthalene (SIM)	0.06	ND	NC	

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL.

ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

General Chemistries

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. L2328902

S1= MW-100-20230522

S2= CHA-1-20230522

<u>Analyte</u>	<u>S1</u>	<u>S2</u>	<u>RPD (%)</u>	
Nitrogen, Ammonia	0.77	0.342	77%	*
Nitrogen, Nitrate	0.047	0.033	NC	
Total Organic Carbon	5.4	5.3	2%	
Sulfate	89	91	2%	
Alkalinity, Total	386	396	3%	

* RPD is above the allowable maximum 20%.

Results are in units of mg/L.

Bold numbers were values that are below the RL.

ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. L2328902

S1= MW-100-20230522

S2= CHA-1-20230522

<u>Analyte</u>	<u>S1</u>	<u>S2</u>	<u>RPD (%)</u>	
aluminum	2.34	4.88	70%	*
antimony	ND	ND	NC	
arsenic	0.00187	0.00311	50%	*
barium	0.1197	0.1334	11%	
beryllium	0.00013	0.00025	NC	
cadmium	0.00013	0.00016	NC	
calcium	153	158	3%	
chromium	0.00349	0.00659	62%	*
cobalt	0.00455	0.00644	34%	*
copper	0.00526	0.00978	60%	*
iron	4.64	8.88	63%	*
lead	0.00305	0.00593	64%	*
magnesium	22.5	23.7	5%	
manganese	9.52	9.41	1%	
mercury	ND	ND	NC	
nickel	0.00659	0.01063	47%	*
potassium	11.1	11.5	4%	
selenium	ND	ND	NC	
silver	ND	ND	NC	
sodium	137	138	1%	
thallium	0.00015	ND	NC	
vanadium	0.0047	0.00911	NC	
zinc	0.0117	0.01683	36%	*
Iron, Dissolved	ND	0.0269	NC	

* RPD is above the allowable maximum 20%.

Results are in units of mg/L.

Bold numbers were values that are below the CRDL.

ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

L2329262



Geology

Hydrology

Remediation

Water Supply

**Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2329262**

**2 Ground Water Samples and 1 Trip Blank
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile, semi-volatiles, PCBs, TAL metals, ammonia, nitrate, sulfate, total organic carbon, and alkalinity analyses for 2 ground water samples and the results of volatile analyses for 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The “not detected” volatile results for bromomethane were qualified as “estimated” (UJ) for both ground water samples and the trip blank because 1 of 2 percent recoveries for bromomethane was below QC limits, but not below 30% in the associated aqueous LCS/LCSD.
- The positive semi-volatile results for caprolactam were qualified as “estimated” (J) for samples MW-2S-20230524 and MW-2-20230524 because %Ds for caprolactam were above the allowable maximum in the associated continuing calibration.
- The “not detected” semi-volatile results for acid extractable compounds were qualified as “rejected, unusable” (J) for sample MW-2S-20230524 because 2 of 3 acid extractable surrogate recoveries were below control limits and below 10% in the sample.
- The “not detected” semi-volatile result for 2,4-dimethylphenol was qualified as “estimated” (UJ) for sample MW-2-20230524 because 1 of 2 percent recoveries for 2,4-dimethylphenol was below QC limits, but not below 30% in the associated aqueous LCS/LCSD.

- The “not detected” semi-volatile results for all compounds were qualified as “estimated” (UJ) for re-extracted sample MW-2S-20230524 because the sample was re-extracted beyond USEPA holding times.
- The positive general chemistry results for alkalinity were qualified as estimated, biased high (J+) for samples MW-2S-20230524 and MW-2-2023052 because the percent recovery for alkalinity was above QC limits in the associated aqueous batch spike sample.

All data that are not qualified rejected (R) are considered usable with estimated (J, J+, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Qualified Data Section

Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N15
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 21:48
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	1.7	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.43	0.50	0.18	J
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N15
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 21:48
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client	: CHA Companies	Lab Number	: L2329262
Project Name	: FRIEDRICHSOHN SITE	Project Number	: 060017.000
Lab ID	: L2329262-01	Date Collected	: 05/24/23 11:00
Client ID	: MW-2S-20230524	Date Received	: 05/24/23
Sample Location	: RT. 32, WATERFORD, NY	Date Analyzed	: 06/01/23 21:48
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V08230601N15	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 22:08
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 22:08
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N16
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 22:08
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-03
 Client ID : TRIP BLANK
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N17
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 00:00
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 22:29
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-03
 Client ID : TRIP BLANK
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N17
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 00:00
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 22:29
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Lab ID : L2329262-03
 Client ID : TRIP BLANK
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V08230601N17
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 00:00
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 22:29
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA108
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/02/23 06:03
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/02/23 06:03
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U R
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U R
95-57-8	2-Chlorophenol	ND	2.0	0.48	U R
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U R
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U R
88-75-5	2-Nitrophenol	ND	10	0.85	U R
100-02-7	4-Nitrophenol	ND	10	0.67	U R
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U R
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U R
108-95-2	Phenol	ND	5.0	0.57	U R
95-48-7	2-Methylphenol	ND	5.0	0.49	U R
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U R
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U R
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	4.1	10	3.3	J J



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/02/23 06:03
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier	
		Results	RL	MDL		
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U	R



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01RE
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/09/23 16:18
 Date Extracted : 06/08/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier	
		Results	RL	MDL		
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U	UJ
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U	UJ
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U	UJ
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U	UJ
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U	UJ
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U	UJ
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U	UJ
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U	UJ
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U	UJ
78-59-1	Isophorone	ND	5.0	1.2	U	UJ
98-95-3	Nitrobenzene	ND	2.0	0.77	U	UJ
86-30-6	NDPA/DPA	ND	2.0	0.42	U	UJ
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U	UJ
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U	UJ
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U	UJ
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U	UJ
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U	UJ
84-66-2	Diethyl phthalate	ND	5.0	0.38	U	UJ
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U	UJ
92-52-4	Biphenyl	ND	2.0	0.46	U	UJ
106-47-8	4-Chloroaniline	ND	5.0	1.1	U	UJ
88-74-4	2-Nitroaniline	ND	5.0	0.50	U	UJ



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01RE
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/09/23 16:18
 Date Extracted : 06/08/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier	
		Results	RL	MDL		
99-09-2	3-Nitroaniline	ND	5.0	0.81	U	UJ
100-01-6	4-Nitroaniline	ND	5.0	0.80	U	UJ
132-64-9	Dibenzofuran	ND	2.0	0.50	U	UJ
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U	UJ
98-86-2	Acetophenone	ND	5.0	0.53	U	UJ
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U	UJ
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U	UJ
95-57-8	2-Chlorophenol	ND	2.0	0.48	U	UJ
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U	UJ
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U	UJ
88-75-5	2-Nitrophenol	ND	10	0.85	U	UJ
100-02-7	4-Nitrophenol	ND	10	0.67	U	UJ
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U	UJ
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U	UJ
108-95-2	Phenol	ND	5.0	0.57	U	UJ
95-48-7	2-Methylphenol	ND	5.0	0.49	U	UJ
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U	UJ
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U	UJ
86-74-8	Carbazole	ND	2.0	0.49	U	UJ
1912-24-9	Atrazine	ND	10	0.76	U	UJ
100-52-7	Benzaldehyde	ND	5.0	0.53	U	UJ
105-60-2	Caprolactam	ND	10	3.3	U	UJ



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01RE
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/09/23 16:18
 Date Extracted : 06/08/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : SV106
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U UJ



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/02/23 06:26
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/02/23 06:26
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U JJ
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	46.	10	3.3	J



Results Summary

Form 1

Semivolatile Organics by GC/MS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E
 Lab File ID : 29262-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/02/23 06:26
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : JG
 Instrument ID : DAKOTA
 GC Column : RTX5-MS
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 29262-01
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 05/30/23 15:15
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : AH
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.54	0.10	0.02	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	0.26	0.10	0.02	
50-32-8	Benzo(a)pyrene	0.92	0.10	0.02	
205-99-2	Benzo(b)fluoranthene	1.5	0.10	0.01	
207-08-9	Benzo(k)fluoranthene	0.47	0.10	0.01	
218-01-9	Chrysene	0.51	0.10	0.01	
208-96-8	Acenaphthylene	0.03	0.10	0.01	J
120-12-7	Anthracene	0.03	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	1.6	0.10	0.01	
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	0.09	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	0.22	0.10	0.01	
193-39-5	Indeno(1,2,3-cd)pyrene	1.4	0.10	0.01	
129-00-0	Pyrene	0.51	0.10	0.02	
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	0.05	0.80	0.01	J
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Semivolatile Organics by GC/MS-SIM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8270E-SIM
 Lab File ID : 29262-02
 Sample Amount : 275 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 05/30/23 16:21
 Date Extracted : 05/29/23
 Dilution Factor : 1
 Analyst : AH
 Instrument ID : SV119
 GC Column : RXI-5SiLM
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.03	0.10	0.02	J
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	0.02	0.10	0.02	J
205-99-2	Benzo(b)fluoranthene	0.03	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.01	0.10	0.01	J
218-01-9	Chrysene	0.02	0.10	0.01	J
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	0.02	0.10	0.01	J
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	0.03	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.02	0.10	0.01	J
129-00-0	Pyrene	0.03	0.10	0.02	J
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230604a-17
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/04/23 15:02
 Date Extracted : 06/02/23
 Dilution Factor : 1
 Analyst : ER
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230604a-17
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/04/23 15:02
 Date Extracted : 06/02/23
 Dilution Factor : 1
 Analyst : ER
 Instrument ID : PEST12
 GC Column : CLP-PesticideII
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230604a-16
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/04/23 14:53
 Date Extracted : 06/02/23
 Dilution Factor : 1
 Analyst : ER
 Instrument ID : PEST12
 GC Column : CLP-Pesticide
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U



Results Summary

Form 1

Polychlorinated Biphenyls by GC

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,8082A
 Lab File ID : 12230604a-16
 Sample Amount : 140 ml
 Extraction Method : EPA 3510C
 Extract Volume : 1000 uL
 GPC Cleanup : N
 Sulfur Cleanup : Y

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/04/23 14:53
 Date Extracted : 06/02/23
 Dilution Factor : 1
 Analyst : ER
 Instrument ID : PEST12
 GC Column : CLP-PesticideII
 %Solids : N/A
 Injection Volume : 1 uL

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-01
Client ID : MW-2S-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 11:00
Date Received : 05/24/23
Date Analyzed : 06/04/23 21:48
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-02
Client ID : MW-2-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1787017.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 12:30
Date Received : 05/24/23
Date Analyzed : 06/04/23 21:52
Dilution Factor : 1
Analyst : WKP
Instrument ID : ICPMSQ
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U



Form 1 METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-01
Client ID : MW-2S-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,6020B
Lab File ID : WG1788064.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 11:00
Date Received : 05/24/23
Date Analyzed : 06/07/23 08:59
Dilution Factor : 1
Analyst : SMV
Instrument ID : ICPMSQ2
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	3.60	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00328	0.00050	0.00016	
7440-39-3	Barium, Total	0.08533	0.00050	0.00017	
7440-41-7	Beryllium, Total	0.00024	0.00050	0.00010	J
7440-43-9	Cadmium, Total	0.00340	0.00020	0.00005	
7440-70-2	Calcium, Total	37.0	0.100	0.0394	
7440-47-3	Chromium, Total	0.00894	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00557	0.00050	0.00016	
7440-50-8	Copper, Total	0.01739	0.00100	0.00038	
7439-89-6	Iron, Total	9.40	0.0500	0.0191	
7439-92-1	Lead, Total	0.03439	0.00100	0.00034	
7439-95-4	Magnesium, Total	10.7	0.0700	0.0242	
7439-96-5	Manganese, Total	0.5985	0.00100	0.00044	
7440-02-0	Nickel, Total	0.01010	0.00200	0.00055	
7440-09-7	Potassium, Total	4.62	0.100	0.0309	
7782-49-2	Selenium, Total	0.00287	0.00500	0.00173	J
7440-22-4	Silver, Total	0.00126	0.00040	0.00016	
7440-23-5	Sodium, Total	209.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00692	0.00500	0.00157	
7440-66-6	Zinc, Total	0.05402	0.01000	0.00341	



Form 1 METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,6020B
 Lab File ID : WG1788064.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/07/23 09:04
 Dilution Factor : 1
 Analyst : SMV
 Instrument ID : ICPMSQ2
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7429-90-5	Aluminum, Total	0.160	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00050	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00515	0.00050	0.00016	
7440-39-3	Barium, Total	0.3841	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	0.00040	0.00020	0.00005	
7440-70-2	Calcium, Total	68.2	0.100	0.0394	
7440-47-3	Chromium, Total	0.00147	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00034	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00073	0.00100	0.00038	J
7439-89-6	Iron, Total	0.147	0.0500	0.0191	
7439-92-1	Lead, Total	0.00130	0.00100	0.00034	
7439-95-4	Magnesium, Total	24.5	0.0700	0.0242	
7439-96-5	Manganese, Total	0.7311	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00468	0.00200	0.00055	
7440-09-7	Potassium, Total	8.37	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	114.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	0.00651	0.01000	0.00341	J



Form 1

METALS

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-01
Client ID : MW-2S-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,7470A
Lab File ID : WG1787582.pdf
Sample Amount : 25ml
Digestion Method : EPA 7470A

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 11:00
Date Received : 05/24/23
Date Analyzed : 06/06/23 19:10
Dilution Factor : 1
Analyst : DMB
Instrument ID : NIC1
%Solids : N/A
Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	0.00017	0.00020	0.00009	J



Form 1

METALS

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,7470A
 Lab File ID : WG1787582.pdf
 Sample Amount : 25ml
 Digestion Method : EPA 7470A

