NHDES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095

STAGE VI PHASE II REPLACEMENT
Monitoring Well Information – Round 2 of 2
North Country Environmental Services, Inc. Landfill
581 Trudeau Road
Bethlehem, New Hampshire 03574

NHDES Site #: 198704033
Project Type: Water Quality Monitoring
Project Number: 1737

Sanborn, Head & Associates, Inc.

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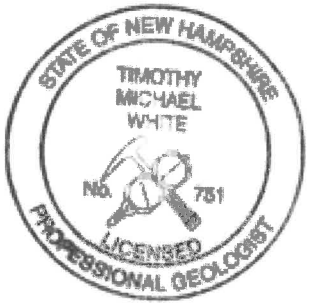

Date of Report: May 8, 2023

Groundwater Monitoring Report Cover Sheet

Site Name: **North Country Environmental Services, Inc. (NCES) Landfill**

Town: **Bethlehem, NH**

Permit #: **GWP-198704033-B-007**

Type of Submittal (*Check all that apply*)

☐ Periodic Summary Report (*year*):

☒ Data Submittal (*month and year per Condition #7 of Permit*): **Stage VI Phase II Replacement Monitoring Wells groundwater data – Round 2 of 2**

Check each box where the answer to any of the following questions is "YES"

Sampling Results

☒ During the most recent monitoring event, were any ***new*** compounds detected at any sampling point?

Well/Compound:

B-929L [outside GMZ]: chromium, iron

B-914U [outside GMZ]: acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene.

B-914L [outside GMZ]: PFBA, PFHpA, PFHxA, PFPeA

B-102S [inside GMZ]: PFOA

☐ Are there any detections of contamination in drinking water that is untreated prior to use? **NO**

Well/Compound:

☐ Do compounds detected exceed AGQS?

☐ Was free product detected for the ***first time*** in any monitoring point? **NO**

☐ Surface Water (*visible sheen*)

☐ Groundwater (*1/8" or greater thickness*)

Location/Thickness:

Contaminant Trends

☐ Do sampling results show an increasing concentration trend in any source area monitoring well? **Concentration trends are discussed in the text.**

Well/Compound:

☒ Do sampling results indicate an AGQS violation in any of the GMZ boundary wells?
AGQS exceedances at monitoring wells for March 2023 are indicated below and are discussed in the report text.
Well/Compound:
B-102S [inside GMZ]: manganese
B-102D [inside GMZ]: arsenic and manganese
B-903L [outside GMZ]: arsenic
B-930L [outside GMZ]: arsenic
B-914U [outside GMZ]: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
B-914L [outside GMZ]: PFOA

Recommendations

☒ Does the report include any recommendations requiring DES action? (*Do not check this box if the only recommendation is to continue with existing permit conditions.*) **Report recommends updating Groundwater Management and Release Detection Permit to incorporate new wells and decommission old wells.**

SANBORN HEAD

Mr. James W. O'Rourke, P.G.
New Hampshire Department of Environmental Services
Waste Management Division
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

May 8, 2023
File No. 1003.23

Re: Stage VI Phase II Replacement Monitoring Well Information – Round 2 of 2
North Country Environmental Services, Inc. Landfill (NCES)
Bethlehem, New Hampshire
NHDES Site #198704033

Dear Mr. O'Rourke:

On behalf of NCES, Sanborn, Head & Associates, Inc. (Sanborn Head) is providing a summary of information related to the second round of sampling of the Stage VI Phase II replacement monitoring wells at the NCES Landfill (Site). The activities were performed in general accordance with Sanborn Head's September 28, 2022 Work Plan for Replacement Monitoring Well Installation[1] and NHDES' October 19, 2022 email.[2]

The replacement monitoring wells are located east of the Stage VI Phase II area to replace existing monitoring wells within the footprint of the landfill expansion.

SUMMARY OF ACTIVITIES

This report summarizes the findings of our assessment of the water quality from the second of two sampling rounds on the newly installed replacement wells. A report discussing the installation and first round of sampling was submitted to NHDES on February 14, 2023.[3]

Monitoring Well Installation

From October 24 to November 8, 2022 six replacement groundwater monitoring wells (B-929U, B-929L, B-930U, B-930L, B-931U, and B-931L) were installed east of the planned Stage VI Phase II landfill (refer to locations on Figure 1). The replacement monitoring wells were installed by New England Boring Contractors of Derry, New Hampshire using drive and wash drilling methods. The replacement wells were installed to monitor generally consistent zones as the existing Site monitoring wells proposed for decommissioning. The upper [U] wells were installed with the screen set to intercept the water table, while the lower [L] wells were screened in similar elevations as the existing wells in the lower glacial till. Boring logs for the replacement wells can be found in the Stage VI Phase II Replacement Monitoring Well Information – Round 1 of 2 report submitted to NHDES on February 14, 2023.

1 https://www4.des.state.nh.us/IISProxy/IISProxy.dll?ContentId=5030205
2 https://www4.des.state.nh.us/IISProxy/IISProxy.dll?ContentId=5036591
3 https://www4.des.state.nh.us/DocViewer/?ContentId=5062831

Groundwater Level Monitoring

Groundwater levels in March 2023 at the upper replacement wells ranged from approximately equal (B-931U / B-102S) to approximately 25 ft higher (B-930U / B-904U) than those measured at the existing upper monitoring wells. At the lower replacement wells, groundwater levels ranged from approximately equal (B-931L / B-914L) to approximately 18 ft higher (B-929L / B-903L) than water levels measured in the lower existing wells. These results are similar to those observed in Round 1. The higher elevation groundwater levels in the replacement wells in the southeast corner of the landfill are consistent with higher rates of groundwater recharge on the undeveloped area east of the landfill. In the southeast corner of the landfill Site, there is a localized component of west/northwest flow indicated in the water table, consistent with the overall northward flow of groundwater at the Site. Refer to Figure 1 for a groundwater elevation contour plan. A summary of groundwater elevations at existing and replacement monitoring wells is provided as Exhibit 1.

Exhibit 1 – *Replacement Monitoring Well Water Level Summary*

Existing Monitoring Wells		Replacement Monitoring Wells	
Existing Well ID	**Water Level Elevation (March 2023) (ft AMSL)**	**Replacement Well ID**	**Water Level Elevation (March 2023) (ft AMSL)**
B-102S	1304.87	**B-931U**	1305.01
B-914U	1307.14		
B-102D	1305.81	**B-931L**	1305.00
B-914L	1305.70		
B-904U	1309.87	**B-930U**	1334.36
B-904L	1309.66	**B-930L**	1308.26
B-903U	1311.61	**B-929U**	1333.52
B-903L	1311.28	**B-929L**	1329.12

Groundwater Sampling

On March 20, 2023, Sanborn Head collected groundwater samples from the six replacement monitoring wells. Monitoring wells were purged and samples were collected using methods consistent with current Site sampling practices (refer to the sampling form in Appendix B). After purging approximately three well volumes, groundwater samples were collected into laboratory-provided containers.

Field parameters pH, specific conductance, temperature, dissolved oxygen, and turbidity were measured at the time of sample collection. Groundwater samples were placed into laboratory containers and transported to Eastern Analytical, Inc. (EAI) of Concord, New Hampshire in coolers with ice under standard chain-of-custody procedures. Samples were submitted for analysis of the following parameters:

- NHDES “Full List” VOCs by USEPA Methods 8260C and 8011/504
- 1,4-Dioxane (low level) by USEPA Method 8260B SIM
- COD by Hach Method H8000

- Bromide and sulfate by USEPA Method 300.0
- Chloride by Standard Method 4500CIE-11
- Nitrate by USEPA Method 353.2
- TKN by Standard Method 4500NorgC/NH3D
- Filtered (dissolved) metals (antimony, arsenic, barium, beryllium, cadmium, chromium, lead, nickel, silver and thallium) by USEPA Method 200.8
- PFAS by USEPA Method 537 Modified, reporting the US Department of Defense (DoD) 25 analytes.[4]
- Acid/Base/Neutrals by USEPA Method 8270D.

The sample names, sample collection times, static groundwater levels, and field parameters for each location are summarized on Sanborn Head's field sampling summary form presented as Appendix B. Copies of the laboratory analytical data reports prepared by EAI are provided in Appendix C. Our findings based on the above-described sampling and analyses are summarized below.

SUMMARY OF BACKGROUND GROUNDWATER CONCENTRATION EXCEEDANCES

This section compares groundwater analytical results of the March 2023 sampling event to the identified background concentrations, consistent with Env-Or 702.03.

A summary of background groundwater exceedances is included as Table 1. Refer to Table 2 for data from the Stage VI Phase II wells only.

Detected concentrations exceeding background values for the first time at existing monitoring locations are summarized in Exhibit 2. Other detected concentrations were either below background concentrations or have previously exceeded background concentrations in the period of record for a given location.

Exhibit 2
Summary of Initial Background Concentration Exceedances – March 2023

Location	Analyte	Concentration / Value	Previous Max or Min	November 2022 Site Background (refer to Table 1)	GW-1 (AGQS)	SM CL	# of sampling events for analyte
Background Wells							
No initial exceedances of background							
Release Detection Wells Outside the GMZ – Impacts Anticipated from Former Unlined Landfill							
B-930U	Chromium, Dissolved	0.0019 mg/L	0.0012 mg/L	0.0014 mg/L	0.1 mg/L	NS	2

[4] https://www4.des.state.nh.us/nh-pfas-investigation/wp-content/uploads/2019/05/201905_Lab-Guidance-1.pdf