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/06/23 19:13
 Dilution Factor : 1
 Analyst : DMB
 Instrument ID : NIC1
 %Solids : N/A
 Date Digested : 06/06/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-01
Client ID : MW-2S-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230606-G
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 11:00
Date Received : 05/24/23
Date Analyzed : 06/06/23 13:38
Dilution Factor : 1
Analyst : KEP
Instrument ID : LACHAT
%Solids : N/A
Date Digested : 06/05/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	0.052	0.075	0.024	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-02
Client ID : MW-2-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 44,350.1
Lab File ID : NH320230606-G
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 12:30
Date Received : 05/24/23
Date Analyzed : 06/06/23 13:40
Dilution Factor : 1
Analyst : KEP
Instrument ID : LACHAT
%Solids : N/A
Date Digested : 06/05/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7664-41-7	Nitrogen, Ammonia	1.81	0.075	0.024	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 44,353.2
 Lab File ID : NO3230525-B1
 Sample Amount :
 Digestion Method :

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 05/25/23 07:50
 Dilution Factor : 1
 Analyst : KAF
 Instrument ID : LACHAT
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	6.0	0.10	0.023	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-02
Client ID : MW-2-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 44,353.2
Lab File ID : NO3230525-B1
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 12:30
Date Received : 05/24/23
Date Analyzed : 05/25/23 08:04
Dilution Factor : 1
Analyst : KAF
Instrument ID : LACHAT
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14797-55-8	Nitrogen, Nitrate	0.025	0.10	0.023	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-01
Client ID : MW-2S-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : wg1787073.csv
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 11:00
Date Received : 05/24/23
Date Analyzed : 06/05/23 03:17
Dilution Factor : 1
Analyst : DEW
Instrument ID :
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	0.74	0.50	0.09	



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-02
Client ID : MW-2-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,9060A
Lab File ID : WG1787075
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 12:30
Date Received : 05/24/23
Date Analyzed : 06/05/23 05:58
Dilution Factor : 1
Analyst : DEW
Instrument ID : TOC-VW4
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	0.46	0.50	0.10	J



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-01
Client ID : MW-2S-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 1,9038
Lab File ID : WG1785830.csv
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 11:00
Date Received : 05/24/23
Date Analyzed : 06/01/23 09:00
Dilution Factor : 1
Analyst : MRW/S
Instrument ID : SPEC6
%Solids : N/A
Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	26.	10	1.4	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-02
 Client ID : MW-2-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 1,9038
 Lab File ID : WG1785830.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 12:30
 Date Received : 05/24/23
 Date Analyzed : 06/01/23 09:00
 Dilution Factor : 2
 Analyst : MRW/S
 Instrument ID : SPEC6
 %Solids : N/A
 Date Digested : 06/01/23

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	44.	20	2.7	



Form 1

WETCHEM

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Lab ID : L2329262-01
 Client ID : MW-2S-20230524
 Sample Location : RT. 32, WATERFORD, NY
 Sample Matrix : WATER
 Analytical Method : 121,2320B
 Lab File ID : 230605.csv
 Sample Amount :
 Digestion Method :

Lab Number : L2329262
 Project Number : 060017.000
 Date Collected : 05/24/23 11:00
 Date Received : 05/24/23
 Date Analyzed : 06/05/23 13:38
 Dilution Factor : 1
 Analyst : MKT
 Instrument ID : METTLER
 %Solids : N/A
 Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	104.	2.00	NA	J+



Form 1

WETCHEM

Client : CHA Companies
Project Name : FRIEDRICHSON SITE
Lab ID : L2329262-02
Client ID : MW-2-20230524
Sample Location : RT. 32, WATERFORD, NY
Sample Matrix : WATER
Analytical Method : 121,2320B
Lab File ID : 230605.csv
Sample Amount :
Digestion Method :

Lab Number : L2329262
Project Number : 060017.000
Date Collected : 05/24/23 12:30
Date Received : 05/24/23
Date Analyzed : 06/05/23 13:41
Dilution Factor : 1
Analyst : MKT
Instrument ID : METTLER
%Solids : N/A
Date Digested :

CAS NO.	Parameter	mg CaCO ₃ /L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	164.	2.00	NA	J+



VOC Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2329262**

**2 Ground Water Samples and 1 Trip Blank
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRF for acetone was below the method minimum, but not below 0.010 for VOA108 on 05-18-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for bromomethane, acetone, and 4-methyl-2-pentanone were below the method minimums, but not below 0.010 on 06-01-23 (V08230601N01). The %D for bromomethane was above the method maximum on 06-01-23 (V08230601N01). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane, 0.010 for all other compounds), as required.

The %D for bromomethane was above the allowable maximum (20%) on 06-01-23 (V08230601N01). Positive results for bromomethane should be considered estimated (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blank.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum, but 1 of 2 percent recoveries for bromomethane was below QC limits, but not below 30% for aqueous samples WG1786504-3/4. Positive results for bromomethane should be considered estimated, biased low (J+) and “not detected” results estimated (UJ) in associated aqueous samples.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Laboratory Control Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : **WG1786504-3** Analysis Date : 06/01/23 16:35 File ID : V08230601N01
 LCSD Sample ID : **WG1786504-4** Analysis Date : 06/01/23 16:56 File ID : V08230601N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Methylene chloride	10	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	10	100	10	10	100	0	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	10	100	10	10	100	0	70-130	20
Dibromochloromethane	10	9.5	95	10	10	100	5	63-130	20
1,1,2-Trichloroethane	10	10	100	10	10	100	0	70-130	20
Tetrachloroethene	10	9.7	97	10	10	100	3	70-130	20
Chlorobenzene	10	10	100	10	10	100	0	75-130	20
Trichlorofluoromethane	10	11	110	10	11	110	0	62-150	20
1,2-Dichloroethane	10	11	110	10	11	110	0	70-130	20
1,1,1-Trichloroethane	10	10	100	10	11	110	10	67-130	20
Bromodichloromethane	10	9.8	98	10	10	100	2	67-130	20
trans-1,3-Dichloropropene	10	9.1	91	10	9.5	95	4	70-130	20
cis-1,3-Dichloropropene	10	9.1	91	10	9.0	90	1	70-130	20
Bromoform	10	8.8	88	10	9.2	92	4	54-136	20
1,1,2,2-Tetrachloroethane	10	10	100	10	10	100	0	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	9.7	97	10	10	100	3	70-130	20
Ethylbenzene	10	9.4	94	10	9.7	97	3	70-130	20
Chloromethane	10	9.6	96	10	9.9	99	3	64-130	20
Bromomethane	10	3.7	37 Q	10	4.3	43	15	39-139	20
Vinyl chloride	10	10	100	10	11	110	10	55-140	20
Chloroethane	10	11	110	10	11	110	0	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20



Laboratory Control Sample Summary

Form 3

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : WG1786504-3 Analysis Date : 06/01/23 16:35 File ID : V08230601N01
 LCSD Sample ID : WG1786504-4 Analysis Date : 06/01/23 16:56 File ID : V08230601N02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Trichloroethene	10	9.2	92	10	9.9	99	7	70-130	20
1,2-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,3-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,4-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	9.5	95	10	9.8	98	3	63-130	20
p/m-Xylene	20	19	95	20	20	100	5	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	9.7	97	3	70-130	20
Styrene	20	20	100	20	20	100	0	70-130	20
Dichlorodifluoromethane	10	10	100	10	10	100	0	36-147	20
Acetone	10	12	120	10	12	120	0	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	11	110	10	12	120	9	63-138	20
4-Methyl-2-pentanone	10	8.8	88	10	9.6	96	9	59-130	20
2-Hexanone	10	9.0	90	10	9.9	99	10	57-130	20
Bromochloromethane	10	9.8	98	10	9.8	98	0	70-130	20
1,2-Dibromoethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromo-3-chloropropane	10	9.9	99	10	11	110	11	41-144	20
Isopropylbenzene	10	9.4	94	10	9.4	94	0	70-130	20
1,2,3-Trichlorobenzene	10	9.5	95	10	9.9	99	4	70-130	20
1,2,4-Trichlorobenzene	10	9.3	93	10	9.8	98	5	70-130	20
Methyl Acetate	10	11	110	10	11	110	0	70-130	20
Cyclohexane	10	10	100	10	11	110	10	70-130	20
1,4-Dioxane	500	440	88	500	460	92	4	56-162	20
Freon-113	10	11	110	10	11	110	0	70-130	20
Methyl cyclohexane	10	9.2	92	10	9.0	90	2	70-130	20



Initial Calibration Summary

Form 6

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Calibration dates : 05/18/23 10:51 05/18/23 13:59

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL20021

Calibration Files

L11 =V08230518A04.d L1 =V08230518A06.d L2 =V08230518A08.d L3 =V08230518A09.d L4 =V08230518A10.d
 L6 =V08230518A11.d L8 =V08230518A12.d L10 =V08230518A13.d

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.268	0.315	0.297	0.275	0.277	0.259	0.273	0.281	6.84
3) TP Chloromethane		0.368	0.417	0.381	0.368	0.370	0.362	0.358	0.375	5.36
4) TC Vinyl chloride	0.269	0.270	0.349	0.329	0.311	0.313	0.301	0.306	0.306	8.84
5) TP Bromomethane		0.278	0.277	0.214	0.193	0.195	0.197	0.204	0.223	17.14
6) TP Chloroethane		0.173	0.225	0.213	0.210	0.212	0.204	0.199	0.205	8.01
7) TP Trichlorofluor		0.336	0.436	0.424	0.404	0.409	0.386	0.408	0.400	8.10
8) TP Ethyl ether		0.106	0.133	0.127	0.124	0.126	0.126	0.124	0.124	6.85
10) TC 1,1-Dichloroet		0.209	0.251	0.242	0.230	0.232	0.226	0.232	0.232	5.73
11) TP Carbon disulfide		0.756	0.929	0.865	0.834	0.846	0.826	0.842	0.843	6.11
12) TP Freon-113		0.174	0.247	0.246	0.239	0.241	0.227	0.239	0.231	11.15
13) TP Iodomethane			0.194	0.225	0.254	0.274	0.275	0.264	0.248	13.01
14) TP Acrolein			0.039	0.037	0.039	0.037	0.036	0.037	0.037	3.51
15) TP Methylene chlo		0.290	0.323	0.289	0.278	0.277	0.276	0.271	0.286	6.12
17) TP Acetone			0.090	0.069	0.063	0.064	0.064	0.062	0.069	15.54
18) TP trans-1,2-Dich		0.262	0.304	0.266	0.255	0.262	0.257	0.257	0.266	6.45
19) TP Methyl acetate			0.198	0.167	0.165	0.164	0.161	0.157	0.168	8.80
20) TP Methyl tert butyl ether		0.626	0.710	0.668	0.671	0.689	0.688	0.676	0.675	3.85
21) TP tert-Butyl alc		0.031	0.027	0.026	0.025	0.025	0.025	0.024	0.026	7.94
22) TP Diisopropyl ether		0.832	1.034	0.966	1.009	1.071	1.085	1.082	1.011	8.92
23) TP 1,1-Dichloroet		0.547	0.618	0.559	0.542	0.537	0.530	0.528	0.552	5.64
24) TP Halothane		0.161	0.191	0.184	0.183	0.188	0.183	0.186	0.182	5.39
25) TP Acrylonitrile			0.132	0.085	0.080	0.081	0.078	0.077	*L	0.9996
26) TP Ethyl tert-but		0.885	1.020	0.943	0.865	0.991	0.936	0.939	0.940	5.76
27) TP Vinyl acetate		0.732	0.717	0.539	0.547	0.650	0.570	0.553	0.615	13.52
28) TP cis-1,2-Dichlo		0.294	0.330	0.298	0.290	0.291	0.291	0.288	0.297	4.96
29) TP 2,2-Dichloropr		0.396	0.453	0.454	0.413	0.425	0.413	0.411	0.424	5.25
30) TP Bromochloromet		0.135	0.141	0.134	0.129	0.132	0.130	0.124	0.132	4.01
31) TP Cyclohexane		0.458	0.487	0.504	0.482	0.510	0.484	0.509	0.491	3.82
32) TC Chloroform		0.505	0.586	0.522	0.497	0.497	0.497	0.493	0.514	6.48
33) TP Ethyl acetate		0.238	0.235	0.220	0.215	0.224	0.219	0.215	0.224	4.05
34) TP Carbon tetrachloride	0.263	0.275	0.339	0.334	0.340	0.363	0.358	0.373	0.331	12.24
35) TP Tetrahydrofuran			0.076	0.062	0.059	0.062	0.061	0.058	0.063	10.31
36) S Dibromofluoromethane	0.292	0.292	0.291	0.288	0.292	0.291	0.287	0.290	0.290	0.64
37) TP 1,1,1-Trichlor		0.378	0.417	0.405	0.411	0.423	0.414	0.420	0.410	3.67
39) TP 2-Butanone			0.127	0.099	0.097	0.098	0.098	0.094	0.102	11.72



Initial Calibration Summary

Form 6

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Calibration dates : 05/18/23 10:51 05/18/23 13:59

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL20021

Calibration Files

L11 =V08230518A04.d L1 =V08230518A06.d L2 =V08230518A08.d L3 =V08230518A09.d L4 =V08230518A10.d
 L6 =V08230518A11.d L8 =V08230518A12.d L10 =V08230518A13.d

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr	0.263	0.386	0.370	0.367	0.377	0.368	0.378	0.358	11.91	
41) TP Benzene	0.926	0.954	1.186	1.105	1.086	1.105	1.095	1.096	1.069	8.03
42) TP Tertiary-Amyl Methyl Ether	0.741	0.825	0.727	0.739	0.774	0.777	0.777	0.766	4.35	
43) S 1,2-Dichloroethane-d4	0.341	0.342	0.345	0.339	0.331	0.334	0.332	0.325	0.336	2.05
44) TP 1,2-Dichloroet	0.364	0.413	0.381	0.383	0.387	0.381	0.376	0.384	3.94	
47) TP Methyl cyclohe	0.293	0.421	0.396	0.423	0.452	0.434	0.462	0.412	13.70	
48) TP Trichloroethene	0.414	0.293	0.310	0.299	0.286	0.294	0.291	0.293	0.310	13.70
50) TP Dibromomethane	0.147	0.179	0.164	0.162	0.163	0.162	0.161	0.162	5.77	
51) TC 1,2-Dichloropr	0.272	0.328	0.314	0.309	0.313	0.312	0.311	0.308	5.54	
53) TP 2-Chloroethyl	0.143	0.163	0.159	0.154	0.159	0.160	0.161	0.157	4.25	
54) TP Bromodichlorom	0.375	0.422	0.386	0.382	0.399	0.400	0.398	0.395	3.89	
57) TP 1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	4.15	
58) TP cis-1,3-Dichloropropene	0.405	0.410	0.500	0.464	0.460	0.476	0.476	0.477	0.459	7.32
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.280	1.303	1.326	1.378	1.366	1.347	1.347	1.334	1.335	2.40
61) TC Toluene	0.674	0.887	0.846	0.830	0.815	0.818	0.799	0.810	8.19	
62) TP 4-Methyl-2-pen	0.079	0.104	0.105	0.108	0.109	0.109	0.105	0.103	10.19	
63) TP Tetrachloroethene	0.285	0.338	0.331	0.324	0.319	0.314	0.312	0.318	5.35	
65) TP trans-1,3-Dichloropropene	0.384	0.410	0.493	0.477	0.489	0.498	0.503	0.492	0.468	9.66
67) TP Ethyl methacry	0.395	0.413	0.394	0.404	0.406	0.411	0.394	0.402	2.04	
68) TP 1,1,2-Trichlor	0.224	0.254	0.235	0.231	0.229	0.230	0.223	0.232	4.42	
69) TP Chlorodibromom	0.250	0.302	0.293	0.303	0.312	0.318	0.314	0.299	7.80	
70) TP 1,3-Dichloropr	0.446	0.524	0.486	0.484	0.475	0.478	0.465	0.480	5.00	
71) TP 1,2-Dibromoethane	0.208	0.256	0.223	0.210	0.217	0.223	0.226	0.223	7.12	
72) TP 2-Hexanone	0.210	0.211	0.191	0.190	0.193	0.197	0.187	0.197	4.91	
73) TP Chlorobenzene	0.805	0.988	0.945	0.911	0.893	0.896	0.869	0.901	6.42	
74) TC Ethylbenzene	1.374	1.693	1.574	1.548	1.549	1.558	1.529	1.547	6.05	
75) TP 1,1,1,2-Tetrac	0.230	0.307	0.311	0.310	0.310	0.315	0.308	0.299	10.18	
76) TP p/m Xylene	0.494	0.618	0.612	0.598	0.594	0.592	0.580	0.584	7.11	
77) TP o Xylene	0.501	0.625	0.588	0.583	0.576	0.581	0.567	0.574	6.46	
78) TP Styrene	0.859	1.030	0.981	0.977	0.971	0.973	0.941	0.962	5.46	
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform	0.281	0.288	0.292	0.312	0.328	0.344	0.333	0.311	7.95	
82) TP Isopropylbenzene	2.667	3.128	2.797	2.776	2.802	2.842	2.737	2.821	5.18	
83) S 4-Bromofluorobenzene	0.972	1.006	1.002	0.992	0.999	0.961	0.992	0.982	0.988	1.57
84) TP Bromobenzene	0.672	0.735	0.656	0.670	0.671	0.683	0.638	0.675	4.44	



Initial Calibration Summary

Form 6

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Calibration dates : 05/18/23 10:51 05/18/23 13:59

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL20021

Calibration Files

L11 =V08230518A04.d L1 =V08230518A06.d L2 =V08230518A08.d L3 =V08230518A09.d L4 =V08230518A10.d
 L6 =V08230518A11.d L8 =V08230518A12.d L10 =V08230518A13.d

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	3.164	3.693	3.377	3.340	3.428	3.459	3.311	3.396	4.77	
86) TP 1,4-Dichlorobu	1.096	0.994	0.869	0.846	0.873	0.911	0.876	0.923	9.75	
87) TP 1,1,2,2-Tetrac	0.568	0.628	0.558	0.598	0.616	0.626	0.583	0.597	4.72	
88) TP 4-Ethyltoluene	2.659	2.965	2.655	2.676	2.756	2.818	2.696	2.747	4.11	
89) TP 2-Chlorotoluene	2.182	2.609	2.311	2.311	2.371	2.452	2.331	2.367	5.65	
90) TP 1,3,5-Trimethy	2.296	2.641	2.422	2.443	2.460	2.490	2.344	2.442	4.53	
91) TP 1,2,3-Trichlor	0.510	0.519	0.478	0.474	0.479	0.495	0.463	0.488	4.18	
92) TP trans-1,4-Dich	0.182	0.168	0.153	0.160	0.170	0.181	0.176	0.170	6.30	
93) TP 4-Chlorotoluene	2.201	2.403	2.187	2.175	2.214	2.256	2.121	2.222	4.02	
94) TP tert-Butylbenzene	1.877	2.172	1.959	1.876	1.833	1.883	1.822	1.917	6.29	
97) TP 1,2,4-Trimethy	2.308	2.554	2.352	2.343	2.386	2.450	2.324	2.388	3.64	
98) TP sec-Butylbenzene	2.672	3.311	2.967	2.874	2.878	2.889	2.757	2.907	6.97	
99) TP p-Isopropyltol	2.347	2.687	2.455	2.405	2.440	2.459	2.375	2.453	4.54	
100) TP 1,3-Dichlorobe	1.135	1.399	1.287	1.288	1.299	1.312	1.233	1.279	6.28	
101) TP 1,4-Dichlorobe	1.317	1.435	1.282	1.288	1.306	1.325	1.241	1.314	4.60	
102) TP p-Diethylbenzene	1.408	1.636	1.500	1.479	1.485	1.521	1.481	1.501	4.58	
103) TP n-Butylbenzene	2.252	2.593	2.328	2.256	2.251	2.284	2.207	2.310	5.63	
104) TP 1,2-Dichlorobe	1.128	1.291	1.211	1.215	1.231	1.245	1.157	1.211	4.49	
105) TP 1,2,4,5-Tetram	2.220	2.636	2.511	2.589	2.570	2.580	2.480	2.512	5.52	
106) TP 1,2-Dibromo-3-	0.063	0.083	0.069	0.068	0.070	0.073	0.073	0.071	8.47	
107) TP 1,3,5-Trichlor	0.912	1.056	0.939	0.941	0.931	0.941	0.915	0.948	5.19	
108) TP Hexachlorobuta	0.407	0.482	0.422	0.416	0.414	0.409	0.396	0.421	6.66	
109) TP 1,2,4-Trichlor	0.824	0.941	0.880	0.858	0.864	0.872	0.845	0.869	4.23	
110) TP Naphthalene	1.865	1.962	1.860	1.860	1.829	1.878	1.757	1.859	3.29	
111) TP 1,2,3-Trichlor	0.747	0.870	0.781	0.796	0.792	0.812	0.765	0.795	4.93	



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230601N01
 Sample No : WG1786504-2
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 16:35
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	87	0
Dichlorodifluoromethane	0.281	0.293	-	-4.3	20	86	0
Chloromethane	0.375	0.36	-	4	20	82	0
Vinyl chloride	0.306	0.319	-	-4.2	20	85	0
Bromomethane	0.223	0.083	-	62.8*	20	34	0
Chloroethane	0.205	0.224	-	-9.3	20	91	0
Trichlorofluoromethane	0.4	0.427	-	-6.7	20	88	0
Ethyl ether	0.124	0.124	-	0	20	85	0
1,1-Dichloroethene	0.232	0.241	-	-3.9	20	87	0
Carbon disulfide	0.843	0.844	-	-0.1	20	85	0
Freon-113	0.231	0.254	-	-10	20	90	0
Iodomethane	0.248	0.093	-	62.5*	20	36	0
Acrolein	0.037	0.043	-	-16.2	20	102	0
Methylene chloride	0.286	0.292	-	-2.1	20	88	0
Acetone	0.069	0.079	-	-14.5	20	100	-.01
trans-1,2-Dichloroethene	0.266	0.269	-	-1.1	20	88	0
Methyl acetate	0.168	0.187	-	-11.3	20	98	0
Methyl tert-butyl ether	0.675	0.643	-	4.7	20	84	0
tert-Butyl alcohol	0.026	0.026	-	0	20	87	0
Diisopropyl ether	1.011	1.007	-	0.4	20	91	0
1,1-Dichloroethane	0.552	0.582	-	-5.4	20	91	0
Halothane	0.182	0.185	-	-1.6	20	88	0
Acrylonitrile	10	10.182	-	-1.8	20	92	0
Ethyl tert-butyl ether	0.94	0.908	-	3.4	20	84	0
Vinyl acetate	0.615	0.613	-	0.3	20	99	0
cis-1,2-Dichloroethene	0.297	0.296	-	0.3	20	87	-.01
2,2-Dichloropropane	0.424	0.451	-	-6.4	20	87	0
Bromochloromethane	0.132	0.13	-	1.5	20	85	0
Cyclohexane	0.491	0.519	-	-5.7	20	90	0
Chloroform	0.514	0.54	-	-5.1	20	90	0
Ethyl acetate	0.224	0.264	-	-17.9	20	105	-.01
Carbon tetrachloride	0.331	0.352	-	-6.3	20	92	0
Tetrahydrofuran	0.063	0.075	-	-19	20	106	0
Dibromofluoromethane	0.29	0.302	-	-4.1	20	91	-.01
1,1,1-Trichloroethane	0.41	0.431	-	-5.1	20	93	0
2-Butanone	0.102	0.111	-	-8.8	20	97	0
1,1-Dichloropropene	0.358	0.346	-	3.4	20	82	0
Benzene	1.069	1.07	-	-0.1	20	85	0
tert-Amyl methyl ether	0.766	0.65	-	15.1	20	78	0
1,2-Dichloroethane-d4	0.336	0.383	-	-14	20	99	0
1,2-Dichloroethane	0.384	0.43	-	-12	20	98	0
Methyl cyclohexane	0.412	0.379	-	8	20	83	0
Trichloroethene	0.31	0.285	-	8.1	20	83	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230601N01
 Sample No : WG1786504-2
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 16:35
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.162	0.167	-	-3.1	20	89	0
1,2-Dichloropropane	0.308	0.322	-	-4.5	20	90	0
2-Chloroethyl vinyl ether	0.157	0.119	-	24.2*	20	66	0
Bromodichloromethane	0.395	0.387	-	2	20	87	0
1,4-Dioxane	0.00192	0.00169*	-	12	20	77	0
cis-1,3-Dichloropropene	0.459	0.418	-	8.9	20	79	0
Chlorobenzene-d5	1	1	-	0	20	86	0
Toluene-d8	1.335	1.354	-	-1.4	20	85	0
Toluene	0.81	0.788	-	2.7	20	80	0
4-Methyl-2-pentanone	0.103	0.09	-	12.6	20	74	0
Tetrachloroethene	0.318	0.307	-	3.5	20	80	0
trans-1,3-Dichloropropene	0.468	0.427	-	8.8	20	77	0
Ethyl methacrylate	0.402	0.319	-	20.6*	20	70	0
1,1,2-Trichloroethane	0.232	0.244	-	-5.2	20	89	0
Chlorodibromomethane	0.299	0.284	-	5	20	84	0
1,3-Dichloropropane	0.48	0.499	-	-4	20	88	0
1,2-Dibromoethane	0.223	0.24	-	-7.6	20	93	0
2-Hexanone	0.197	0.176	-	10.7	20	79	0
Chlorobenzene	0.901	0.898	-	0.3	20	82	0
Ethylbenzene	1.547	1.457	-	5.8	20	80	0
1,1,1,2-Tetrachloroethane	0.299	0.314	-	-5	20	87	0
p/m Xylene	0.584	0.568	-	2.7	20	80	0
o Xylene	0.574	0.561	-	2.3	20	82	0
Styrene	0.962	0.958	-	0.4	20	84	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	85	0
Bromoform	0.311	0.273	-	12.2	20	80	0
Isopropylbenzene	2.821	2.644	-	6.3	20	81	0
4-Bromofluorobenzene	0.988	0.981	-	0.7	20	84	0
Bromobenzene	0.675	0.642	-	4.9	20	84	0
n-Propylbenzene	3.396	3.319	-	2.3	20	84	0
1,4-Dichlorobutane	0.923	0.929	-	-0.7	20	91	0
1,1,2,2-Tetrachloroethane	0.597	0.605	-	-1.3	20	93	0
4-Ethyltoluene	2.747	2.642	-	3.8	20	85	0
2-Chlorotoluene	2.367	2.388	-	-0.9	20	88	0
1,3,5-Trimethylbenzene	2.442	2.449	-	-0.3	20	86	0
1,2,3-Trichloropropane	0.488	0.509	-	-4.3	20	91	0
trans-1,4-Dichloro-2-buten	0.17	0.152	-	10.6	20	85	0
4-Chlorotoluene	2.222	2.15	-	3.2	20	84	0
tert-Butylbenzene	1.917	1.885	-	1.7	20	82	0
1,2,4-Trimethylbenzene	2.388	2.377	-	0.5	20	86	0
sec-Butylbenzene	2.907	2.902	-	0.2	20	84	0
p-Isopropyltoluene	2.453	2.378	-	3.1	20	83	0
1,3-Dichlorobenzene	1.279	1.311	-	-2.5	20	87	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : VOA108
 Lab File ID : V08230601N01
 Sample No : WG1786504-2
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 16:35
 Init. Calib. Date(s) : 05/18/23 05/18/23
 Init. Calib. Times : 10:51 13:59

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene	1.314	1.314	-	0	20	88	0
p-Diethylbenzene	1.501	1.445	-	3.7	20	82	0
n-Butylbenzene	2.31	2.417	-	-4.6	20	89	0
1,2-Dichlorobenzene	1.211	1.207	-	0.3	20	85	0
1,2,4,5-Tetramethylbenzene	2.512	2.227	-	11.3	20	76	0
1,2-Dibromo-3-chloropropan	0.071	0.07	-	1.4	20	87	0
1,3,5-Trichlorobenzene	0.948	0.965	-	-1.8	20	88	0
Hexachlorobutadiene	0.421	0.416	-	1.2	20	84	0
1,2,4-Trichlorobenzene	0.869	0.808	-	7	20	78	0
Naphthalene	1.859	1.596	-	14.1	20	73	0
1,2,3-Trichlorobenzene	0.795	0.759	-	4.5	20	83	0

* Value outside of QC limits.