Location	Analyte	Concentration / Value	Previous Max or Min	November 2022 Site Background (refer to Table 1)	GW-1 (AGQS)	SM CL	# of sampling events for analyte
	Comments: The March 2023 results for chromium represented only the second sampling round for those analytes at B-930U, and the concentration did not exceed the AGQS. VOCs were not detected at B-930U in March 2023. Given the general absence of other potential leachate indicators, including more soluble analytes, the data are not consistent with a new release.						
B-914U	Acenaphthene	0.13 µg/l	N/A	<0.1 µg/l	420 µg/l	NS	5
	Acenaphthylene	0.23 µg/l	N/A	<0.1 µg/l	420 µg/l	NS	5
	Anthracene	0.46 µg/l	N/A	<0.1 µg/l	2100 µg/l	NS	5
	Benzo(a)anthracene	1.6 µg/l	N/A	<0.1 µg/l	0.1 µg/l	NS	5
	Benzo(a)pyrene	2 µg/l	N/A	<0.1 µg/l	0.2 µg/l	NS	5
	Benzo(b)fluoranthene	2.7 µg/l	N/A	<0.1 µg/l	0.1 µg/l	NS	5
	Benzo(g,h,i)perylene	0.98 µg/l	N/A	<0.1 µg/l	210 µg/l	NS	5
	Benzo(k)fluoranthene	1 µg/l	N/A	<0.1 µg/l	0.5 µg/l	NS	5
	Chrysene	2.1 µg/l	N/A	<0.1 µg/l	5 µg/l	NS	5
	Dibenz(a,h)anthracene	0.23 µg/l	N/A	<0.1 µg/l	0.1 µg/l	NS	5
	Fluoranthene	3.5 µg/l	N/A	<0.1 µg/l	280 µg/l	NS	5
	Fluorene	0.18 µg/l	N/A	<0.1 µg/l	280 µg/l	NS	5
	Indeno(1,2,3-cd)pyrene	1.1 µg/l	N/A	<0.1 µg/l	0.1 µg/l	NS	5
	Naphthalene (SVOC)	0.14 µg/l	N/A	<0.1 µg/l	100 µg/l	NS	5
	Phenanthrene	1.6 µg/l	N/A	<0.1 µg/l	210 µg/l	NS	5
	Pyrene	2.9 µg/l	N/A	<0.1 µg/l	210 µg/l	NS	5
	Comments: The March 2023 results for SVOCs represented the fifth sampling round for those analytes at B-914U. Concentrations of six of these analytes exceeded the AGQS. However, VOCs were not detected at B-914U in March 2023. The B-914U sample in March 2023 was noted as turbid. A filtered SVOC sample was collected from B-914U in April 2023 for comparison to the unfiltered results from March 2023 and SVOCs were not detected from the filtered sample at B-914U in April 2023. Given the general absence of other potential leachate indicators, including more soluble analytes, the data are not consistent with a new release.						
B-914L	Temperature	5.50 °C	7.4°C	5.6-13.5°C	NS	NS	17
	Perfluorobutanoic Acid (PFBA)	13.7 ng/l	N/A	<4.0-<5.0 ng/L	NS	NS	2
	Perfluoroheptanoic Acid (PFHpA)	12.1 ng/L	N/A	<4.0-<5.0 ng/L	NS	NS	2
	Perfluorohexanoic Acid (PFHxA)	17.4 ng/L	N/A	<4.0-<5.0 ng/L	NS	NS	2
	Perfluoropentanoic Acid (PFPeA)	19.3 ng/L	N/A	<4.0-<5.0 ng/L	NS	NS	2

Location	Analyte	Concentration / Value	Previous Max or Min	November 2022 Site Background (refer to Table 1)	GW-1 (AGQS)	SM CL	# of sampling events for analyte
	Comments: March 2023 was the second round in which samples from this location were analyzed for PFAS. B-914L is also located in close proximity to the former unlined portion of the landfill, which could have residual impacts to groundwater quality. The temperature at B-914L was only slightly below the background range, noting that this well had not been sampled previously in the month of March. VOCs were not detected at B-914L in March 2023. Given the general absence of other potential leachate indicators, including more soluble analytes, the data are not consistent with a new release.						
Groundwater Management Wells Inside the GMZ – Impacts Anticipated from Former Unlined Landfill							
B-102S	Perfluorooctanoic Acid (PFOA)	4.24 ng/L	N/A	<4.0-<5.0 ng/L	12 ng/l	NS	3
	Comments: The initial PFOA detection at B-102S also represented a background concentration exceedance at this location. The March 2023 sampling round was only the second sampling round for PFOA at B-102S. VOCs were not detected at B-102S in December 2022 or March 2023. Given the general absence of other potential leachate indicators, including more soluble analytes, the data are not consistent with a new release.						

SUMMARY OF INITIAL DETECTS

This section summarizes analytes detected for the first time in March 2023 at a location in its respective period of record. Analytes (except sulfate) detected for the first time at a monitoring location in March 2023 are summarized in Exhibit 3.

Exhibit 3
Summary of Initial Detects at Groundwater Monitoring Locations – March 2023

Location	Analyte	*milligrams per liter (mg/l) unless otherwise noted*			
		NHDES AGQS	**Site Background**	**March 2023 Concentration**	**Laboratory Reporting Limit**
B-929L	Chromium	0.1 mg/L	0.0014 mg/L	0.0012 mg/L	0.001 mg/L
	Iron	N/A – SMCL 0.3 mg/L	0.64 mg/L	0.091 mg/L	0.05 mg/L
B-914U	Acenaphthene	420 µg/L	<0.1 µg/L	0.13 µg/L	0.1 µg/L
	Acenaphthylene	420 µg/L	<0.1 µg/L	0.23 µg/L	0.1 µg/L
	Anthracene	2100 µg/L	<0.1 µg/L	0.46 µg/L	0.1 µg/L
	Benzo(a)anthracene	0.1 µg/L	<0.1 µg/L	1.6 µg/L	0.1 µg/L
	Benzo(a)pyrene	0.2 µg/L	<0.1 µg/L	2 µg/L	0.1 µg/L
	Benzo(b)fluoranthene	0.1 µg/L	<0.1 µg/L	2.7 µg/L	0.1 µg/L
	Benzo(g,h,i)perylene	210 µg/L	<0.1 µg/L	0.98 µg/L	0.1 µg/L
	Benzo(k)fluoranthene	0.5 µg/L	<0.1 µg/L	1 µg/L	0.1 µg/L
	Chrysene	5 µg/L	<0.1 µg/L	2.1 µg/L	0.1 µg/L
	Dibenz(a,h)anthracene	0.1 µg/L	<0.1 µg/L	0.23 µg/L	0.1 µg/L
	Fluoranthene	280 µg/L	<0.1 µg/L	3.5 µg/L	0.1 µg/L
	Fluorene	280 µg/L	<0.1 µg/L	0.18 µg/L	0.1 µg/L
	Indeno(1,2,3-cd)pyrene	0.1 µg/L	<0.1 µg/L	1.1 µg/L	0.1 µg/L
	Naphthalene (SVOC)	100 µg/L	<0.1 µg/L	0.14 µg/L	0.1 µg/L
	Phenanthrene	210 µg/L	<0.1 µg/L	1.6 µg/L	0.1 µg/L
	Pyrene	210 µg/L	<0.1 µg/L	2.9 µg/L	0.1 µg/L
B-914L	PFBA	NS	<4.0-<5.0 ng/L	13.7 ng/l	4 ng/l
	PFHpA	NS	<4.0-<5.0 ng/L	12.1 ng/L	4 ng/l
	PFHxA	NS	<4.0-<5.0 ng/L	17.4 ng/L	4 ng/l
	PFPeA	NS	<4.0-<5.0 ng/L	19.3 ng/L	4 ng/l

Location	Analyte	*milligrams per liter (mg/l) unless otherwise noted*			
		NHDES AGQS	**Site Background**	**March 2023 Concentration**	**Laboratory Reporting Limit**
B-102S	PFOA	12 ng/L	<4.0-<5.0 ng/L	4.24 ng/L	4 ng/l

Notes:
"GW-1" Groundwater Standards are from the New Hampshire Department of Environmental Services (NHDES) Contaminated Sites Risk Characterization and Management Policy (RCMP) (January 1998, with 2000 through 2018 revisions/addenda). GW-1 Groundwater Standards are intended to be equivalent to the AGQSs promulgated in Env-Or 600 (June 2015 with October 2016, September 2018, September 2019, May 2020, January 2021, and July 2021 amendments). For analytes where GW-1 and AGQS values differ, the values presented in this table reflect the AGQSs in the latest Env-Or 600 update. The AGQS/GW-1 Groundwater Standards are intended to be protective of groundwater as a source of drinking water.
SMCLs are not established for the above-listed analytes, except for iron, for which the SMCL is 0.3 mg/L.

Sulfate was analyzed for the second time at each of the groundwater wells sampled in March 2023 and all concentrations were below the GW-1/AGQS for sulfate (500 mg/l). There is no site background established for sulfate.

SUMMARY OF GROUNDWATER QUALITY EXCEEDANCES

Detected concentrations in groundwater in March 2023 which exceeded applicable standards are indicated on Table 1 and in Table A.2, and summarized in Exhibit 4 below. Concentrations were compared to the GW-1/AGQS; if no GW-1/AGQS is available for an analyte, then concentrations were compared to the USEPA SMCLs,[5] if available.

Exhibit 4
Summary of Exceedances of AGQS or SMCL – March 2023

Analyte	AGQS (or SMCL if no AGQS)	Exceedance in March 2023		Initial Exceedance March 2023	
		Within GMZ	**Outside GMZ**	**Within GMZ**	**Outside GMZ**
AGQS Exceedance					
Manganese	0.3 mg/L	B-102S, B-102D	None	None	None
Arsenic	0.005 mg/L	B-102D	B-903L, B-930L	None	None
Benzo(a)anthracene	0.1 µg/l	None	None	None	B-914U
Benzo(a)pyrene	0.2 µg/l	None	None	None	B-914U

[5] The SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These analytes are not considered by USEPA to present a risk to human health at the SMCL.

Analyte	AGQS (or SMCL if no AGQS)	Exceedance in March 2023		Initial Exceedance March 2023	
		Within GMZ	Outside GMZ	Within GMZ	Outside GMZ
Benzo(b)fluoranthene	0.1 µg/l	None	None	None	B-914U
Benzo(k)fluoranthene	0.5 µg/l	None	None	None	B-914U
Dibenz(a,h)anthracene	0.1 µg/l	None	None	None	B-914U
Indeno(1,2,3-cd)pyrene	0.1 µg/l	None	None	None	B-914U
PFOA	12 ng/l	None	None	None	B-914L
SMCL Exceedance (analytes with no AGQS)					
Iron	0.3 mg/L	B-102D	None	None	None

Notes:
1. "Initial exceedance" indicates that March 2023 was the first time the AGQS or SMCL was exceeded in a sample collected from a given location in the respective period of record. Period of record varies by location.

mg/l = milligrams per liter
µg/l = micrograms per liter
ng/l = nanograms per liter

GROUNDWATER QUALITY TREND ASSESSMENT

This section provides a comparison to background values, an assessment of trends for analytes with first-time background exceedances, and an assessment of trends for analytes with exceedances of standards for March 2023 results. Refer to Tables 1, 2, A.2, and A.3 for analytical data summaries. Time series plots are included in Appendices D and E.

Volatile Organic Compounds (VOCs)

VOCs were not detected in groundwater in March 2023.

Semi-volatile Organic Compounds (SVOCs)

Sixteen SVOCs, all polycyclic aromatic hydrocarbons (PAHs), were detected in March 2023 for the first time in B-914U (refer to analyte list in Exhibit 2). The March 2023 results for SVOCs represented the fifth sampling round for those analytes at B-914U. Concentrations of six of the analytes (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene) exceeded the AGQS. VOCs were not detected at B-914U in March 2023. The B-914U sample in March 2023 was noted as turbid. A filtered SVOC sample was collected from B-914U in April 2023 for comparison to the unfiltered results from March 2023 to evaluate the potential influence of suspended sediment on the SVOC results. SVOCs were not detected in the filtered sample collected at B-914U in April 2023

indicating that the SVOC detections in the March 2023 sample were likely attributable to the influence of the suspended sediment in the sample. April 2023 results will be reported to NHDES in the forthcoming April Tri-annual Report.

Inorganic Parameters

Note: As indicated in previous transmittals, several metals (principally iron, arsenic, and manganese) are naturally occurring in soil at the Site, and elevated concentrations of these metals have been detected in groundwater generally at locations downgradient of the former unlined landfill, which generally have reducing conditions. Therefore, locations within and adjacent to the GMZ are anticipated to typically exhibit higher metals concentrations in groundwater than other areas of the Site. As discussed in previous reports, iron, manganese, and/or arsenic have shown variable, but in some cases overall increasing concentration trends for recent reporting periods at locations within the GMZ (i.e., manganese at B-304DR), which are inferred to be related to the persistent reducing conditions associated with the former unlined landfill. Manganese concentrations at MW-701 (outside the GMZ) have been variable in recent years but were above the GW-1/AGQS in April, July, and November 2021, and January, July, and November 2022, and have typically been above the current Site background (0.19 mg/l) since early 2017.

A summary of inorganic parameters is provided below.

Metals

- **Antimony**: Was not detected in March 2023. Antimony was detected at only one location in December 2022: B-102S (inside the GMZ), at a concentration of 0.0013 mg/l, slightly above the laboratory reporting limit (0.001 mg/l), which the background is based on. This detection was not repeated in March 2023.

- **Arsenic:** Exceedances of the arsenic Site background concentration (0.0011 mg/l) in March 2023 were limited to one well inside the GMZ (B-102D) and four wells outside the GMZ (B-903L, B-904L, B-930L and B-914U) at concentrations ranging from 0.0013 mg/l (B-914U) to 0.06 mg/l (B-102D). Each of these background exceedances also represented an exceedance of the arsenic AGQS of 0.005 mg/l, except for the detections at B-904L and B-914U, which had concentrations below the AQGS. The concentration at B-903L represented a period of record maximum at that location. Arsenic was detected at concentrations below the Site background at replacement monitoring well B-931U.

  Arsenic concentrations in replacement wells were below the Site background except at B-930L. The arsenic exceedance recorded at B-930L (0.0051 mg/l) was at the same order of magnitude as the concentration recorded at its nearby replacement well B-904L (0.0029 mg/L).

- **Barium**: Exceedances of the barium Site background concentration (0.025 mg/l) were indicated at one location inside the GMZ (B-102S; 0.09 mg/l) and one location outside the GMZ (B-914L; 0.038 mg/l). The detection of barium above Site background at B-904L in

December 2022 (0.048 mg/l) was not repeated in March 2023. The AGQS for barium (2 mg/l) was not exceeded in groundwater in March 2023.

Barium was detected at each of the replacement monitoring wells, but at concentrations below the Site background.

- **Chromium:** Exceedances of the chromium Site background concentration (0.0014 mg/l) were limited to one location outside the GMZ (B-930U). The detection at B-930U (0.0019 mg/l) represented an initial exceedance of background and a period of record maximum at this well, noting that it was only the second sampling round at this location. Chromium was detected at concentrations below the Site background at replacement monitoring wells B-929U and B-929L.

- **Iron**: Exceedances of the iron Site background concentration (0.64 mg/l) in March 2023 were limited to one well inside the GMZ (B-102D) at a concentration of 9.9 mg/l. This background exceedance also represented an exceedance of the iron SMCL of 0.3 mg/l. Iron was detected at replacement monitoring well B-929L and existing well B-904L at concentrations below the Site background.

- **Lead**: Was not detected in March 2023. Lead was detected at only one location in December 2022: B-904L, at a concentration of 0.0032 mg/l. This detection exceeded the Site background (<0.001 mg/l) but was below the AGQS (0.015 mg/l). This detection was not repeated in March 2023.

- **Manganese:** Exceedances of the manganese Site background concentration (0.19 mg/l) in March 2023 were limited to two locations inside the GMZ (B-102S, and B-102D), at concentrations ranging from 1.2 mg/l (B-102D) to 2 mg/l (B-102S). Each of these background exceedances also represented an exceedance of the manganese AGQS of 0.3 mg/l.

  Manganese was detected at replacement monitoring wells B-929L, B-930L, and B-931L, and existing wells B-903L, B-904L, and B-914U, but at concentrations below the Site background.

Bromide
Bromide was not detected in groundwater in March 2023.

Chloride
Chloride was detected at 11 of 14 locations in March 2023, at concentrations ranging from 1.6 mg/l (B-102D) to 14 mg/l (B-914L). The concentration at B-914L exceeded the Site background (4 mg/l), but was within the range of historical results at this location. Chloride was not detected at B-903L, B-930U or B-930L.

Nitrate
Nitrate was detected at five locations in March 2023, at concentrations ranging from 0.52 mg/l (B-904U) to 1.9 mg/l (B-929U), all below the Site background (2.5 mg/l).

Total Kjeldahl Nitrogen (TKN)
Detections of TKN were limited to one well inside the GMZ: B-102D at a concentration of 0.61 mg/l, just above the reporting limit of 0.5 mg/l, and well within the range of previous results at B-102D. The Site background for TKN is 0.92 mg/l.

Sulfate
Sulfate was detected at each of the 14 wells sampled in March 2023 at concentrations ranging from 4.1 mg/l (B-903L) to 20 mg/l (B-914L), all well below the AQGS of 500 mg/l and the SMCL of 250 mg/l. Because analysis for sulfate is not required in the Permit, a background value has not been established for this parameter.

Chemical Oxygen Demand (COD)
COD was detected at only one well (B-914U outside the GMZ) at a concentration of 45 mg/l, which exceeded the COD Site background concentration (20 mg/l). This detection represented a period of record maximum at B-914U, an increase from the previous maximum at this location of 34 mg/l detected in November 2008.

Per- and Polyfluoroalkyl Substances (PFAS)
Samples for PFAS analysis were collected from each of the 14 monitoring wells sampled at the Site in March 2023. Detections of PFAS analytes were limited to two locations, one inside the GMZ (B-102S) and one slightly outside the GMZ (B-914L). Both B-102S and B-914L are located in close proximity to the eastern boundary of the former unlined landfill.

March 2023 was the second PFAS sampling event at B-914L and six PFAS analytes were detected at this location, four of which represented initial detections at this location. PFBA, PFPeA, PFHxA, and PFHpA were detected at B-914L at concentrations ranging from 12.1 ng/l (PFHpA) to 19.3 ng/l (PFPeA). PFOA was detected at a concentration of 19.4 ng/l, an increase from 4.84 ng/l in December 2022, and exceeding the AGQS of 12 ng/l. PFBS was also detected at a concentration of 20.2 ng/l, an increase from 7.18 ng/l in December 2022 [no AGQS established].

At B-102S, five PFAS analytes were detected at low concentrations: PFOA at 4.24 ng/l (below the AGQS of 12 ng/l), which represented an initial detect at this location; PFHxA at 4.12 ng/l (below the previous detection [9.63 ng/l in July 2017]); PFHpA at 5.02 ng/l (below the previous detection [6.09 ng/l in July 2017]); PFBS at 5.5 ng/l (a slight increase from 4.77 ng/l in December 2022); and PFHxS at 4.82 ng/l (below the AGQS of 18 ng/l and below the previous detection [7.64 ng/l in July 2017]).

The proximity of B-102S and B-914L to the former unlined landfill is consistent with residual impacts from historical operations at these locations. Similar low-level PFAS analytes were detected in a previous sampling event performed at B-102S in July 2017 (PFHxA, PFHpA, and PFHxS were detected at concentrations ranging from 6.09 to 9.63 ng/l).

A tabular summary of water quality sampling results at the Stage VI Phase II wells is provided as Table 2.

CLOSING

Based on observations from installation and two rounds of sampling, the replacement groundwater monitoring wells located east of the proposed Stage VI Phase II footprint provide baseline water level and water quality information suitable for future incorporation into the Site groundwater monitoring program as release detection wells. We recommend that the Groundwater Management and Release Detection Permit be updated to incorporate new wells and remove old wells which are planned for decommissioning.

Should you have questions regarding the information presented herein, or wish to discuss any of our findings and conclusions as presented in this report, please feel free to contact Tim White at Sanborn Head or Joe Gay at NCES.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.