SVOC Data Section



**QA/QC Review of Method 8270D Semi-Volatiles
Data for Alpha Analytical, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Geology

Hydrology

Remediation

Water Supply

Holding Times: Sample MW-2S-20230524 was re-extracted beyond within USEPA SW-846 holding times. The “not detected” results for all compounds should be considered estimated (UJ) in re-extracted sample MW-2S-20230524.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 for SV106 on 04-06-23. The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 for DAKOTA on 04-13-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRF for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimum, but not below 0.010 on 06-09-23 (WG1789355-3). The %Ds for p-chloro-m-phenol, 2,4,5-trichlorophenol, dimethyl phthalate, and 4-nitrophenol were above the method maximum on 06-01-23 (WG1786190-3). The %Ds for 10 compounds (highlighted on attached Form 7) were above the method maximum on 06-09-23 (WG1789355-3). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for p-chloro-m-phenol, 2,4,5-trichlorophenol, dimethyl phthalate, and 4-nitrophenol were above the allowable maximum (20%) on 06-01-23 (WG1786190-3). The %Ds for acetophenone and caprolactam were above the allowable maximum (20%) on 06-01-23 (WG1786190-4). The %Ds for 10 compounds (highlighted on attached Form 7)

were above the allowable maximum (20%) on 06-09-23 (WG1789355-3). The %D for atrazine was above the allowable maximum (20%) on 06-09-23 (WG1789355-5). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: Two of three acid extractable surrogate recoveries for samples MW-2S-20230524 were below control limits and below 10%. Positive results for acid extractable compounds should be considered estimated, biased low (J-) and “not detected” results rejected, unusable (R) in sample MW-2S-20230524.

Laboratory Control Sample: The relative percent difference (RPD) for 2,4-dimethylphenol was above the allowable maximum for aqueous samples WG1788810-2/3. Positive results for 2,4-dimethylphenol should be considered estimated (J) in associated aqueous samples.

The RPD for 2,4-dimethylphenol was above the allowable maximum and 1 of 2 percent recoveries (%Rs) for 2,4-dimethylphenol was below QC limits, but not below 30% for aqueous samples WG1784627-2/3. One of two %Rs for 4-chloroaniline was below QC limits, but not below 30% for aqueous samples WG1788810-2/3. Positive results for 2,4-dimethylphenol and 4-chloroaniline should be considered estimated, biased low (J-) and “not detected” results estimated (UJ) in associated aqueous samples.

Two of two %Rs for 4-nitrophenol were above QC limits for aqueous samples WG1784627-2/3. One of two %Rs for 4-nitrophenol was above QC limits for aqueous samples WG1788810-2/3. Positive results for 4-nitrophenol should be considered estimated, biased high (J+) in associated aqueous samples.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Laboratory Control Sample Summary

Form 3

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : **WG1784627-2** Analysis Date : 06/02/23 00:04 File ID : 784627-2
 LCSD Sample ID : **WG1784627-3** Analysis Date : 06/02/23 00:26 File ID : 784627-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Bis(2-chloroethyl)ether	18	11.	63	18	10.	55	14	40-140	30
3,3'-Dichlorobenzidine	18	9.6	53	18	8.5	47	12	40-140	30
2,4-Dinitrotoluene	18	14.	79	18	15.	82	4	48-143	30
2,6-Dinitrotoluene	18	14.	78	18	15.	81	4	40-140	30
4-Chlorophenyl phenyl ether	18	13.	70	18	13.	73	4	40-140	30
4-Bromophenyl phenyl ether	18	14.	77	18	14.	76	1	40-140	30
Bis(2-chloroisopropyl)ether	18	10.	58	18	10.	55	5	40-140	30
Bis(2-chloroethoxy)methane	18	12.	65	18	11.	60	8	40-140	30
Hexachlorocyclopentadiene	18	13.	70	18	12.	67	4	40-140	30
Isophorone	18	12.	66	18	12.	65	2	40-140	30
Nitrobenzene	18	12.	67	18	11.	61	9	40-140	30
NDPA/DPA	18	14.	75	18	13.	74	1	40-140	30
n-Nitrosodi-n-propylamine	18	12.	66	18	12.	67	2	29-132	30
Bis(2-ethylhexyl)phthalate	18	16.	86	18	16.	86	0	40-140	30
Butyl benzyl phthalate	18	15.	81	18	15.	85	5	40-140	30
Di-n-butylphthalate	18	14.	78	18	14.	79	1	40-140	30
Di-n-octylphthalate	18	15.	83	18	15.	84	1	40-140	30
Diethyl phthalate	18	14.	75	18	14.	77	3	40-140	30
Dimethyl phthalate	18	15.	82	18	15.	83	1	40-140	30
Biphenyl	18	13.	71	18	12.	68	4	40-140	30
4-Chloroaniline	18	12.	63	18	9.8	54	15	40-140	30
2-Nitroaniline	18	15.	85	18	16.	86	1	52-143	30
3-Nitroaniline	18	11.	61	18	11.	63	3	25-145	30
4-Nitroaniline	18	13.	70	18	13.	73	4	51-143	30
Dibenzofuran	18	14.	77	18	14.	74	4	40-140	30
1,2,4,5-Tetrachlorobenzene	18	13.	72	18	12.	64	12	2-134	30



Laboratory Control Sample Summary

Form 3

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : **WG1784627-2** Analysis Date : 06/02/23 00:04 File ID : 784627-2
 LCSD Sample ID : **WG1784627-3** Analysis Date : 06/02/23 00:26 File ID : 784627-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Acetophenone	18	11.	61	18	10.	57	7	39-129	30
2,4,6-Trichlorophenol	18	15.	82	18	15.	83	1	30-130	30
p-Chloro-m-cresol	18	15.	84	18	15.	85	1	23-97	30
2-Chlorophenol	18	12.	65	18	12.	65	0	27-123	30
2,4-Dichlorophenol	18	14.	80	18	14.	80	0	30-130	30
2,4-Dimethylphenol	18	11.	60	18	5.0	28 Q 73 Q		30-130	30
2-Nitrophenol	18	13.	73	18	13.	72	1	30-130	30
4-Nitrophenol	18	15.	82 Q	18	15.	82 Q	0	10-80	30
2,4-Dinitrophenol	18	14.	77	18	16.	91	17	20-130	30
4,6-Dinitro-o-cresol	18	16.	90	18	16.	87	3	20-164	30
Phenol	18	9.0	49	18	8.3	45	9	12-110	30
2-Methylphenol	18	11.	62	18	10.	58	7	30-130	30
3-Methylphenol/4-Methylphenol	18	13.	74	18	12.	68	8	30-130	30
2,4,5-Trichlorophenol	18	17.	94	18	17.	92	2	30-130	30
Carbazole	18	14.	77	18	14.	77	0	55-144	30
Atrazine	18	16.	88	18	17.	91	3	40-140	30
Benzaldehyde	18	11.	60	18	10.	56	7	40-140	30
Caprolactam	18	5.8	32	18	7.0	39	20	10-130	30
2,3,4,6-Tetrachlorophenol	18	15.	80	18	15.	82	2	40-140	30



Laboratory Control Sample Summary

Form 3

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : **WG1788810-2** Analysis Date : 06/09/23 15:08 File ID : 788810-2
 LCSD Sample ID : **WG1788810-3** Analysis Date : 06/09/23 15:31 File ID : 788810-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Bis(2-chloroethyl)ether	18	13.	72	18	12.	67	7	40-140	30
3,3'-Dichlorobenzidine	18	10.	55	18	8.3	46	18	40-140	30
2,4-Dinitrotoluene	18	16.	88	18	13.	74	17	48-143	30
2,6-Dinitrotoluene	18	14.	76	18	12.	66	14	40-140	30
4-Chlorophenyl phenyl ether	18	12.	64	18	10.	56	13	40-140	30
4-Bromophenyl phenyl ether	18	12.	63	18	9.9	54	15	40-140	30
Bis(2-chloroisopropyl)ether	18	15.	82	18	14.	78	5	40-140	30
Bis(2-chloroethoxy)methane	18	14.	76	18	12.	68	11	40-140	30
Hexachlorocyclopentadiene	18	10.	56	18	9.4	52	7	40-140	30
Isophorone	18	11.	63	18	11.	59	7	40-140	30
Nitrobenzene	18	12.	66	18	12.	64	3	40-140	30
NDPA/DPA	18	14.	77	18	12.	64	18	40-140	30
n-Nitrosodi-n-propylamine	18	12.	64	18	11.	61	5	29-132	30
Bis(2-ethylhexyl)phthalate	18	23.	124	18	20.	109	13	40-140	30
Butyl benzyl phthalate	18	18.	100	18	15.	85	16	40-140	30
Di-n-butylphthalate	18	18.	98	18	15.	84	15	40-140	30
Di-n-octylphthalate	18	21.	114	18	18.	101	12	40-140	30
Diethyl phthalate	18	17.	93	18	14.	78	18	40-140	30
Dimethyl phthalate	18	14.	75	18	12.	64	16	40-140	30
Biphenyl	18	11.	62	18	10.	57	8	40-140	30
4-Chloroaniline	18	9.3	51	18	7.2	39	Q 27	40-140	30
2-Nitroaniline	18	14.	78	18	12.	67	15	52-143	30
3-Nitroaniline	18	14.	78	18	11.	60	26	25-145	30
4-Nitroaniline	18	15.	84	18	12.	68	21	51-143	30
Dibenzofuran	18	13.	73	18	12.	64	13	40-140	30
1,2,4,5-Tetrachlorobenzene	18	8.8	48	18	8.3	46	4	2-134	30



Laboratory Control Sample Summary

Form 3

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : **WG1788810-2** Analysis Date : 06/09/23 15:08 File ID : 788810-2
 LCSD Sample ID : **WG1788810-3** Analysis Date : 06/09/23 15:31 File ID : 788810-3

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Acetophenone	18	10.	58	18	10.	56	4	39-129	30
2,4,6-Trichlorophenol	18	11.	62	18	9.7	53	16	30-130	30
p-Chloro-m-cresol	18	12.	69	18	10.	58	17	23-97	30
2-Chlorophenol	18	13.	72	18	13.	70	3	27-123	30
2,4-Dichlorophenol	18	13.	73	18	12.	67	9	30-130	30
2,4-Dimethylphenol	18	10.	58	18	7.6	42	32 Q	30-130	30
2-Nitrophenol	18	15.	82	18	14.	78	5	30-130	30
4-Nitrophenol	18	16.	89 Q	18	13.	74	18	10-80	30
2,4-Dinitrophenol	18	13.	74	18	11.	62	18	20-130	30
4,6-Dinitro-o-cresol	18	16.	88	18	13.	70	23	20-164	30
Phenol	18	9.3	51	18	9.0	49	4	12-110	30
2-Methylphenol	18	12.	65	18	10.	57	13	30-130	30
3-Methylphenol/4-Methylphenol	18	12.	66	18	11.	60	10	30-130	30
2,4,5-Trichlorophenol	18	12.	65	18	10.	56	15	30-130	30
Carbazole	18	15.	83	18	13.	72	14	55-144	30
Atrazine	18	14.	80	18	12.	65	21	40-140	30
Benzaldehyde	18	11.	59	18	10.	57	3	40-140	30
Caprolactam	18	6.3	34	18	5.2	29	16	10-130	30
2,3,4,6-Tetrachlorophenol	18	12.	69	18	10.	57	19	40-140	30



Surrogate Recovery Summary

Form 2

Semivolatiles

Client: CHA Companies
Project Name: FRIEDRICHSOHN SITE

Lab Number: L2329262
Project Number: 060017.000
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-2S-20230524 (L2329262-01)	7*	23	72	84	0*	74	2
MW-2S-20230524 (L2329262-01RE)	54	44	71	60	56	55	0
MW-2-20230524 (L2329262-02)	47	42	67	71	55	62	0
WG1784627-1BLANK	65	50	77	87	86	85	0
WG1784627-2LCS	61	51	69	81	101	72	0
WG1784627-3LCSD	58	49	64	72	92	76	0
WG1788810-1BLANK	27	24	41	38	33	49	0
WG1788810-2LCS	59	53	72	60	82	66	0
WG1788810-3LCSD	57	50	69	57	70	57	0