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GAP/MEE/TMW: gap

TABLES

Table 1 Evaluation of Background Exceedances – Groundwater Samples – March 2023
Table 2 Evaluation of Background Exceedances – Stage VI Phase II Replacement Wells – December 2022 & March 2023

FIGURE

Figure 1 Groundwater Elevation Contour Plan

APPENDICES

Appendix A Summary of Historical Monitoring Data (March 2023 locations only)
- Table A.1 Water Level – Depth and Elevation Post-2009
- Table A.2 Summary of Monitoring Data – Groundwater Samples

Table A.3 Summary of Monitoring Data – PFAS analytical results
Appendix B Groundwater Field Sampling Summary Form
Appendix C Analytical Laboratory Reports
Appendix D Time Series Plots (March groundwater locations only; Field and Indicator Parameters, VOCs)
Appendix E PFAS Plots

cc: w/Appendices: Mr. Joe Gay, NCES
Mr. Kevin Roy, NCES
Town of Bethlehem

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TABLES

TABLE 1
Evaluation of Background Exceedances – Groundwater Samples – March 2023
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Sample Location	Sample Date	Sample Type	SU	uS/cm	C	mg/L										ug/L																						ng/L										Inferred Context for Background Exceedance											Comments
			pH	Specific Conductance	Temperature	Chemical Oxygen Demand (COD)	Chloride	Total Kjeldahl Nitrogen (TKN)	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Chromium, Dissolved	Iron, Dissolved	Lead, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Dichlorodifluoromethane (CFC12)	Dioxane (1,4-)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Perfluorobutanoic Acid (PFBA) [3]	Perfluoropentanoic Acid (PFPeA) [4]	Perfluorohexanoic Acid (PFHxA) [5]	Perfluoroheptanoic Acid (PFHpA) [6]	Perfluorooctanoic Acid (PFOA) [7]	Perfluorononanoic Acid (PFNA) [8]	Perfluorobutanesulfonic Acid (PFBS) [45]	Perfluorohexanesulfonic acid (PFHxS) [65]	Perfluorooctanesulfonic Acid (PFOS) [85]	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1	2	3	4	5	6	7	8	9	10	11	
GW-1 (AGQS)									0.006	0.005	2	0.1		0.015	0.3	0.1	1000	0.32	420	420	2100	0.1	0.2	0.1	210	0.5	5	0.1	280	280	0.1	100	210	210					12	11		18	15																	
SMCL			6.5-8.5				250						0.3		0.05																																								
Background 2022-11			6.5-9.3	186	5.6-13.5	20	4	0.92	<0.001	0.0011	0.025	0.0014	0.64	<0.001	0.19	0.0027	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0												
Background Wells																																																									
B-923U	11/2/2022	N	7.49	60	8.1	<10	<1	<0.5					<0.05		<0.005		<2	<0.25																																							
B-924U	11/2/2022	N	Sampling not required as part of permit monitoring																																																					
B-924L	11/2/2022	N	Sampling not required as part of permit monitoring																																																				
B-925U	11/2/2022	N	6.73	61	7.6	<10	<1	<0.5					*0.41*		0.015		<2	<0.25																																							
B-925L	11/2/2022	N	Sampling not required as part of permit monitoring																																																				
Release Detection Wells Outside the GMZ																																																							
MW-603	11/2/2022	N	6.8	75	12.9	<10	2.3	<0.5					<0.05		<0.005		<2	<0.25																																							
B-903U	11/1/2022	N	To be sampled in December 2022																																																				
B-903U	12/1/2022	N	*5.99*	92	6.72	<10	1.8	<0.5	<0.001	<0.0005	0.011	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	✓											
B-903U	3/20/2023	N	7.07	91	7.2	<10	1.9	<0.5	<0.001	<0.0005	0.0066	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	✓											
B-929U	12/1/2022	N	*5.29*	68	3.86	<10	1.2	<0.5	<0.001	<0.0005	0.01	0.0011	<0.05	<0.001	0.0099	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	✓											
B-929U	3/20/2023	N	6.57	84	7.7	<10	1.8	<0.5	<0.001	<0.0005	0.0065	0.0013	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-903L	11/2/2022	N	To be sampled in December 2022																																																				
B-903L	12/1/2022	N	7.48	88	6.35	<10	<1	<0.5	<0.001	**0.0077**	0.01	<0.001	<0.05	<0.001	0.041	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓								
B-903L	3/20/2023	N	7.96	109	7.6	<10	<1	<0.5	<0.001	**0.0083**	0.0067	<0.001	<0.05	<0.001	0.037	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓								
B-929L	12/1/2022	N	*6.47*	101	5.59	15	1.6	<0.5	<0.001	0.00051	0.015	<0.001	<0.05	<0.001	0.046	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	✓											
B-929L	3/20/2023	N	6.93	83	7.1	<10	1.7	<0.5	<0.001	<0.0005	0.009	0.0012	0.091	<0.001	0.0095	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-904U	11/1/2022	N	To be sampled in December 2022																																																			
B-904U	12/1/2022	N	6.57	70	6.62	<10	1.3	<0.5	<0.001	<0.0005	0.0084	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-904U	3/20/2023	N	7.66	105	8.8	<10	2	<0.5	<0.001	0.00055	0.004	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-930U	12/1/2022	N	7.32	87	5.87	<10	1.3	<0.5	<0.001	<0.0005	0.013	0.0012	0.089	<0.001	0.018	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-930U	3/20/2023	N	7.26	96	6.5	<10	<1	<0.5	<0.001	<0.0005	0.0084	0.0019	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4									✓			Refer to Mar. 2023 report for discussion of chromium.
B-904L	11/1/2022	N	To be sampled in December 2022																																																		
B-904L	12/1/2022	N	7.1	92	7.9	<10	1.6	<0.5	<0.001	0.0028	0.048	0.0013	*1.4*	0.0032	*1.4*	0.0021	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓								
B-904L	3/20/2023	N	7.02	94	8.3	<10	1.7	<0.5	<0.001	0.0029	0.014	<0.001	0.085	<0.001	*0.08*	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓								
B-930L	12/1/2022	N	7.99	102	5.73	<10	<1	<0.5	<0.001	0.0051	0.013	<0.001	<0.05	<0.001	*0.099*	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓								
B-930L	3/20/2023	N	7.72	113	6.4	<10	<1	<0.5	<0.001	0.0051	0.0096	<0.001	<0.05	<0.001	*0.071*	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓								
B-914U	11/1/2022	N	To be sampled in December 2022																																																		
B-914U	12/1/2022	N	*6.36*	78	10.23	<10	3.9	<0.5	<0.001	<0.0005	0.014	<0.001	<0.05	<0.001	<0.005	0.0012	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	✓											
B-914U	3/20/2023	N	6.7	76	10.9	45	2.5	<0.5	<0.001	0.0013	0.0093	<0.001	<0.05	<0.001	*0.087*	<0.001	<2	<0.25	0.13	0.23	0.46	**1.6**	**2**	**2.7**	0.98	**1**	2.1	**0.23**	3.5	0.18	**1.1**	0.14	1.6	2.9	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				✓				✓				Refer to Mar. 2023 report for discussion of SVOCs.
B-931U	12/1/2022	N	7.14	79	6.61	<10	2	<0.5	<0.001	0.00051	0.0089	<0.001	0.11	<0.001	0.0076	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-931U	3/20/2023	N	7.62	95	7.1	<10	1.9	<0.5	<0.001	0.00068	0.0035	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-914L	11/1/2022	N	To be sampled in December 2022																																																		
B-914L	12/1/2022	N	7.18	197	9.2	21	2.7	<0.5	<0.001	<0.0005	0.05	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	4.84	<4	7.18	<4	<4	<4							✓					
B-914L	3/20/2023	N	7.08	197	5.5	<10	14	<0.5	<0.001	<0.0005	0.038	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	13.7	19.3	17.4	12.1	**19.4**	<4	20.2	<4	<4	<4								✓				Refer to Mar. 2023 report for discussion of temperature & PFAS.
B-931L	12/1/2022	N	7.02	86	7.26	<10	2.2	<0.5	<0.001	<0.0005	0.013	<0.001	<0.05	<0.001	*0.17*	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-931L	3/20/2023	N	7.27	107	5.6	<10	2.1	<0.5	<0.001	<0.0005	0.0077	<0.001	<0.05	<0.001	*0.065*	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4												
B-915D	11/1/2022	N	Sampling not required as part of permit monitoring																																																		
B-916U	11/1/2022	N	*5.65*	76	12.5	<10	3.9	<0.5					*0.36*		0.028		<2	<0.25																																						
B-916M	11/1/2022	N	*6.09*	302	9.9	<10	56	<0.5					<0.05		<0.005		<2	<0.25																																						
B-916D	11/1/2022	N	Sampling not required as part of permit monitoring																																																		
B-917U	11/1/2022	N	6.94	46	8.9	<10	1	<0.5					<0.05		<0.005		<2	<0.25																																						
B-909	11/1/2022	N	6.8	94	9.6	<10	<1	<0.5					<0.05		<0.005		<2	<0.25																																						
B-917D	11/1/2022	N	Sampling not required as part of permit monitoring																																																		
B-918U	11/1/2022	N	*6.2*	172	13.8	<10	15	<0.5					<0.05		<0.005		<2	<0.25																																						
B-918D	11/2/2022	N	Sampling not required as part of permit monitoring																																																		
B-926U	11/1/2022	N	*6.08*	172	10.6	<10	11	<0.5					<0.05		**2.6**		<2	<0.25																																						
B-926L	11/1/2022	N	*6.16*	251	9	<10	43	<0.5					<0.05		<0.005		<2	<0.25																																						
B-927U	11/1/2022	N	*6.21*	334	15.4	<10	48	<0.5					<0.05		<0.005		<2	<0.25																																						
B-927L	11/1/2022	N	Sampling not required as part of permit monitoring																																																		
B-927M : *Well with a history of low-level DCDFM detections located proximate to the GMZ; previous results are consistent with residual impacts from the former unlined landfill/landfill infrastructure and historical results from decommissioned predecessor well B-921M.*																																																					
B-927M	11/1/2022	N	7.19	134	17	66	3.4	<0.5					**3.6**		*0.25*		10	<0.25																																						
B-918M: *Well located outside the GMZ north of the Stage I Landfill with a history of low-level PFAS and 1,4-dioxane detections. Results are consistent with residual impacts from the August 2006 leachate forcemain break, subsequently addressed as part of the Stage I Phase I Landfill Capping System Repair Project, completed in September 2009.*																																																					
B-918M	11/2/2022	N	6.51	223	10.9	<10	20	<0.5					<0.05		0.016		<2	<0.25																																						
B-918M	1/4/2023	N	6.95	190	9	<10	15	<0.5					<0.05		0.011		<2	<0.25																																						
MW-701/B-915U/B-915M: *Well located outside the GMZ proximate to the Stage I Landfill with a history of low-level PFAS detections related to historical leachate infrastructure operations corrected as part of the Leachate Management Improvement Project (LMIP), completed in May 2009. Stage I leachate infrastructure was later re-constructed as part of Stage V construction 2014-15.*																																																					
MW-701	11/2/2022	N	6.68	228	11.1	<10	8.5	0.71					<0.05		**1.2**		<2	<0.25																																						
MW-701	1/4/2023	N	6.7	230	7.5	<10	7	<0.5					<0.05		**1.2**		<2	<0.25																																						
B-915U	11/1/2022	N	6.64	146	10.4	<10	5.8	<0.5					<0.05		<0.005		<2	<0.25																																						
B-915M	11/1/2022	N	*6.21*	326	9.3	<10	65	<0.5					<0.05		<0.005		<2	<0.25																																						
Release Detection Wells Inside the GMZ – Impacts Anticipated from Former Unlined Landfill																																																					
B-919D	11/2/2022	N	7.06	96	13.8	<10	2.3	<0.5	<0.001	0.0012	0.013	<0.001	0.076	<0.001	0.026	<0.001	<2	<0.25																																						
MW-801/MW-802/MW-803/B-919U/B-919M: *Well located in the GMZ downgradient of the former unlined landfill with a history of sporadic low-level VOC detections. Low-level PFAS has also been detected at one or more locations. Results are consistent with residual impacts from the former unlined landfill.*																																																					
MW-801	11/1/2022	N	7.05	109	13.4	<10	2.4	<0.5		**0.0094**			*6.2*		**4.1**		<2	<0.25																																						
MW-802	11/1/2022	N	*6.41*	310	17.4	11	34	0.63		**0.021**			*19*		**2.7**		<2	<0.25																																						
MW-803	11/1/2022	N	*6.3*	393	18.2	59	13	1.7		**0.069**			*55*		**5.5**		<2	<0.25																																						
MW-803	11/1/2022	FD				71	13	2		**0.069**			*54*		**5.5**		<2	<0.25																																						
B-919U	11/2/2022	N	*6.49*	136	11	<10	5.3	<0.5	<0.001	<0.0005	0.01	0.0011	<0.05	<0.001	<0.005	<0.001	<2	<0.25																																						
B-919M	11/2/2022	N	6.81	154	14.4	<10	2.9	<0.5	<0.001	**0.045**	0.016	<0.001	*9.4*	<0.001	**4.5**	0.001	<2	<0.25																																						
B-928U	11/2/2022	N	6.51	216	10.8	<10	22	<0.5	<0.001	<0.0005	0.016	<0.001	<0.05	<0.001	<0.005	<0.001	<2	<0.25																																						
B-928D	11/2/2022	N	*6.28*	283	10.8	<10	31	0.64	<0.001	<0.0005	0.017	<0.001	<0.05	<0.001	<0.005	<0.001	<2	**0.71**																																						
B-304UR/B-304DR: *Wells located in the GMZ downgradient of the former unlined landfill with a history of periodic low-level 1,4-dioxane detections and periodic elevated (above GMZ background) bromide and chloride detections; Results are consistent with residual water quality effects related to the former unlined landfill and earthwork that was performed upgradient* **of these wells in summer 2019 to remove old, of these wells in summer 2019 to remove old, unused landfill infrastructure.**																																																					
B-304UR	11/2/2022	N	6.74	336	12.7	<10	22	<0.5	<0.001	<0.0005	0.018	<0.001	0.097	<0.001	<0.005	0.001	<2	**0.38**																																						
B-304DR	11/2/2022	N	*6.44*	328	15.3	<10	37	<0.5	<0.001	<0.0005	0.035	<0.001	<0.05	<0.001	**2.4**	0.01	<2	**0.43**																																						
B-304DR	11/2/2022	FD				<10	37	<0.5					<0.05		**2.3**		<2	**0.41**																																						
Groundwater Management Wells Inside the GMZ – Impacts Anticipated from Former Unlined Landfill																																																				
B-102S	11/1/2022	N	To be sampled in December 2022																																																		
B-102S	12/6/2022	N	6.85	109	10.7	56	3	<0.5	0.0013	<0.0005	0.12	<0.001	*0.44*	<0.001	**4.6**	0.0022	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	4.77	<4	<4	<4				✓								
B-102S	3/20/2023	N	6.61	115	9.3	<10	3.7	<0.5	<0.001	<0.0005	0.09	<0.001	<0.05	<0.001	**2**	0.0019	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	4.12	5.02	4.24	<4	5.5	4.82	<4	<4				✓								Refer to Mar. 2023 report for discussion of PFAS.
B-102D	11/1/2022	N	To be sampled in December 2022																																																		
B-102D	12/1/2022	N	*6.08*	89	10.09	<10	1.7	<0.5	<0.001	**0.061**	0.0096	<0.001	*9.9*	<0.001	**1.2**	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	✓			✓								

TABLE 1
Evaluation of Background Exceedances – Groundwater Samples – March 2023
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Sample Location	Sample Date	Sample Type	SU	uS/cm	C	mg/L										ug/L																				ng/L									Inferred Context for Background Exceedance										Comments
			pH	Specific Conductance	Temperature	Chemical Oxygen Demand (COD)	Chloride	Total Kjeldahl Nitrogen (TKN)	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Chromium, Dissolved	Iron, Dissolved	Lead, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Dichlorodifluoromethane (CFC12)	Dioxane (1,4-)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Perfluorobutanoic Acid (PFBA) [3]	Perfluoropentanoic Acid (PFPeA) [4]	Perfluorohexanoic Acid (PFHxA) [5]	Perfluoroheptanoic Acid (PFHpA) [6]	Perfluorooctanoic Acid (PFOA) [7]	Perfluorononanoic Acid (PFNA) [8]	Perfluorobutanesulfonic Acid (PFBS) [4S]	Perfluorohexanesulfonic acid (PFHxS) [6S]	Perfluorooctanesulfonic acid (PFOS) [8S]	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1	2	3	4	5	6	7	8	9	10	11	
GW-1 (AGQS)									0.006	0.005	2	0.1		0.015	0.3	0.1	1000	0.32	420	420	2100	0.1	0.2	0.1	210	0.5	5	0.1	280	280	0.1	100	210	210					12	11		18	15														
SMCL			6.5-8.5				250						0.3		0.05																																					
Background 2022-11			6.5-9.3	186	5.6-13.5	20	4	0.92	<0.001	0.0011	0.025	0.0014	0.64	<0.001	0.19	0.0027	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	pH below background downgradient of/adjacent to lined landfill; pH generally 5.2 to 6.2 s.u.	pH elevated due to grout used in monitoring well construction; grout may also result in elevated specific conductance.	Temperature above background inferred to be related to location of well downgradient of/adjacent to lined landfill area.	Periodically or consistently elevated concentrations of metals (typically, but not limited to naturally-occurring arsenic, manganese, iron) consistent with residual water quality effects related to the former unlined landfill, principally chemically-reducing conditions.	Periodically or consistently elevated chloride (and sometimes also specific conductance) primarily at shallow locations near or downgradient of roadways inferred to be in part or in whole related to road salting/vehicle traffic and associated soil disturbance. Deeper intervals may also indicate elevated chloride concentrations within the GMZ.	Periodically or consistently elevated chloride (and sometimes also specific conductance) at intermediate and deep wells outside the GMZ, and generally northwest of the landfill. These intermediate and deep wells sporadically indicate the presence of anthropogenic influence (e.g., sporadic detection of VOCs presumed to be related to earthwork associated with previous phases of landfill development), and are inferred to be completed in groundwater intervals representative of longer flow paths/travel times. As such, results from these monitoring wells are inferred to be representative of historical conditions which may no longer exist at the site.	Periodically or frequently detected COD consistent with residual water quality effects related to the former unlined landfill.	TKN consistent with residual water quality effects related to the former unlined landfill.	Shallow or intermediate well with sporadic nitrate detection; inferred to be related to hydroseeding, vegetation clearing, soil disturbance, or other site operations.	History of low-level PFAS inside the GMZ related to the presence of the former unlined landfill.	Low-level detections of extended metals list analytes (primarily barium and chromium) at locations adjacent to/downgradient of lined landfill areas; inferred to be related to naturally-occurring metals in soil with concentrations possibly increased by mineral weathering related to earthwork associated with previous phases of landfill development.	
B-102D	3/20/2023	N	6.8	105	11.5	<10	1.6	0.61	<0.001	0.06	0.0092	<0.001	*9.9*	<0.001	*1.2*	<0.001	<2	<0.25	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4											
B-103S	11/1/2022	N	6.87	152	13.1	<10	9.5	<0.5					*9.7*		*2.6*		<2	<0.25																																					
B-103D	11/1/2022	N	6.97	101	12.9	<10	2	<0.5					*4.5*		*1.1*		<2	<0.25																																					
MW-604	11/2/2022	N	7.18	298	12.9	<10	25	<0.5	<0.001	0.00061	0.091	<0.001	<0.05	<0.001	*0.052*	<0.001	<2	<0.25																	4.01	4.38	6.58	5.87	11	<4	<4	<4	<4	<4											

Notes:
1. Samples were collected by Sanborn Head on the dates indicated. Samples were analyzed by Eastern Analytical, Inc. (EAI) of Concord, New Hampshire.
Field duplicate samples are indicated by "FD" in the Sample Type column.

2. Only detected analytes which exceed background in one or more sample in the current rounds are presented herein. Blank cells for an analyte indicate not analyzed. Refer to the analytical laboratory reports for the complete list of parameters analyzed. Results are compared to their respective background values from time of sampling.

3. pH is presented in standard units (s.u.), specific conductance is presented in microSiemens per centimeter (µS/cm), and temperature is presented in degrees Celsius (C). Indicator parameter and metals results are presented in milligrams per liter (mg/L) which is equivalent to parts per million. Volatile organic compound (VOC) and Semi-volatile organic compound (SVOC) results are presented in micrograms per liter (µg/L) which is equivalent to parts per billion (ppb). PFAS results are presented in nanograms per liter (ng/L) which is equivalent to parts per trillion (ppt).

4. "S" indicates background value for bromide is 0.4 mg/L for wells within the groundwater management zone (GMZ) established for the site, and 0.1 mg/L for wells outside the GMZ.
"<" indicates the analyte was not detected above the listed laboratory reporting limit.
Blank cells indicate the sample was not analyzed for that analyte.
[3] = number of carbons in the alkyl chain for perfluorinated carboxylic acids (PFCAs). The carbon included in the carboxylic functional group is non-fluorinated and the remaining carbons (i.e., alkyl chain) are fluorinated.
[4S] = number of carbons in the alkyl chain for perfluorinated sulfonic acids (PFSAs). All of the carbons are fluorinated.

5. "GW-1" Groundwater Standards are from the New Hampshire Department of Environmental Services (NHDES) Contaminated Sites Risk Characterization and Management Policy (RCMP) (January 1998, with 2000 through 2018 revisions/addenda). GW-1 Groundwater Standards are intended to be equivalent to the AGQSs promulgated in Env-Or 600 (June 2015 with October 2016, September 2018, September 2019, May 2020, January 2021, and July 2021 amendments). For analytes where GW-1 and AGQS values differ, the values presented in this table reflect the AGQSs in the latest Env-Or 600 update. The AGQS/GW-1 Groundwater Standards are intended to be protective of groundwater as a source of drinking water.

"SMCL" refers to the USEPA Secondary Maximum Contaminant Levels as presented in the National Primary Drinking Water Standards (May 2009). The SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These analytes are not considered to present a risk to human health at the SMCL.