QC LIMITS

(21-120) 2FP = 2-FLUOROPHENOL
(10-120) PHL = PHENOL-D6
(23-120) NBZ = NITROBENZENE-D5
(15-120) FBP = 2-FLUOROBIPHENYL
(10-120) TBP = 2,4,6-TRIBROMOPHENOL
(41-149) TPH = 4-TERPHENYL-D14

* Values outside of QC limits

FORM II NYTCL-8270-LVI



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1) I IS1_1,4-Dichlorobenzene-d4	-----ISTD-----											
2) t N-Nitrosodimethylamine	1.187	0.943	0.874	0.849	0.963	0.882	0.963	0.975	0.990	0.920	0.955	9.88
3) t Pyridine	1.482	1.418	1.519	1.440	1.605	1.460	1.520	1.608	1.625	1.498	1.517	4.83
4) S 2-Fluorophenol	1.145	1.231	0.965	1.187	1.160	1.164	1.198	1.244	1.251	1.178	1.172	6.95
5) T Aniline	2.024	1.998	1.965	2.128	2.236	2.015	2.164	2.252	2.292	2.148	2.122	5.49
6) t 2-Chlorophenol	1.146	1.266	1.087	1.175	1.292	1.175	1.197	1.253	1.262	1.191	1.204	5.27
7) S Phenol-d6	1.524	1.618	1.485	1.578	1.725	1.528	1.595	1.680	1.703	1.561	1.600	5.08
8) T Phenol	1.685	1.889	1.628	1.695	1.696	1.667	1.730	1.789	1.818	1.684	1.728	4.63
9) T bis(2-Chloroethyl)ether	1.305	1.318	1.291	1.270	1.342	1.269	1.319	1.357	1.334	1.260	1.306	2.55
10) T 1,3-Dichlorobenzene	1.583	1.364	1.380	1.432	1.461	1.342	1.381	1.472	1.463	1.382	1.426	5.02
11) T 1,4-Dichlorobenzene	1.565	1.392	1.407	1.452	1.495	1.413	1.472	1.495	1.533	1.423	1.465	3.93
12) T 1,2-Dichlorobenzene	1.310	1.625	1.335	1.324	1.403	1.387	1.343	1.436	1.469	1.359	1.399	6.73
13) t Benzyl alcohol	1.296	1.359	1.099	1.250	1.314	1.266	1.341	1.360	1.408	1.313	1.301	6.53
14) T bis(2-chloroisopropyl)ether	1.692	1.638	1.422	1.410	1.500	1.511	1.523	1.513	1.519	1.376	1.510	6.45
15) T 2-Methylphenol	0.987	1.263	1.156	1.254	1.305	1.195	1.238	1.318	1.317	1.220	1.225	8.07
16) T Hexachloroethane	0.653	0.499	0.490	0.541	0.565	0.497	0.535	0.554	0.582	0.527	0.544	8.95
17) T n-Nitrosodi-n-propylamine	1.438	1.114	0.996	0.995	1.059	1.114	1.112	1.142	1.170	1.050	1.119	11.29
18) T 3-Methylphenol/4-Methylphenol	1.065	1.254	1.241	1.272	1.288	1.272	1.374	1.376	1.411	1.296	1.285	7.52
19) S Nitrobenzene-d5	1.445	1.520	1.333	1.360	1.438	1.347	1.480	1.519	1.552	1.419	1.441	5.36
20) T Nitrobenzene	1.502	1.680	1.268	1.395	1.475	1.399	1.477	1.570	1.601	1.483	1.485	7.83
21) T Isophorone	3.298	3.162	2.714	2.850	3.069	2.867	2.990	3.068	3.147	2.847	3.001	6.00
22) T 2-Nitrophenol				0.550	0.595	0.510	0.548	0.586	0.607	0.547	0.563	6.03
23) T 2,4-Dimethylphenol	1.366	1.392	1.332	1.341	1.513	1.324	1.442	1.513	1.510	1.397	1.413	5.40
24) T bis(2-Chloroethoxy)methane	1.747	1.784	1.584	1.690	1.602	1.558	1.660	1.637	1.702	1.524	1.649	5.07
25) T 2,4-Dichlorophenol		1.125	1.113	1.204	1.190	1.078	1.163	1.203	1.239	1.139	1.162	4.47
26) T 1,2,4-Trichlorobenzene	1.417	1.435	1.218	1.246	1.459	1.335	1.412	1.431	1.424	1.356	1.373	6.08
27) I IS2_1,4-Dichlorobenzene-d4	-----ISTD-----											
28) T Benzaldehyde		1.295	1.174	1.181	1.348	1.380	1.196	1.293	1.312	1.162	1.260	6.56
29) T Acetophenone		2.343	2.394	2.296	2.336	2.507	2.215	2.326	2.408	2.078	2.322	5.25
30) T m-Toluidine		1.334	1.631	2.013	2.106	2.321	2.098	2.201	2.297	2.025	2.003	16.10
31) T 2-Chloroaniline		1.615	1.738	1.680	1.806	1.903	1.701	1.770	1.823	1.601	1.737	5.71
32) I IS3_1,4-Dichlorobenzene-d4	-----ISTD-----											
33) T n-Decane	1.791	1.404	1.326	1.426	1.407	1.508	1.396	1.284	1.334	1.308	1.418	10.35
34) I IS1_Naphthalene-d8	-----ISTD-----											
35) T Naphthalene	1.124	1.145	1.077	1.132	1.103	1.058	1.090	1.112	1.113	1.142	1.110	2.53
36) T Benzoic Acid					0.123	0.163	0.211	0.238	0.266	0.270	*L	0.9991



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

	Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) T	4-Chloroaniline		0.182	0.155	0.152	0.159	0.162	0.154	0.157	0.160	0.166	0.161	5.61
38) T	Hexachlorobutadiene		0.286	0.284	0.314	0.304	0.271	0.290	0.305	0.314	0.319	0.299	5.52
39) T	p-Chloro-m-cresol		0.296	0.345	0.339	0.366	0.345	0.354	0.366	0.367	0.377	0.351	6.93
40) T	2-Methylnaphthalene	0.750	0.740	0.699	0.704	0.702	0.670	0.701	0.710	0.734	0.744	0.715	3.54
41) T	1-Methylnaphthalene	0.313	0.349	0.292	0.322	0.298	0.292	0.303	0.304	0.307	0.315	0.310	5.44
42) T	Hexachlorocyclopentadiene	0.293	0.362	0.317	0.351	0.357	0.338	0.357	0.356	0.380	0.399	0.351	8.47
43) T	2,4,6-Trichlorophenol			0.254	0.282	0.299	0.278	0.287	0.294	0.310	0.325	0.291	7.39
44) T	2,4,5-Trichlorophenol			0.310	0.304	0.315	0.295	0.313	0.326	0.324	0.329	0.315	3.74
45) S	2-Fluorobiphenyl	1.069	0.962	0.950	0.987	1.001	0.931	0.992	0.982	1.015	1.049	0.994	4.30
46) T	2-Chloronaphthalene	0.798	0.740	0.799	0.763	0.785	0.732	0.766	0.783	0.800	0.806	0.777	3.37
47) T	2-Nitroaniline			0.203	0.203	0.222	0.222	0.219	0.227	0.240	0.235	0.222	5.97
48) T	1,4-Dinitrobenzene						0.098	0.113	0.111	0.115	0.111	0.110	6.12
49) T	1,3-Dinitrobenzene						0.112	0.119	0.121	0.126	0.126	0.121	4.76
50) T	Dimethyl phthalate	0.918	0.949	0.932	0.924	0.947	0.881	0.893	0.875	0.882	0.880	0.908	3.21
51) T	Acenaphthylene	1.350	1.197	1.168	1.238	1.215	1.177	1.201	1.245	1.261	1.260	1.231	4.31
52) T	2,6-Dinitrotoluene			0.171	0.176	0.181	0.183	0.182	0.196	0.193	0.188	0.184	4.60
53) T	1,2-Dinitrobenzene				0.073	0.073	0.076	0.081	0.076	0.083	0.081	0.078	5.05
54) I	IS2_Naphthalene-d8	-----ISTD-----											
55) T	a-Terpineol		0.349	0.346	0.323	0.365	0.379	0.354	0.353	0.373	0.307	0.350	6.54
56) T	3-Chloroaniline			0.199	0.191	0.200	0.221	0.198	0.193	0.211	0.176	0.199	6.78
57) T	2,6-Dichlorophenol			0.326	0.332	0.360	0.376	0.354	0.363	0.382	0.335	0.354	5.91
58) T	1-chloro-2-nitrobenzene		0.151	0.138	0.147	0.167	0.178	0.166	0.167	0.173	0.148	0.159	8.54
59) T	Caprolactam			0.146	0.175	0.182	0.190	0.194	0.183	0.187	0.157	0.177	9.54
60) T	1,2,4,5-Tetrachlorobenzene	0.558	0.592	0.536	0.524	0.539	0.562	0.556	0.537	0.564	0.483	0.545	5.34
61) T	Biphenyl	1.038	1.000	1.087	1.014	1.056	1.108	1.090	1.071	1.096	0.941	1.050	4.99
62) I	IS1_Acenaphthene-d10	-----ISTD-----											
63) T	3-Nitroaniline			0.297	0.286	0.323	0.307	0.306	0.304	0.322	0.319	0.308	4.15
64) T	Acenaphthene	1.153	1.211	1.217	1.196	1.117	1.121	1.091	1.115	1.158	1.171	1.155	3.79
65) T	2,4-Dinitrophenol					0.157	0.170	0.163	0.164	0.184	0.181	0.170	6.28
66) T	Dibenzofuran	1.718	1.942	1.750	1.836	1.811	1.840	1.769	1.821	1.897	1.882	1.827	3.78
67) T	2,4-Dinitrotoluene			0.363	0.338	0.361	0.385	0.369	0.372	0.419	0.428	0.379	7.95
68) T	4-Nitrophenol				0.209	0.226	0.241	0.235	0.255	0.274	0.270	0.244	9.59
69) T	2,3,5,6-Tetrachlorophenol			0.394	0.435	0.424	0.440	0.418	0.432	0.463	0.471	0.434	5.66
70) T	2,3,4,6-Tetrachlorophenol			0.390	0.447	0.426	0.433	0.450	0.441	0.477	0.475	0.443	6.29
71) T	Diethyl phthalate	1.526	1.361	1.366	1.356	1.418	1.318	1.243	1.228	1.328	1.361	1.351	6.24
72) T	Fluorene	1.356	1.523	1.488	1.477	1.461	1.466	1.444	1.420	1.504	1.502	1.464	3.32



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73) T 4-Chlorophenyl-phenylether	0.812	0.799	0.771	0.787	0.763	0.795	0.759	0.765	0.793	0.794	0.784	2.32
74) T 4-Nitroaniline			0.295	0.296	0.309	0.301	0.289	0.300	0.331	0.330	0.306	5.17
75) T 4,6-Dinitro-o-cresol			0.210	0.211	0.200	0.191	0.200	0.227	0.229	0.210	0.210	6.76
76) T NDPA/DPA	1.322	1.328	1.169	1.239	1.230	1.208	1.149	1.143	1.190	1.203	1.218	5.29
77) T Azobenzene	1.619	1.634	1.625	1.585	1.574	1.521	1.466	1.480	1.539	1.504	1.555	3.95
78) S 2,4,6-Tribromophenol		0.216	0.192	0.225	0.214	0.226	0.217	0.221	0.234	0.241	0.221	6.25
79) T 4-Bromophenyl-phenylether	0.571	0.491	0.481	0.491	0.514	0.498	0.502	0.482	0.507	0.506	0.504	5.13
80) T Hexachlorobenzene	0.567	0.618	0.573	0.538	0.523	0.523	0.527	0.524	0.552	0.553	0.550	5.49
81) T Pentachlorophenol			0.271	0.274	0.269	0.317	0.330	0.353	0.354	0.310	12.34	
82) I IS2_Acenaphthene-d10	-----ISTD-----											
83) T Dichloran		0.158	0.213	0.216	0.224	0.217	0.239	0.236	0.258	0.234	0.222	12.57
84) T Pentachloronitrobenzene		0.163	0.200	0.193	0.233	0.229	0.249	0.246	0.260	0.237	0.223	14.08
85) I IS3_Acenaphthene-d10	-----ISTD-----											
86) T Atrazine		0.402	0.542	0.454	0.501	0.510	0.476	0.482	0.502	0.496	0.485	8.16
87) I IS1_Phenanthrene-d10	-----ISTD-----											
88) T Phenanthrene	1.070	1.003	0.972	0.984	0.990	0.951	0.985	0.977	1.039	1.038	1.001	3.67
89) T Anthracene	1.157	0.948	0.998	1.027	1.017	1.034	1.028	1.005	1.082	1.073	1.037	5.45
90) T Carbazole	0.798	0.924	0.969	0.924	0.887	0.911	0.933	0.930	0.970	0.948	0.920	5.38
91) T Di-n-butylphthalate		1.054	1.041	1.062	1.049	1.083	1.063	1.129	1.104	1.073	2.80	
92) T Fluoranthene	1.205	1.224	1.239	1.243	1.271	1.269	1.287	1.262	1.375	1.366	1.274	4.41
93) T Benzidine		0.799	0.822	0.824	0.835	0.827	0.859	0.855	0.832	2.48		
94) T Pyrene	1.393	1.292	1.262	1.304	1.311	1.287	1.336	1.313	1.420	1.410	1.333	4.15
95) S 4-Terphenyl-d14	1.039	0.931	0.981	0.976	0.992	0.992	1.021	1.013	1.082	1.088	1.012	4.77
96) T Butyl benzyl phthalate		0.426	0.464	0.440	0.463	0.470	0.466	0.493	0.483	0.463	4.61	
97) I IS2_Phenanthrene-d10	-----ISTD-----											
98) T Diphenamid		0.507	0.519	0.536	0.555	0.541	0.569	0.574	0.503	0.538	5.03	
99) I IS3_Phenanthrene-d10	-----ISTD-----											
100) T n-Octadecane		0.380	0.400	0.409	0.398	0.416	0.388	0.389	0.389	0.398	0.396	2.80
101) T Parathion		0.097	0.094	0.094	0.097	0.103	0.110	0.099	6.31			
102) T 3,3'-Dimethylbenzidine		0.810	0.883	0.866	0.907	0.932	0.972	0.895	6.25			
103) I IS1_Chrysene-d12	-----ISTD-----											
104) T Benzo[a]anthracene	1.408	1.297	1.308	1.404	1.364	1.335	1.347	1.337	1.421	1.417	1.364	3.39
105) T 3,3'-Dichlorobenzidine		0.485	0.541	0.532	0.516	0.508	0.530	0.554	0.559	0.528	4.68	
106) T Chrysene	1.229	1.327	1.222	1.341	1.309	1.219	1.218	1.258	1.314	1.296	1.273	3.86
107) T bis(2-Ethylhexyl)phthalate		0.785	0.665	0.745	0.705	0.715	0.675	0.687	0.710	0.696	0.709	5.20
108) T Di-n-octylphthalate		1.131	1.252	1.258	1.215	1.215	1.217	1.275	1.238	1.225	3.59	