6. Bold values exceed the GW-1/AGQS.
Italic values exceed the SMCL.
Green shading indicates a concentration exceeds current background.
Yellow shading indicates a concentration exceeds current background for the first time.

TABLE 2
Evaluation of Background Exceedances – Stage VI Phase II Replacement Wells - December 2022 & March 2023
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Sample Location	Sample Date	Sample Type	SU	C	mg/L								ug/L															ng/L						
			pH	Temperature	Chemical Oxygen Demand (COD)	Chloride	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Chromium, Dissolved	Iron, Dissolved	Lead, Dissolved	Manganese, Dissolved	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Perfluorobutanoic Acid (PFBA) [3]	Perfluoropentanoic Acid (PFPeA) [4]	Perfluorohexanoic Acid (PFHxA) [5]	Perfluoroheptanoic Acid (PFHpA) [6]	Perfluorooctanoic Acid (PFOA) [7]	Perfluorobutanesulfonic Acid (PFBS) [4S]	Perfluorohexanesulfonic acid (PFHxS) [6S]
GW-1 (AGQS)							0.006	0.005	2	0.1		0.015	0.3	420	420	2100	0.1	0.2	0.1	210	0.5	5	0.1	280	280	0.1	100	210	210					12		18
SMCL			6.5-8.5			250					0.3		0.05																						
Background 2022-11			6.5-9.3	5.6-13.5	20	4	<0.001	0.0011	0.025	0.0014	0.64	<0.001	0.19	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0	<4.0-<5.0
Release Detection Wells Outside the GMZ																																			
B-903U	12/1/2022	N	*5.99*	6.72	<10	1.8	<0.001	<0.0005	0.011	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-903U	3/20/2023	N	7.07	7.2	<10	1.9	<0.001	<0.0005	0.0066	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-929U	12/1/2022	N	*5.29*	3.86	<10	1.2	<0.001	<0.0005	0.01	0.0011	<0.05	<0.001	0.0099	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-929U	3/20/2023	N	6.57	7.7	<10	1.8	<0.001	<0.0005	0.0065	0.0013	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-903L	12/1/2022	N	7.48	6.35	<10	<1	<0.001	**0.0077**	0.01	<0.001	<0.05	<0.001	0.041	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-903L	3/20/2023	N	7.96	7.6	<10	<1	<0.001	**0.0083**	0.0067	<0.001	<0.05	<0.001	0.037	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-929L	12/1/2022	N	*6.47*	5.59	15	1.6	<0.001	0.00051	0.015	<0.001	<0.05	<0.001	0.046	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-929L	3/20/2023	N	6.93	7.1	<10	1.7	<0.001	<0.0005	0.009	0.0012	0.091	<0.001	0.0095	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-904U	12/1/2022	N	6.57	6.62	<10	1.3	<0.001	<0.0005	0.0084	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-904U	3/20/2023	N	7.66	8.8	<10	2	<0.001	0.00055	0.004	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-930U	12/1/2022	N	7.32	5.87	<10	1.3	<0.001	<0.0005	0.013	0.0012	0.089	<0.001	0.018	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-930U	3/20/2023	N	7.26	6.5	<10	<1	<0.001	<0.0005	0.0084	0.0019	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-904L	12/1/2022	N	7.1	7.9	<10	1.6	<0.001	0.0028	0.048	0.0013	*1.4*	0.0032	***1.4***	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-904L	3/20/2023	N	7.02	8.3	<10	1.7	<0.001	0.0029	0.014	<0.001	0.085	<0.001	*0.08*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-930L	12/1/2022	N	7.99	5.73	<10	<1	<0.001	**0.0051**	0.013	<0.001	<0.05	<0.001	*0.099*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-930L	3/20/2023	N	7.72	6.4	<10	<1	<0.001	**0.0051**	0.0096	<0.001	<0.05	<0.001	*0.071*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-914U	12/1/2022	N	*6.36*	10.23	<10	3.9	<0.001	<0.0005	0.014	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-914U	3/20/2023	N	6.7	10.9	45	2.5	<0.001	0.0013	0.0093	<0.001	<0.05	<0.001	*0.087*	0.13	0.23	0.46	**1.6**	**2**	**2.7**	0.98	**1**	2.1	**0.23**	3.5	0.18	**1.1**	0.14	1.6	2.9	<4	<4	<4	<4	<4	<4	<4
B-931U	12/1/2022	N	7.14	6.61	<10	2	<0.001	0.00051	0.0089	<0.001	0.11	<0.001	0.0076	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-931U	3/20/2023	N	7.62	7.1	<10	1.9	<0.001	0.00068	0.0035	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-914L	12/1/2022	N	7.18	9.2	21	2.7	<0.001	<0.0005	0.05	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	4.84	7.18	<4
B-914L	3/20/2023	N	7.08	5.5	<10	14	<0.001	<0.0005	0.038	<0.001	<0.05	<0.001	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	13.7	19.3	17.4	12.1	**19.4**	20.2	<4
B-931L	12/1/2022	N	7.02	7.26	<10	2.2	<0.001	<0.0005	0.013	<0.001	<0.05	<0.001	*0.17*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-931L	3/20/2023	N	7.27	5.6	<10	2.1	<0.001	<0.0005	0.0077	<0.001	<0.05	<0.001	*0.065*	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
Groundwater Management Wells Inside the GMZ – Impacts Anticipated from Former Unlined Landfill																																				
B-102S	12/6/2022	N	6.85	10.7	56	3	0.0013	<0.0005	0.12	<0.001	*0.44*	<0.001	***4.6***	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	4.77	<4
B-102S	3/20/2023	N	6.61	9.3	<10	3.7	<0.001	<0.0005	0.09	<0.001	<0.05	<0.001	***2***	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	4.12	5.02	4.24	5.5	4.82
B-102D	12/1/2022	N	*6.08*	10.09	<10	1.7	<0.001	**0.061**	0.0096	<0.001	*9.9*	<0.001	***1.2***	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4
B-102D	3/20/2023	N	6.8	11.5	<10	1.6	<0.001	**0.06**	0.0092	<0.001	*9.9*	<0.001	***1.2***	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<4	<4	<4	<4	<4	<4	<4

TABLE 2
Evaluation of Background Exceedances – Stage VI Phase II Replacement Wells - December 2022 & March 2023
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Notes:
1. Samples were collected by Sanborn Head on the dates indicated. Samples were analyzed by Eastern Analytical, Inc. (EAI) of Concord, New Hampshire.

2. Only detected analytes which exceed background in one or more sample in the current rounds are presented herein. Blank cells for an analyte indicate not analyzed. Refer to the analytical laboratory reports for the complete list of parameters analyzed. Results are compared to their respective background values from time of sampling.

3. pH is presented in standard units (s.u.), and temperature is presented in degrees Celsius (C). Indicator parameter and metals results are presented in milligrams per liter (mg/L) which is equivalent to parts per million. Semi-volatile organic compound (SVOC) results are presented in micrograms per liter (µg/L) which is equivalent to parts per billion (ppb). PFAS results are presented in nanograms per liter (ng/L) which is equivalent to parts per trillion (ppt).

4. "<" indicates the analyte was not detected above the listed laboratory reporting limit.
[3] = number of carbons in the alkyl chain for perfluorinated carboxylic acids (PFCAs). The carbon included in the carboxylic functional group is non-fluorinated and the remaining carbons (i.e., alkyl chain) are fluorinated.
[4S] = number of carbons in the alkyl chain for perfluorinated sulfonic acids (PFSAs). All of the carbons are fluorinated.

5. "GW-1" Groundwater Standards are from the New Hampshire Department of Environmental Services (NHDES) Contaminated Sites Risk Characterization and Management Policy (RCMP) (January 1998, with 2000 through 2018 revisions/addenda). GW-1 Groundwater Standards are intended to be equivalent to the AGQSs promulgated in Env-Or 600 (June 2015 with October 2016, September 2018, September 2019, May 2020, January 2021, and July 2021 amendments). For analytes where GW-1 and AGQS values differ, the values presented in this table reflect the AGQSs in the latest Env-Or 600 update. The AGQS/GW-1 Groundwater Standards are intended to be protective of groundwater as a source of drinking water.

"SMCL" refers to the USEPA Secondary Maximum Contaminant Levels as presented in the National Primary Drinking Water Standards (May 2009). The SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These analytes are not considered to present a risk to human health at the SMCL.

6. Bold values exceed the GW-1/AGQS.
Italic values exceed the SMCL.
Green shading indicates a concentration exceeds current background.
Yellow shading indicates a concentration exceeds current background for the first time.

FIGURE

NOTES:

1. THE GROUNDWATER ELEVATION CONTOURS SHOWN ARE BASED ON GROUNDWATER LEVELS MEASURED BY SANBORN HEAD PERSONNEL IN WELLS SCREENED ACROSS/NEAR TO THE WATER TABLE ON MARCH 20, 2023 AND APRIL 18, 19, 2023. VARIATIONS IN GROUNDWATER ELEVATIONS ARE EXPECTED TO OCCUR DUE TO CHANGES IN PRECIPITATION, TEMPERATURE, AND OTHER FACTORS NOT EVIDENT AT THE TIME WATER LEVEL MEASUREMENTS WERE OBTAINED.

2. THE GROUNDWATER ELEVATION CONTOURS WERE DEVELOPED USING GENERALLY-ACCEPTED HYDROGEOLOGIC PRACTICES, AND ARE INTENDED TO DEPICT INFERRED TRENDS IN GROUNDWATER LEVELS CONSISTENT WITH THE AVAILABLE INFORMATION. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN AND OTHER INTERPRETATIONS ARE POSSIBLE.

LEGEND:

- GROUNDWATER MANAGEMENT ZONE
- 1311.1 — GROUNDWATER ELEVATION RECORDED AT WELL LOCATION IN MARCH 2023 (NEW STAGE VI PHASE II WELLS) AND APRIL 2023 (EXISTING WELLS)
- 1305 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE LESS CONSTRAINED)

AR-3
TIE COURSE - S 70°46'29" E 844.45'
AMMONOOSUC RIVER
AR-2
AR-1
SF-1
S-109
S-108
S-101
S-1 (MAIN SEEP)
MUCHMORE ROAD
B-928U 1289.3
B-928D
OUTFALL 2
LAUREL LANE
B-304UR 1291.5
B-304DR
MW-604 1278.1
LIMIT OF WETLANDS DELINEATED BY B.H. KEITH ASSOCIATES IN APRIL 1999
STORMWATER POND 4
B-919M
B-919U 1304.1
B-919D
B-927M
B-927U 1300.0
B-927L
OUTFALL 1
B-909 1293.0
B-917D
B-917U 1294.7
B-918D
B-918U 1303.6
B-918M
MW-803 1303.0
MW-802 1303.0
B-916M
B-916U 1312.1
B-916D
STAGE IV
PHASE I
TOWN DISTRICT II
TOWN DISTRICT V
B-103S 1303.4
B-103D
STORMWATER POND 5
B-915M
B-915U 1313.9
B-915D
STAGE V
PHASE I
MW-801 1303.9
PHASE II
PHASE II
1304.9
B-102S
B-931L
B-931U 1305.0
B-926L
B-926U 1307.0
B-102D
B-914L
STORMWWATER POND 6
STAGE II
B-914U 1307.1
PHASE I
MW-701 1315.9
APPROXIMATE EXTENT OF FORMER UNLINED LANDFILL
MW-603 1308.7
STAGE I
PHASE I
STAGE III
PHASE III
PHASE II
B-930U 1334.4
B-930L
B-904U/L 1309.9
STAGE IV
PHASE II
PHASE IV
B-903U/L 1311.6
B-929U 1333.5
B-929L
STAGE VI
B-925U 1334.7
B-925L
B-924U 1329.0
B-924L
1318.4
B-923U

GRAPHICAL SCALE
100' 50' 0 100' 200'

SANBORN HEAD

DRAWN BY:	E. WRIGHT
DESIGNED BY:	M. ESTABROOKS
REVIEWED BY:	T. WHITE
PROJECT MGR:	M. ESTABROOKS
PIC:	T. WHITE
DATE:	MAY 2023

NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.
BETHLEHEM, NEW HAMPSHIRE

PROJECT NUMBER: 1003.23

GROUNDWATER ELEVATION CONTOUR PLAN (MAR/APR 2023)

FIGURE NUMBER: 1

APPENDIX A

SUMMARY OF HISTORICAL MONITORING DATA

TABLE A.1
Water Level - Depth and Elevation Post-2009
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-102S	04-07-2009	1344.77	TPVC	36.30	1308.47
B-102S	07-14-2009	1344.77	TPVC	36.22	1308.55
B-102S	11-10-2009	1344.77	TPVC	36.44	1308.33
B-102S	04-08-2010	1344.77	TPVC	36.57	1308.20
B-102S	07-13-2010	1344.77	TPVC	36.27	1308.50
B-102S	11-02-2010	1344.77	TPVC	36.21	1308.56
B-102S	04-18-2011	1344.77	TPVC	34.90	1309.87
B-102S	07-13-2011	1344.77	TPVC	35.40	1309.37
B-102S	11-02-2011	1344.77	TPVC	36.21	1308.56
B-102S	04-10-2012	1344.77	TPVC	37.51	1307.26
B-102S	07-16-2012	1344.77	TPVC	37.84	1306.93
B-102S	11-06-2012	1344.77	TPVC	38.18	1306.59
B-102S	04-10-2013	1344.77	TPVC	38.55	1306.22
B-102S	07-08-2013	1344.77	TPVC	38.11	1306.66
B-102S	11-07-2013	1344.77	TPVC	37.80	1306.97
B-102S	04-22-2014	1344.77	TPVC	37.05	1307.72
B-102S	07-14-2014	1344.77	TPVC	37.70	1307.07
B-102S	11-04-2014	1344.77	TPVC	37.97	1306.80
B-102S	04-13-2015	1344.77	TPVC	38.50	1306.27
B-102S	07-21-2015	1344.77	TPVC	38.56	1306.21
B-102S	11-10-2015	1344.77	TPVC	38.90	1305.87
B-102S	04-11-2016	1344.77	TPVC	39.09	1305.68
B-102S	07-11-2016	1344.77	TPVC	38.95	1305.82
B-102S	11-07-2016	1344.77	TPVC	39.39	1305.38
B-102S	04-03-2017	1344.77	TPVC	39.61	1305.16
B-102S	07-25-2017	1344.77	TPVC	39.22	1305.55
B-102S	11-09-2017	1344.77	TPVC	38.90	1305.87
B-102S	04-24-2018	1344.77	TPVC	38.91	1305.86
B-102S	07-11-2018	1344.77	TPVC	38.95	1305.82
B-102S	11-05-2018	1344.77	TPVC	39.28	1305.49
B-102S	04-23-2019	1344.77	TPVC	38.91	1305.86
B-102S	07-08-2019	1344.77	TPVC	38.92	1305.85
B-102S	11-06-2019	1344.77	TPVC	38.72	1306.05
B-102S	04-20-2020	1344.77	TPVC	38.30	1306.47
B-102S	07-16-2020	1344.77	TPVC	38.46	1306.31
B-102S	11-03-2020	1344.77	TPVC	38.63	1306.14
B-102S	04-20-2021	1344.77	TPVC	38.83	1305.94
B-102S	07-05-2021	1344.77	TPVC	39.25	1305.52
B-102S	09-29-2021	1344.77	TPVC	39.63	1305.14
B-102S	11-01-2021	1344.77	TPVC	39.86	1304.91
B-102S	02-22-2022	1344.77	TPVC	39.89	1304.88
B-102S	04-18-2022	1344.77	TPVC	39.77	1305.00
B-102S	04-20-2022	1344.77	TPVC	39.78	1304.99
B-102S	06-08-2022	1344.77	TPVC	39.92	1304.85
B-102S	07-13-2022	1344.77	TPVC	40.03	1304.74
B-102S	11-01-2022	1344.77	TPVC	40.36	1304.41
B-102S	12-06-2022	1344.77	TPVC	40.17	1304.60
B-102S	03-20-2023	1344.77	TPVC	39.90	1304.87
B-102D	04-07-2009	1344.02	TPVC	34.91	1309.11
B-102D	07-14-2009	1344.02	TPVC	34.83	1309.19
B-102D	11-10-2009	1344.02	TPVC	35.08	1308.94
B-102D	04-08-2010	1344.02	TPVC	34.94	1309.08
B-102D	07-13-2010	1344.02	TPVC	34.54	1309.48
B-102D	11-02-2010	1344.02	TPVC	34.57	1309.45
B-102D	04-18-2011	1344.02	TPVC	33.86	1310.16
B-102D	07-13-2011	1344.02	TPVC	33.75	1310.27
B-102D	11-02-2011	1344.02	TPVC	34.63	1309.39

TABLE A.1
Water Level - Depth and Elevation Post-2009
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-102D	04-10-2012	1344.02	TPVC	35.91	1308.11
B-102D	07-16-2012	1344.02	TPVC	36.11	1307.91
B-102D	11-06-2012	1344.02	TPVC	36.44	1307.58
B-102D	04-10-2013	1344.02	TPVC	36.80	1307.22
B-102D	07-08-2013	1344.02	TPVC	38.38	1305.64
B-102D	11-07-2013	1344.02	TPVC	35.80	1308.22
B-102D	04-22-2014	1344.02	TPVC	35.69	1308.33
B-102D	07-14-2014	1344.02	TPVC	35.96	1308.06
B-102D	11-04-2014	1344.02	TPVC	36.37	1307.65
B-102D	04-13-2015	1344.02	TPVC	36.94	1307.08
B-102D	07-21-2015	1344.02	TPVC	36.93	1307.09
B-102D	11-10-2015	1344.02	TPVC	37.20	1306.82
B-102D	04-11-2016	1344.02	TPVC	37.37	1306.65
B-102D	07-11-2016	1344.02	TPVC	37.23	1306.79
B-102D	11-07-2016	1344.02	TPVC	37.69	1306.33
B-102D	04-03-2017	1344.02	TPVC	38.06	1305.96
B-102D	07-25-2017	1344.02	TPVC	37.56	1306.46
B-102D	11-09-2017	1344.02	TPVC	37.38	1306.64
B-102D	04-24-2018	1344.02	TPVC	37.36	1306.66
B-102D	07-11-2018	1344.02	TPVC	37.20	1306.82
B-102D	11-05-2018	1344.02	TPVC	37.58	1306.44
B-102D	04-23-2019	1344.02	TPVC	37.55	1306.47
B-102D	07-08-2019	1344.02	TPVC	37.24	1306.78
B-102D	11-06-2019	1344.02	TPVC	37.16	1306.86
B-102D	04-20-2020	1344.02	TPVC	36.89	1307.13
B-102D	07-16-2020	1344.02	TPVC	36.88	1307.14
B-102D	11-03-2020	1344.02	TPVC	37.30	1306.72
B-102D	04-20-2021	1344.02	TPVC	37.39	1306.63
B-102D	07-05-2021	1344.02	TPVC	44.32	1299.70
B-102D	09-29-2021	1344.02	TPVC	37.98	1306.04
B-102D	11-01-2021	1344.02	TPVC	38.23	1305.79
B-102D	04-20-2022	1344.02	TPVC	38.34	1305.68
B-102D	07-13-2022	1344.02	TPVC	40.42	1303.60
B-102D	11-01-2022	1344.02	TPVC	38.69	1305.33
B-102D	12-01-2022	1344.02	TPVC	38.78	1305.24
B-102D	03-20-2023	1344.02	TPVC	38.21	1305.81
B-903U	04-07-2009	1384.77	TPVC	70.36	1314.41
B-903U	07-14-2009	1384.77	TPVC	70.06	1314.71
B-903U	11-10-2009	1384.77	TPVC	70.36	1314.41
B-903U	04-08-2010	1384.77	TPVC	70.59	1314.18
B-903U	07-14-2010	1384.77	TPVC	69.96	1314.81
B-903U	11-02-2010	1384.77	TPVC	70.20	1314.57
B-903U	04-19-2011	1384.77	TPVC	70.15	1314.62
B-903U	07-13-2011	1384.77	TPVC	69.20	1315.57
B-903U	11-02-2011	1384.77	TPVC	70.21	1314.56
B-903U	04-11-2012	1384.77	TPVC	71.65	1313.12
B-903U	07-17-2012	1384.77	TPVC	71.61	1313.16
B-903U	11-07-2012	1384.77	TPVC	71.86	1312.91
B-903U	12-05-2012	1384.77	TPVC	71.99	1312.78
B-903U	04-10-2013	1384.77	TPVC	72.12	1312.65
B-903U	07-09-2013	1384.77	TPVC	71.87	1312.90
B-903U	11-06-2013	1384.77	TPVC	71.21	1313.56
B-903U	04-22-2014	1384.77	TPVC	71.66	1313.11
B-903U	07-15-2014	1384.77	TPVC	71.35	1313.42
B-903U	11-04-2014	1384.77	TPVC	71.75	1313.02
B-903U	04-15-2015	1384.77	TPVC	72.53	1312.24
B-903U	07-22-2015	1384.77	TPVC	72.35	1312.42