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : SV106
 Calibration dates : 04/06/23 00:58 04/06/23 13:26

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19895

Calibration Files

L1 =ADPL1.D L2 =ADPL2.D L3 =ADPL3.D L4 =ADPL4.D L5 =ADPL5.D L6 =ADPL6.D L7 =ADPL7.D
 L8 =ADPL8.D L9 =ADPL9.D L10 =ADPL10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109) T Benzo(b)fluoranthene	1.347	1.349	1.198	1.407	1.385	1.345	1.330	1.276	1.388	1.317	1.334	4.58
110) T Benzo(k)fluoranthene	1.155	1.183	1.237	1.182	1.193	1.107	1.151	1.229	1.213	1.263	1.191	3.88
111) T Benzo(a)pyrene	1.078	1.089	1.154	1.150	1.178	1.086	1.118	1.128	1.155	1.138	1.127	3.01
112) I IS1_Perylene-d12	-----ISTD-----											
113) T Indeno(1,2,3-cd)pyrene	0.895	0.930	0.950	0.958	0.892	0.895	0.915	0.924	0.855	0.860	0.908	3.78
114) T Dibenzo[a,h]anthracene	1.002	0.894	0.903	0.951	0.953	0.950	0.981	0.953	0.915	0.903	0.940	3.80
115) T Benzo(g,h,i)perylene	1.033	0.905	0.941	1.004	0.963	0.945	0.960	0.922	0.836	0.748	0.926	8.88



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1) I IS1_1,4-Dichlorobenzene-d4	-----ISTD-----											
2) t N-Nitrosodimethylamine		0.548	0.717	0.739	0.740	0.728	0.733	0.742	0.803	0.841	*L	0.9975
3) t Pyridine		0.548	0.958	1.071	1.249	0.932	1.065	1.192	1.240	1.294	*L	0.9955
4) S 2-Fluorophenol	0.933	0.866	0.977	1.070	1.041	1.032	1.052	1.068	1.139	1.150	1.033	8.47
5) T Aniline	1.890	1.522	1.638	1.827	1.811	1.793	1.800	1.795	1.882	1.944	1.790	6.95
6) t 2-Chlorophenol	1.032	1.123	1.072	1.267	1.215	1.225	1.215	1.252	1.265	1.288	1.195	7.41
7) S Phenol-d6	1.112	1.228	1.214	1.354	1.302	1.344	1.325	1.415	1.437	1.505	1.324	8.80
8) T Phenol	1.395	1.468	1.430	1.646	1.600	1.496	1.508	1.551	1.616	1.676	1.539	6.14
9) T bis(2-Chloroethyl)ether	0.895	1.148	1.079	1.150	1.122	1.013	1.029	1.060	1.058	1.109	1.066	7.16
10) T 1,3-Dichlorobenzene	1.458	1.394	1.455	1.463	1.451	1.401	1.393	1.413	1.456	1.469	1.435	2.14
11) T 1,4-Dichlorobenzene	1.505	1.417	1.477	1.489	1.493	1.371	1.421	1.412	1.462	1.470	1.452	3.01
12) T 1,2-Dichlorobenzene	1.419	1.442	1.380	1.471	1.429	1.406	1.362	1.369	1.391	1.389	1.406	2.46
13) t Benzyl alcohol	0.774	0.890	0.931	0.918	0.976	0.959	0.915	0.967	0.992	1.044	0.936	7.71
14) T bis(2-chloroisopropyl)ether	1.732	1.783	1.706	1.958	1.860	1.769	1.714	1.784	1.742	1.796	1.785	4.26
15) T 2-Methylphenol	0.768	1.072	1.002	1.041	1.013	1.034	1.015	1.040	1.070	1.107	1.016	9.14
16) T Hexachloroethane	0.661	0.565	0.498	0.546	0.555	0.528	0.532	0.532	0.543	0.548	0.551	7.75
17) T n-Nitrosodi-n-propylamine	0.570	0.835	0.767	0.893	0.849	0.806	0.839	0.855	0.862	0.903	0.818	11.68
18) T 3-Methylphenol/4-Methylphenol	0.768	0.849	1.066	1.122	1.143	1.064	1.063	1.107	1.138	1.176	1.050	12.75
19) S Nitrobenzene-d5	1.334	1.159	1.236	1.354	1.273	1.246	1.238	1.249	1.269	1.329	1.269	4.56
20) T Nitrobenzene	1.162	1.276	1.152	1.279	1.307	1.197	1.186	1.251	1.236	1.288	1.234	4.51
21) T Isophorone	1.951	1.920	2.057	2.350	2.279	2.171	2.207	2.240	2.264	2.389	2.183	7.31
22) T 2-Nitrophenol	0.460	0.456	0.547	0.584	0.549	0.617	0.599	0.618	0.661	0.676	0.577	13.06
23) T 2,4-Dimethylphenol	1.026	1.047	1.051	1.178	1.146	1.121	1.087	1.115	1.133	1.198	1.110	5.15
24) T bis(2-Chloroethoxy)methane	1.542	1.401	1.426	1.489	1.398	1.385	1.364	1.358	1.367	1.430	1.416	4.17
25) T 2,4-Dichlorophenol	0.949	0.937	0.945	1.098	1.080	0.990	1.068	1.094	1.112	1.163	1.044	7.77
26) T 1,2,4-Trichlorobenzene	1.294	1.381	1.197	1.360	1.280	1.304	1.221	1.221	1.236	1.269	1.276	4.76
27) I IS2_1,4-Dichlorobenzene-d4	-----ISTD-----											
28) T Benzaldehyde	1.153	0.824	0.990	0.991	1.037	1.136	1.126	1.113	1.082	1.008	1.046	9.48
29) T Acetophenone	1.813	1.661	1.714	1.792	1.850	1.967	1.918	1.977	1.881	1.740	1.831	5.84
30) T m-Toluidine	0.472	0.864	1.395	1.607	1.633	1.864	1.863	1.871	1.818	1.689	*L	0.9975
31) T 2-Chloroaniline	1.585	1.504	1.624	1.727	1.680	1.836	1.816	1.828	1.736	1.598	1.693	6.78
32) I IS3_1,4-Dichlorobenzene-d4	-----ISTD-----											
33) T n-Decane	1.438	1.152	1.216	1.252	1.221	1.272	1.155	1.198	1.219	1.190	1.231	6.63
34) I IS1_Naphthalene-d8	-----ISTD-----											
35) T Naphthalene	1.018	0.994	0.965	0.975	0.990	0.956	0.955	0.963	0.945	0.949	0.971	2.40
36) T Benzoic Acid					0.080	0.130	0.171	0.189	0.228	0.243	*L	0.9968



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) T 4-Chloroaniline	0.092	0.110	0.118	0.124	0.116	0.108	0.114	0.123	0.118	0.123	0.115	8.30
38) T Hexachlorobutadiene	0.207	0.179	0.215	0.194	0.200	0.194	0.197	0.199	0.196	0.195	0.198	4.77
39) T p-Chloro-m-cresol	0.223	0.182	0.240	0.256	0.261	0.257	0.266	0.277	0.281	0.293	0.254	12.65
40) T 2-Methylnaphthalene	0.571	0.609	0.587	0.649	0.667	0.619	0.642	0.651	0.649	0.668	0.631	5.29
41) T 1-Methylnaphthalene	0.228	0.185	0.212	0.217	0.231	0.222	0.211	0.226	0.222	0.229	0.218	6.15
42) T Hexachlorocyclopentadiene	0.218	0.216	0.219	0.254	0.237	0.240	0.249	0.249	0.251	0.258	0.239	6.77
43) T 2,4,6-Trichlorophenol		0.128	0.188	0.201	0.222	0.214	0.228	0.231	0.237	0.251	*L	0.9985
44) T 2,4,5-Trichlorophenol		0.164	0.198	0.228	0.241	0.242	0.241	0.259	0.261	0.268	0.234	14.32
45) S 2-Fluorobiphenyl	0.836	0.721	0.803	0.796	0.821	0.782	0.778	0.781	0.768	0.784	0.787	3.97
46) T 2-Chloronaphthalene	0.707	0.647	0.685	0.706	0.709	0.684	0.693	0.706	0.686	0.699	0.692	2.67
47) T 2-Nitroaniline	0.142	0.175	0.177	0.199	0.211	0.202	0.214	0.218	0.225	0.238	0.200	14.09
48) T 1,4-Dinitrobenzene			0.072	0.080	0.095	0.094	0.092	0.104	0.101	0.109	0.093	13.08
49) T 1,3-Dinitrobenzene				0.104	0.097	0.099	0.109	0.115	0.115	0.122	0.109	8.38
50) T Dimethyl phthalate	0.742	0.733	0.762	0.842	0.871	0.817	0.809	0.845	0.815	0.854	0.809	5.95
51) T Acenaphthylene	0.967	0.966	0.975	1.090	1.124	1.061	1.068	1.087	1.060	1.096	1.049	5.58
52) T 2,6-Dinitrotoluene	0.132	0.173	0.131	0.165	0.177	0.174	0.168	0.184	0.176	0.192	0.167	12.21
53) T 1,2-Dinitrobenzene			0.049	0.064	0.069	0.067	0.064	0.067	0.070	0.073	0.065	11.19
54) I IS2_Naphthalene-d8	-----ISTD-----											
55) T a-Terpeneol	0.271	0.269	0.269	0.258	0.282	0.291	0.278	0.292	0.289	0.266	0.277	4.21
56) T 3-Chloroaniline	0.096	0.121	0.150	0.133	0.145	0.158	0.149	0.148	0.144	0.133	0.138	13.05
57) T 2,6-Dichlorophenol	0.193	0.251	0.259	0.263	0.274	0.294	0.305	0.314	0.316	0.292	0.276	13.50
58) T 1-chloro-2-nitrobenzene	0.162	0.134	0.138	0.152	0.149	0.156	0.151	0.155	0.151	0.139	0.149	6.10
59) T Caprolactam				0.114	0.134	0.150	0.161	0.164	0.161	0.157	0.149	12.30
60) T 1,2,4,5-Tetrachlorobenzene	0.440	0.404	0.388	0.397	0.400	0.419	0.403	0.409	0.396	0.365	0.402	4.86
61) T Biphenyl	0.913	0.868	0.913	0.891	0.899	0.944	0.936	0.927	0.895	0.824	0.901	3.93
62) I IS1_Acenaphthene-d10	-----ISTD-----											
63) T 3-Nitroaniline	0.255	0.255	0.315	0.319	0.315	0.338	0.332	0.346	0.355	0.353	0.318	11.46
64) T Acenaphthene	1.114	1.114	1.030	1.121	1.116	1.078	1.064	1.075	1.109	1.072	1.089	2.76
65) T 2,4-Dinitrophenol					0.138	0.155	0.160	0.174	0.197	0.202	*L	0.9974
66) T Dibenzofuran	1.784	1.750	1.693	1.854	1.765	1.728	1.685	1.710	1.723	1.681	1.737	3.07
67) T 2,4-Dinitrotoluene	0.318	0.352	0.345	0.381	0.389	0.413	0.411	0.429	0.445	0.434	0.392	10.84
68) T 4-Nitrophenol				0.230	0.258	0.255	0.260	0.282	0.289	0.285	*L	0.9994
69) T 2,3,5,6-Tetrachlorophenol			0.263	0.332	0.338	0.348	0.356	0.375	0.397	0.389	*L	0.9993
70) T 2,3,4,6-Tetrachlorophenol			0.285	0.328	0.357	0.355	0.361	0.377	0.389	0.385	*L	0.9997
71) T Diethyl phthalate	1.487	1.484	1.390	1.484	1.457	1.469	1.452	1.473	1.493	1.474	1.466	2.03
72) T Fluorene	1.429	1.361	1.373	1.403	1.440	1.408	1.371	1.407	1.419	1.393	1.400	1.85



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73) T 4-Chlorophenyl-phenylether	0.652	0.753	0.696	0.687	0.698	0.664	0.657	0.673	0.666	0.659	0.681	4.44
74) T 4-Nitroaniline	0.240	0.253	0.283	0.321	0.331	0.329	0.340	0.349	0.357	0.357	0.316	13.50
75) T 4,6-Dinitro-o-cresol				0.170	0.179	0.205	0.212	0.229	0.250	0.248	*L	0.9987
76) T NDPA/DPA	1.256	1.121	1.143	1.219	1.197	1.219	1.180	1.204	1.221	1.187	1.195	3.31
77) T Azobenzene	1.103	1.257	1.199	1.316	1.306	1.310	1.261	1.282	1.281	1.240	1.256	5.13
78) S 2,4,6-Tribromophenol		0.179	0.210	0.240	0.229	0.230	0.233	0.246	0.257	0.259	0.232	10.80
79) T 4-Bromophenyl-phenylether	0.324	0.395	0.454	0.464	0.422	0.429	0.417	0.431	0.458	0.457	0.425	9.86
80) T Hexachlorobenzene	0.543	0.499	0.530	0.560	0.544	0.507	0.522	0.533	0.543	0.538	0.532	3.46
81) T Pentachlorophenol				0.246	0.251	0.261	0.297	0.315	0.346	0.349	*L	0.9981
82) I IS2_Acenaphthene-d10	-----ISTD-----											
83) T Dichloran			0.169	0.179	0.163	0.181	0.211	0.231	0.233	0.232	*L	0.9977
84) T Pentachloronitrobenzene	0.219	0.221	0.165	0.175	0.190	0.205	0.206	0.225	0.217	0.209	0.203	9.97
85) I IS3_Acenaphthene-d10	-----ISTD-----											
86) T Atrazine	0.362	0.313	0.346	0.320	0.327	0.375	0.391	0.357	0.403	0.439	0.363	10.98
87) I IS1_Phenanthrene-d10	-----ISTD-----											
88) T Phenanthrene	1.058	1.104	1.057	1.019	1.046	0.997	1.017	1.022	1.002	0.979	1.030	3.56
89) T Anthracene	1.013	0.995	0.965	0.988	1.028	0.988	1.011	1.012	0.996	0.982	0.998	1.85
90) T Carbazole	0.873	0.949	0.893	0.912	0.977	0.950	0.980	0.978	0.954	0.939	0.941	3.92
91) T Di-n-butylphthalate	1.074	1.038	1.046	1.095	1.115	1.076	1.150	1.151	1.178	1.155	1.108	4.45
92) T Fluoranthene	1.160	1.162	1.153	1.217	1.252	1.182	1.229	1.230	1.255	1.237	1.208	3.29
93) T Benzidine			0.711	0.748	0.676	0.827	0.837	0.873	0.869	0.791	10.00	
94) T Pyrene	1.206	1.319	1.272	1.268	1.349	1.256	1.277	1.290	1.273	1.258	1.277	3.00
95) S 4-Terphenyl-d14	0.976	0.954	0.960	0.979	1.026	0.964	0.985	0.979	0.980	0.974	0.978	2.01
96) T Butyl benzyl phthalate	0.411	0.426	0.461	0.496	0.497	0.487	0.533	0.534	0.592	0.599	0.504	12.46
97) I IS2_Phenanthrene-d10	-----ISTD-----											
98) T Diphenamid	0.492	0.457	0.445	0.464	0.475	0.521	0.542	0.559	0.543	0.515	0.501	8.02
99) I IS3_Phenanthrene-d10	-----ISTD-----											
100) T n-Octadecane	0.381	0.394	0.346	0.362	0.387	0.402	0.411	0.387	0.396	0.390	0.386	4.90
101) T Parathion			0.083	0.077	0.086	0.096	0.107	0.097	0.123	0.128	*Q	0.9983
102) T 3,3'-Dimethylbenzidine		0.198	0.425	0.486	0.524	0.652	0.721	0.688	0.859	0.856	*Q	0.9978
103) I IS1_Chrysene-d12	-----ISTD-----											
104) T Benzo[a]anthracene	1.244	1.246	1.228	1.206	1.255	1.254	1.245	1.279	1.307	1.274	1.254	2.23
105) T 3,3'-Dichlorobenzidine	0.464	0.433	0.404	0.442	0.464	0.477	0.501	0.529	0.553	0.554	0.482	10.61
106) T Chrysene	1.204	1.121	1.194	1.193	1.225	1.203	1.174	1.208	1.178	1.143	1.184	2.66
107) T bis(2-Ethylhexyl)phthalate	0.621	0.587	0.619	0.671	0.694	0.708	0.744	0.769	0.805	0.785	0.700	10.79
108) T Di-n-octylphthalate			1.020	1.118	1.110	1.207	1.317	1.381	1.521	1.493	1.271	14.64



Initial Calibration Summary

Form 6

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Calibration dates : 04/13/23 01:37 04/13/23 14:37

Lab Number : L2329262
 Project Number : 060017.000
 Ical Ref : ICAL19934

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
 L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109) T Benzo(b)fluoranthene	1.270	1.437	1.229	1.327	1.308	1.327	1.424	1.438	1.454	1.394	1.361	5.80
110) T Benzo(k)fluoranthene	1.230	1.156	1.246	1.300	1.322	1.347	1.303	1.394	1.356	1.335	1.299	5.41
111) T Benzo(a)pyrene	1.077	1.099	1.122	1.128	1.148	1.194	1.241	1.287	1.275	1.257	1.183	6.58
112) I IS1_Perylene-d12	-----ISTD-----											
113) T Indeno(1,2,3-cd)pyrene	1.010	0.946	0.999	0.997	0.998	1.063	1.092	1.153	1.182	1.164	1.060	7.86
114) T Dibenzo[a,h]anthracene	1.050	1.040	1.065	1.091	1.140	1.095	1.143	1.176	1.158	1.154	1.111	4.42
115) T Benzo(g,h,i)perylene	1.137	1.014	1.057	1.073	1.163	1.107	1.170	1.182	1.155	1.157	1.122	5.01



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0601NA
 Sample No : WG1786190-3
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 21:27
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	111	0
n-Nitrosodimethylamine	5	4.847	-	3.1	20	115	0
Pyridine	5	4.932	-	1.4	20	139	0
2-Fluorophenol	1.033	1.043	-	-1	20	113	0
Aniline	1.79	1.719	-	4	20	107	0
2-Chlorophenol	1.195	1.28	-	-7.1	20	116	0
Phenol-d6	1.324	1.388	-	-4.8	20	115	0
Phenol	1.539	1.496	-	2.8	20	111	0
Bis(2-chloroethyl)ether	1.066	1.045	-	2	20	115	0
1,3-Dichlorobenzene	1.435	1.544	-	-7.6	20	123	0
1,4-Dichlorobenzene	1.452	1.565	-	-7.8	20	127	0
1,2-Dichlorobenzene	1.406	1.509	-	-7.3	20	119	0
Benzyl alcohol	0.936	1.045	-	-11.6	20	121	0
Bis(2-chloroisopropyl)ethe	1.785	1.677	-	6.1	20	106	0
2-Methylphenol	1.016	1.126	-	-10.8	20	121	0
Hexachloroethane	0.551	0.574	-	-4.2	20	121	0
n-Nitrosodi-n-propylamine	0.818	0.889	-	-8.7	20	123	0
3-Methylphenol/4-Methylphe	1.05	1.204	-	-14.7	20	126	0
Nitrobenzene-d5	1.269	1.269	-	0	20	113	0
Nitrobenzene	1.234	1.356	-	-9.9	20	126	0
Isophorone	2.183	2.582	-	-18.3	20	132	0
2-Nitrophenol	0.577	0.614	-	-6.4	20	111	0
2,4-Dimethylphenol	1.11	1.297	-	-16.8	20	129	0
Bis(2-chloroethoxy)methane	1.416	1.433	-	-1.2	20	115	0
2,4-Dichlorophenol	1.044	1.246	-	-19.3	20	140	0
1,2,4-Trichlorobenzene	1.276	1.388	-	-8.8	20	119	0
IS1_Naphthalene-d8	1	1	-	0	20	109	0
Naphthalene	0.971	1.041	-	-7.2	20	119	0
Benzoic Acid	5	6.966	-	-39.3*	20	191	0
4-Chloroaniline	0.115	0.137	-	-19.1	20	139	0
Hexachlorobutadiene	0.198	0.209	-	-5.6	20	118	0
p-Chloro-m-cresol	0.254	0.329	-	-29.5*	20	140	0
2-Methylnaphthalene	0.631	0.695	-	-10.1	20	123	0
1-Methylnaphthalene	0.218	0.252	-	-15.6	20	124	0
Hexachlorocyclopentadiene	0.239	0.248	-	-3.8	20	113	0
2,4,6-Trichlorophenol	5	6.002	-	-20	20	143	0
2,4,5-Trichlorophenol	0.234	0.311	-	-32.9*	20	141	0
2-Fluorobiphenyl	0.787	0.903	-	-14.7	20	126	0
2-Chloronaphthalene	0.692	0.822	-	-18.8	20	131	0
2-Nitroaniline	0.2	0.217	-	-8.5	20	117	0
1,4-Dinitrobenzene	0.093	0.106	-	-14	20	123	0
1,3-Dinitrobenzene	0.109	0.124	-	-13.8	20	137	0
Dimethyl phthalate	0.809	1.057	-	-30.7*	20	141	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0601NA
 Sample No : WG1786190-3
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 21:27
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.302	-	-24.1*	20	134	0
2,6-Dinitrotoluene	0.167	0.2	-	-19.8	20	126	0
1,2-Dinitrobenzene	0.065	0.073	-	-12.3	20	120	0
IS1_Acenaphthene-d10	1	1	-	0	20	126	0
3-Nitroaniline	0.318	0.349	-	-9.7	20	130	0
Acenaphthene	1.089	1.142	-	-4.9	20	133	0
2,4-Dinitrophenol	5	5.659	-	-13.2	20	145	0
Dibenzofuran	1.737	1.866	-	-7.4	20	136	0
2,4-Dinitrotoluene	0.392	0.449	-	-14.5	20	137	0
4-Nitrophenol	5	6.331	-	-26.6*	20	168	0
2,3,5,6-Tetrachlorophenol	5	5.474	-	-9.5	20	144	0
2,3,4,6-Tetrachlorophenol	5	5.375	-	-7.5	20	139	0
Diethyl phthalate	1.466	1.676	-	-14.3	20	143	0
Fluorene	1.4	1.499	-	-7.1	20	134	0
4-Chlorophenyl phenyl ethe	0.681	0.719	-	-5.6	20	136	0
4-Nitroaniline	0.316	0.358	-	-13.3	20	137	0
4,6-Dinitro-o-cresol	5	5.638	-	-12.8	20	148	0
NDPA/DPA	1.195	1.3	-	-8.8	20	134	0
Azobenzene	1.256	1.422	-	-13.2	20	137	0
2,4,6-Tribromophenol	0.232	0.306	-	-31.9*	20	167	0
4-Bromophenyl phenyl ether	0.425	0.462	-	-8.7	20	135	0
Hexachlorobenzene	0.532	0.618	-	-16.2	20	154	0
Pentachlorophenol	5	5.815	-	-16.3	20	166	0
IS1_Phenanthrene-d10	1	1	-	0	20	126	0
Phenanthrene	1.03	1.077	-	-4.6	20	136	0
Anthracene	0.998	1.083	-	-8.5	20	138	0
Carbazole	0.941	1.065	-	-13.2	20	141	0
Di-n-butylphthalate	1.108	1.239	-	-11.8	20	145	0
Fluoranthene	1.208	1.316	-	-8.9	20	140	0
Benzidine	0.791	0.854	-	-8	20	159	0
Pyrene	1.277	1.413	-	-10.6	20	142	0
4-Terphenyl-d14	0.978	1.053	-	-7.7	20	138	0
Butyl benzyl phthalate	0.504	0.601	-	-19.2	20	155	0
IS1_Chrysene-d12	1	1	-	0	20	127	0
Benzo(a)anthracene	1.254	1.305	-	-4.1	20	132	0
3,3'-Dichlorobenzidine	0.482	0.526	-	-9.1	20	140	0
Chrysene	1.184	1.252	-	-5.7	20	132	0
Bis(2-ethylhexyl)phthalate	0.7	0.835	-	-19.3	20	149	0
Di-n-octylphthalate	1.271	1.442	-	-13.5	20	151	0
Benzo(b)fluoranthene	1.361	1.404	-	-3.2	20	134	0
Benzo(k)fluoranthene	1.299	1.427	-	-9.9	20	134	0
Benzo(a)pyrene	1.183	1.26	-	-6.5	20	134	0
IS1_Perylene-d12	1	1	-	0	20	122	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : DAKOTA
 Lab File ID : ABN0601NA
 Sample No : WG1786190-3
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 21:27
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	1.083	-	-2.2	20	124	0
Dibenzo(a,h)anthracene	1.111	1.193	-	-7.4	20	133	0
Benzo(ghi)perylene	1.122	1.195	-	-6.5	20	132	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : DAKOTA
 Lab File ID : AP90601NA
 Sample No : WG1786190-4
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/01/23 21:49
 Init. Calib. Date(s) : 04/13/23 04/13/23
 Init. Calib. Times : 01:37 14:37

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Benzaldehyde	1.046	1.121	-	-7.2	20	111	0
Acetophenone	1.831	2.347	-	-28.2*	20	134	0
m-Toluidine	5	5.94	-	-18.8	20	125	0
2-Chloroaniline	1.693	2.172	-	-28.3*	20	133	0
IS2_Naphthalene-d8	1	1	-	0	20	105	0
a-Terpineol	0.277	0.37	-	-33.6*	20	134	0
3-Chloroaniline	0.138	0.188	-	-36.2*	20	125	0
2,6-Dichlorophenol	0.276	0.455	-	-64.9*	20	163	0
1-chloro-2-nitrobenzene	0.149	0.201	-	-34.9*	20	136	0
Caprolactam	0.149	0.246	-	-65.1*	20	173	0
1,2,4,5-Tetrachlorobenzene	0.402	0.556	-	-38.3*	20	140	0
Biphenyl	0.901	1.305	-	-44.8*	20	146	0
IS2_Acenaphthene-d10	1	1	-	0	20	121	0
Dichloran	5	6.376	-	-27.5*	20	183	0
Pentachloronitrobenzene	0.203	0.294	-	-44.8*	20	175	0
IS2_Phenanthrene-d10	1	1	-	0	20	140	0
Diphenamid	0.501	0.727	-	-45.1*	20	195	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : ABN0609
 Sample No : WG1789355-3
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/09/23 11:38
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	153	0
n-Nitrosodimethylamine	0.955	0.751	-	21.4*	20	130	0
Pyridine	1.517	1.213	-	20	20	127	0
2-Fluorophenol	1.172	1.065	-	9.1	20	140	0
Aniline	2.122	1.766	-	16.8	20	134	0
2-Chlorophenol	1.204	1.213	-	-0.7	20	158	0
Phenol-d6	1.6	1.472	-	8	20	148	0
Phenol	1.728	1.515	-	12.3	20	139	0
Bis(2-chloroethyl)ether	1.306	1.274	-	2.5	20	154	0
1,3-Dichlorobenzene	1.426	1.448	-	-1.5	20	165	0
1,4-Dichlorobenzene	1.465	1.461	-	0.3	20	158	0
1,2-Dichlorobenzene	1.399	1.402	-	-0.2	20	155	0
Benzyl alcohol	1.301	1.009	-	22.4*	20	122	0
Bis(2-chloroisopropyl)ethe	1.51	1.755	-	-16.2	20	178	0
2-Methylphenol	1.225	1.105	-	9.8	20	142	0
Hexachloroethane	0.544	0.597	-	-9.7	20	184	0
n-Nitrosodi-n-propylamine	1.119	0.927	-	17.2	20	127	0
3-Methylphenol/4-Methylphe	1.285	1.145	-	10.9	20	138	0
Nitrobenzene-d5	1.441	1.389	-	3.6	20	158	0
Nitrobenzene	1.485	1.372	-	7.6	20	150	0
Isophorone	3.001	2.443	-	18.6	20	131	0
2-Nitrophenol	0.563	0.62	-	-10.1	20	186	0
2,4-Dimethylphenol	1.413	1.216	-	13.9	20	141	0
Bis(2-chloroethoxy)methane	1.649	1.602	-	2.9	20	157	0
2,4-Dichlorophenol	1.162	1.091	-	6.1	20	155	0
1,2,4-Trichlorobenzene	1.373	1.212	-	11.7	20	139	0
IS1_Naphthalene-d8	1	1	-	0	20	167	0
Naphthalene	1.11	0.975	-	12.2	20	153	0
Benzoic Acid	5	4.999	-	0	20	175	0
4-Chloroaniline	0.161	0.119	-	26.1*	20	122	0
Hexachlorobutadiene	0.299	0.214	-	28.4*	20	131	0
p-Chloro-m-creso	0.351	0.279	-	20.5*	20	135	0
2-Methylnaphthalene	0.715	0.628	-	12.2	20	156	0
1-Methylnaphthalene	0.31	0.232	-	25.2*	20	132	0
Hexachlorocyclopentadiene	0.351	0.256	-	27.1*	20	126	0
2,4,6-Trichlorophenol	0.291	0.217	-	25.4*	20	130	0
2,4,5-Trichlorophenol	0.315	0.233	-	26*	20	132	0
2-Fluorobiphenyl	0.994	0.748	-	24.7*	20	134	0
2-Chloronaphthalene	0.777	0.633	-	18.5	20	144	0
2-Nitroaniline	0.222	0.201	-	9.5	20	151	0
1,4-Dinitrobenzene	0.11	0.09	-	18.2	20	153	0
1,3-Dinitrobenzene	0.121	0.106	-	12.4	20	157	0
Dimethyl phthalate	0.908	0.78	-	14.1	20	148	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Instrument ID : SV106
 Lab File ID : ABN0609
 Sample No : WG1789355-3
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/09/23 11:38
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.231	0.996	-	19.1	20	141	0
2,6-Dinitrotoluene	0.184	0.167	-	9.2	20	152	0
1,2-Dinitrobenzene	0.078	0.068	-	12.8	20	149	0
IS1_Acenaphthene-d10	1	1	-	0	20	150	0
3-Nitroaniline	0.308	0.332	-	-7.8	20	162	0
Acenaphthene	1.155	1.079	-	6.6	20	144	0
2,4-Dinitrophenol	0.17	0.161	-	5.3	20	142	0
Dibenzofuran	1.827	1.662	-	9	20	135	0
2,4-Dinitrotoluene	0.379	0.392	-	-3.4	20	153	0
4-Nitrophenol	0.244	0.274	-	-12.3	20	170	0
2,3,5,6-Tetrachlorophenol	0.434	0.358	-	17.5	20	122	0
2,3,4,6-Tetrachlorophenol	0.443	0.35	-	21*	20	121	0
Diethyl phthalate	1.351	1.458	-	-7.9	20	166	0
Fluorene	1.464	1.327	-	9.4	20	136	0
4-Chlorophenyl phenyl ether	0.784	0.62	-	20.9*	20	117	0
4-Nitroaniline	0.306	0.315	-	-2.9	20	157	0
4,6-Dinitro-o-cresol	0.21	0.207	-	1.4	20	155	0
NDPA/DPA	1.218	1.128	-	7.4	20	140	0
Azobenzene	1.555	1.286	-	17.3	20	127	0
2,4,6-Tribromophenol	0.221	0.214	-	3.2	20	142	0
4-Bromophenyl phenyl ether	0.504	0.392	-	22.2*	20	118	0
Hexachlorobenzene	0.55	0.446	-	18.9	20	128	0
Pentachlorophenol	0.31	0.255	-	17.7	20	142	0
IS1_Phenanthrene-d10	1	1	-	0	20	131	0
Phenanthrene	1.001	0.977	-	2.4	20	134	0
Anthracene	1.037	0.996	-	4	20	126	0
Carbazole	0.92	0.888	-	3.5	20	127	0
Di-n-butylphthalate	1.073	1.195	-	-11.4	20	149	0
Fluoranthene	1.274	1.075	-	15.6	20	111	0
Benzidine	0.832	0.694	-	16.6	20	110	0
Pyrene	1.333	1.135	-	14.9	20	115	0
4-Terphenyl-d14	1.012	0.812	-	19.8	20	107	0
Butyl benzyl phthalate	0.463	0.513	-	-10.8	20	145	0
IS1_Chrysene-d12	1	1	-	0	20	108	0
Benzo(a)anthracene	1.364	1.242	-	8.9	20	100	0
3,3'-Dichlorobenzidine	0.528	0.47	-	11	20	98	0
Chrysene	1.273	1.147	-	9.9	20	101	0
Bis(2-ethylhexyl)phthalate	0.709	0.983	-	-38.6*	20	148	0
Di-n-octylphthalate	1.225	1.555	-	-26.9*	20	138	0
Benzo(b)fluoranthene	1.334	1.172	-	12.1	20	94	0
Benzo(k)fluoranthene	1.191	1.206	-	-1.3	20	117	0
Benzo(a)pyrene	1.127	1.035	-	8.2	20	103	0
IS1_Perylene-d12	1	1	-	0	20	104	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : SV106
 Lab File ID : ABN0609
 Sample No : WG1789355-3
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/09/23 11:38
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	0.908	0.849	-	6.5	20	98	0
Dibenzo(a,h)anthracene	0.94	0.952	-	-1.3	20	104	0
Benzo(ghi)perylene	0.926	1.009	-	-9	20	111	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Semivolatiles

Client : CHA Companies
 Project Name : FRIEDRICHSOHN SITE
 Instrument ID : SV106
 Lab File ID : ADP0609
 Sample No : WG1789355-5
 Channel :

Lab Number : L2329262
 Project Number : 060017.000
 Calibration Date : 06/09/23 12:24
 Init. Calib. Date(s) : 04/06/23 04/06/23
 Init. Calib. Times : 00:58 13:26

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	148	0
n-Decane	1.418	1.379	-	2.8	20	136	0
IS3_Acenaphthene-d10	1	1	-	0	20	140	0
Atrazine	0.485	0.382	-	21.2*	20	105	0
IS3_Phenanthrene-d10	1	1	-	0	20	120	0
n-Octadecane	0.396	0.495	-	-25*	20	143	0
Parathion	0.099	0.12	-	-21.2*	20	153	0
3,3'-Dimethylbenzidine	0.895	0.543	-	39.3*	20	74	0

* Value outside of QC limits.



SVOC SIM Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8270D SIM Semi-Volatiles
Data for Alpha Analytical, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (20%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum and percent recoveries were within QC limits for aqueous samples WG1784628-2/3.

Compound ID: Checked compound results were within GC/MS quantitation limits.

PCB Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of 8082A PCB Data
for Alpha Analytical Labs
SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: The samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analysis of the method blank reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits on both columns for the ground water samples and rinse blank.

Laboratory Control Sample: The relative percent differences for aroclor 1016 and aroclor 1260 were below the allowable maximums and percent recoveries were within QC limits for aqueous samples WG1786104-2/3.

Initial Calibration: The average %RSDs for target aroclors were below the allowable maximum (20%) on both columns, as required.

Continuing Calibration: The average %Ds for aroclor 1016 and aroclor 1260 were below the allowable maximum (20%) for both columns, as required

PCB Identification Summary: Checked surrogate results were within quantitation limits. The analyses of the ground water samples reported target aroclors as not detected.

Metals Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Metals Data
for Alpha Analytical Labs
SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

Blanks: The analyses of initial and continuing calibration and method blanks reported target metals as either not detected or below the reporting limits, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for target metals were within control limits (75-125%) for aqueous batch MS/MSD sample L2328902-06.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (20%) for aqueous batch MS/MSD sample L2328902-06, as required.

Laboratory Control Sample: The percent recoveries for target metals were within control limits for aqueous samples WG1785834-2, WG1786091-2, and WG1786098-2.

Serial Dilution: This data was not provided.

Total vs Dissolved: The dissolved results for iron were less than the total results plus 10%, as required.

General Chemistry

Data Section



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Alkalinity Data for
Alpha Analytical Labs, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported alkalinity as not detected.

Spike Sample Recovery: The percent recovery for alkalinity was above QC limits (86-116%) for aqueous batch spike sample L2329184-07. The positive results for alkalinity should be considered estimated, biased high (J+) in associated aqueous samples.

Laboratory Duplicates: The relative percent difference for alkalinity was below the allowable maximum (20%) for aqueous batch duplicate sample WG1787193-3, as required.

Laboratory Control Sample: The percent recovery for alkalinity was within QC limits (90-110%) for aqueous sample WG1787193-2.

Form 5a Matrix Spike

Client : CHA Companies
 Project Name : FRIEDRICHSON SITE
 Client Sample ID : NA
 Lab Sample ID : **L2329184-07**
 Matrix Spike : WG1787193-4
 Matrix Spike Dup :

Lab Number : L2329262
 Project Number : 060017.000
 Matrix : WATER
 MS Analysis Date : 06/05/23 13:06
 MSD Analysis Date :

Parameter	Sample Conc. (mg CaCO3/L)	Matrix Spike Sample		%R	Matrix Spike Duplicate		%R	RPD	Recovery Limits	RPD Limit
		Spike Added (mg CaCO3/L)	Spike Conc. (mg CaCO3/L)		Spike Added (mg CaCO3/L)	Spike Conc. (mg CaCO3/L)				
Alkalinity, Total	5.80	100	123.	117 Q					86-116	10





Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Ammonia Data for
Alpha Analytical Labs, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported ammonia as not detected.

Spike Sample Recovery: The percent recovery for ammonia was within QC limits (90-110%) for aqueous spike sample MW-2-20230524.

Laboratory Duplicates: The relative percent difference for ammonia was below the allowable maximum (20%) for aqueous duplicate sample MW-2-20230524, as required.

Laboratory Control Sample: The percent recovery for ammonia was within QC limits (90-110%) for aqueous sample WG1787121-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Nitrate Data for
Alpha Analytical Labs, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported nitrate as not detected.

Spike Sample Recovery: The percent recovery for nitrate was within QC limits (83-113%) for aqueous spike sample MW-2S-20230524.

Laboratory Duplicates: The relative percent difference for nitrate was below the allowable maximum (20%) for aqueous duplicate sample MW-2S-20230524, as required.

Laboratory Control Sample: The percent recovery for nitrate was within QC limits (90-110%) for aqueous sample WG1783188-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Sulfate Data for
Alpha Analytical Labs, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported sulfate as not detected.

Spike Sample Recovery: The percent recovery for sulfate was within QC limits (55-147%) for aqueous batch spike sample L2328087-01.

Laboratory Duplicates: The relative percent difference for sulfate was below the allowable maximum (20%) for aqueous batch duplicate sample WG1785830-4, as required.

Laboratory Control Sample: The percent recovery for sulfate was within QC limits (90-110%) for aqueous sample WG1785830-2.



Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Total Organic Carbon Data (TOC) for
Alpha Analytical Labs, SDG Number: L2329262**

**2 Ground Water Samples
Collected May 24, 2023**

Prepared by: Donald Anné
June 26, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method blanks reported TOC as not detected.

Spike Sample Recovery: The percent recoveries for TOC were within QC limits (80-120%) for aqueous batch spike samples L2328902-06 and L2329532-01.

Laboratory Duplicates: The relative percent differences for TOC were below the allowable maximum (20%) for aqueous batch duplicate samples WG1787073-3 and WG1787075-3, as required.

Laboratory Control Sample: The percent recoveries for TOC were within QC limits (90-110%) for aqueous samples WG1787073-2 and WG1787075-2.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.