TABLE A.1
Water Level - Depth and Elevation Post-2009
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
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Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-903U	11-10-2015	1384.77	TPVC	72.45	1312.32
B-903U	04-11-2016	1384.77	TPVC	72.60	1312.17
B-903U	07-11-2016	1384.77	TPVC	72.34	1312.43
B-903U	11-07-2016	1384.77	TPVC	72.85	1311.92
B-903U	04-03-2017	1384.77	TPVC	73.38	1311.39
B-903U	07-26-2017	1384.77	TPVC	72.74	1312.03
B-903U	11-09-2017	1384.77	TPVC	72.59	1312.18
B-903U	04-24-2018	1384.77	TPVC	72.64	1312.13
B-903U	07-11-2018	1384.77	TPVC	72.16	1312.61
B-903U	11-05-2018	1384.77	TPVC	72.58	1312.19
B-903U	04-22-2019	1384.77	TPVC	73.11	1311.66
B-903U	07-08-2019	1384.77	TPVC	72.24	1312.53
B-903U	11-06-2019	1384.77	TPVC	72.41	1312.36
B-903U	04-20-2020	1384.77	TPVC	72.27	1312.50
B-903U	07-16-2020	1384.77	TPVC	71.87	1312.90
B-903U	11-04-2020	1384.77	TPVC	72.40	1312.37
B-903U	04-20-2021	1384.77	TPVC	72.65	1312.12
B-903U	07-07-2021	1384.77	TPVC	72.64	1312.13
B-903U	11-02-2021	1384.77	TPVC	73.21	1311.56
B-903U	04-20-2022	1384.77	TPVC	73.65	1311.12
B-903U	07-12-2022	1384.77	TPVC	73.19	1311.58
B-903U	11-01-2022	1384.77	TPVC	73.68	1311.09
B-903U	12-01-2022	1384.77	TPVC	73.78	1310.99
B-903U	03-20-2023	1384.77	TPVC	73.16	1311.61
B-929U	11-02-2022	1376.06	TPVC	43.13	1332.93
B-929U	12-01-2022	1376.06	TPVC	43.54	1332.52
B-929U	03-20-2023	1376.06	TPVC	42.54	1333.52
B-903L	04-07-2009	1384.51	TPVC	70.15	1314.36
B-903L	07-14-2009	1384.51	TPVC	69.85	1314.66
B-903L	11-10-2009	1384.51	TPVC	70.15	1314.36
B-903L	04-08-2010	1384.51	TPVC	70.45	1314.06
B-903L	07-14-2010	1384.51	TPVC	70.40	1314.11
B-903L	04-19-2011	1384.51	TPVC	70.10	1314.41
B-903L	07-13-2011	1384.51	TPVC	69.10	1315.41
B-903L	11-02-2011	1384.51	TPVC	70.09	1314.42
B-903L	04-11-2012	1384.51	TPVC	71.64	1312.87
B-903L	07-18-2012	1384.51	TPVC	71.58	1312.93
B-903L	11-07-2012	1384.51	TPVC	71.78	1312.73
B-903L	12-05-2012	1384.51	TPVC	71.90	1312.61
B-903L	04-10-2013	1384.51	TPVC	72.09	1312.42
B-903L	07-09-2013	1384.51	TPVC	71.83	1312.68
B-903L	11-06-2013	1384.51	TPVC	71.14	1313.37
B-903L	04-22-2014	1384.51	TPVC	71.64	1312.87
B-903L	07-15-2014	1384.51	TPVC	71.44	1313.07
B-903L	11-04-2014	1384.51	TPVC	71.78	1312.73
B-903L	04-15-2015	1384.51	TPVC	72.59	1311.92
B-903L	07-21-2015	1384.51	TPVC	72.40	1312.11
B-903L	11-10-2015	1384.51	TPVC	72.49	1312.02
B-903L	04-11-2016	1384.51	TPVC	72.63	1311.88
B-903L	07-11-2016	1384.51	TPVC	72.39	1312.12
B-903L	11-07-2016	1384.51	TPVC	72.89	1311.62
B-903L	04-03-2017	1384.51	TPVC	73.43	1311.08
B-903L	07-26-2017	1384.51	TPVC	72.78	1311.73
B-903L	11-09-2017	1384.51	TPVC	72.62	1311.89
B-903L	04-24-2018	1384.51	TPVC	72.65	1311.86
B-903L	07-11-2018	1384.51	TPVC	72.11	1312.40

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Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-903L	11-05-2018	1384.51	TPVC	72.59	1311.92
B-903L	04-22-2019	1384.51	TPVC	73.15	1311.36
B-903L	07-08-2019	1384.51	TPVC	72.28	1312.23
B-903L	11-06-2019	1384.51	TPVC	72.43	1312.08
B-903L	04-20-2020	1384.51	TPVC	72.27	1312.24
B-903L	07-16-2020	1384.51	TPVC	71.93	1312.58
B-903L	11-04-2020	1384.51	TPVC	72.43	1312.08
B-903L	04-20-2021	1384.51	TPVC	72.68	1311.83
B-903L	07-07-2021	1384.51	TPVC	72.68	1311.83
B-903L	11-02-2021	1384.51	TPVC	73.26	1311.25
B-903L	04-20-2022	1384.51	TPVC	73.76	1310.75
B-903L	07-12-2022	1384.51	TPVC	73.22	1311.29
B-903L	11-02-2022	1384.51	TPVC	73.80	1310.71
B-903L	12-01-2022	1384.51	TPVC	73.83	1310.68
B-903L	03-20-2023	1384.51	TPVC	73.23	1311.28
B-929L	11-02-2022	1375.99	TPVC	47.04	1328.95
B-929L	12-01-2022	1375.99	TPVC	46.97	1329.02
B-929L	03-20-2023	1375.99	TPVC	46.87	1329.12
B-904U	04-07-2009	1379.79	TPVC	66.88	1312.91
B-904U	07-14-2009	1379.79	TPVC	66.65	1313.14
B-904U	11-10-2009	1379.79	TPVC	66.88	1312.91
B-904U	04-08-2010	1379.79	TPVC	67.13	1312.66
B-904U	07-14-2010	1379.79	TPVC	66.61	1313.18
B-904U	11-02-2010	1379.79	TPVC	66.69	1313.10
B-904U	04-19-2011	1379.79	TPVC	66.62	1313.17
B-904U	07-13-2011	1379.79	TPVC	65.80	1313.99
B-904U	10-04-2011	1379.79	TPVC	66.48	1313.31
B-904U	11-02-2011	1379.79	TPVC	66.69	1313.10
B-904U	12-08-2011	1379.79	TPVC	67.10	1312.69
B-904U	01-10-2012	1379.79	TPVC	67.20	1312.59
B-904U	02-07-2012	1379.79	TPVC	67.52	1312.27
B-904U	03-06-2012	1379.79	TPVC	67.81	1311.98
B-904U	04-11-2012	1379.79	TPVC	68.14	1311.65
B-904U	07-17-2012	1379.79	TPVC	68.18	1311.61
B-904U	11-07-2012	1379.79	TPVC	68.48	1311.31
B-904U	12-05-2012	1379.79	TPVC	68.63	1311.16
B-904U	04-10-2013	1379.79	TPVC	68.87	1310.92
B-904U	07-09-2013	1379.79	TPVC	68.53	1311.26
B-904U	11-06-2013	1379.79	TPVC	67.80	1311.99
B-904U	04-22-2014	1379.79	TPVC	68.07	1311.72
B-904U	07-15-2014	1379.79	TPVC	67.97	1311.82
B-904U	11-04-2014	1379.79	TPVC	68.35	1311.44
B-904U	04-15-2015	1379.79	TPVC	69.10	1310.69
B-904U	07-22-2015	1379.79	TPVC	69.02	1310.77
B-904U	11-10-2015	1379.79	TPVC	69.08	1310.71
B-904U	04-11-2016	1379.79	TPVC	69.28	1310.51
B-904U	07-11-2016	1379.79	TPVC	69.06	1310.73
B-904U	11-07-2016	1379.79	TPVC	69.51	1310.28
B-904U	04-03-2017	1379.79	TPVC	70.00	1309.79
B-904U	07-26-2017	1379.79	TPVC	69.46	1310.33
B-904U	11-09-2017	1379.79	TPVC	69.25	1310.54
B-904U	04-24-2018	1379.79	TPVC	69.31	1310.48
B-904U	07-11-2018	1379.79	TPVC	68.89	1310.90
B-904U	11-05-2018	1379.79	TPVC	69.25	1310.54
B-904U	04-22-2019	1379.79	TPVC	69.68	1310.11
B-904U	07-08-2019	1379.79	TPVC	68.03	1311.76

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Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-904U	11-06-2019	1379.79	TPVC	69.11	1310.68
B-904U	04-20-2020	1379.79	TPVC	68.89	1310.90
B-904U	07-16-2020	1379.79	TPVC	68.59	1311.20
B-904U	11-04-2020	1379.79	TPVC	69.00	1310.79
B-904U	04-20-2021	1379.79	TPVC	69.28	1310.51
B-904U	07-06-2021	1379.79	TPVC	69.31	1310.48
B-904U	11-02-2021	1379.79	TPVC	69.90	1309.89
B-904U	04-20-2022	1379.79	TPVC	70.29	1309.50
B-904U	07-12-2022	1379.79	TPVC	69.96	1309.83
B-904U	11-01-2022	1379.79	TPVC	70.41	1309.38
B-904U	12-01-2022	1379.79	TPVC	70.50	1309.29
B-904U	03-20-2023	1379.79	TPVC	69.92	1309.87
B-930U	12-01-2022	1376.69	TPVC	42.09	1334.60
B-930U	03-20-2023	1376.69	TPVC	42.33	1334.36
B-904L	04-07-2009	1379.79	TPVC	67.00	1312.79
B-904L	07-14-2009	1379.79	TPVC	74.27	1305.52
B-904L	11-10-2009	1379.79	TPVC	67.09	1312.70
B-904L	04-08-2010	1379.79	TPVC	67.29	1312.50
B-904L	07-13-2010	1379.79	TPVC	66.77	1313.02
B-904L	11-03-2010	1379.79	TPVC	66.80	1312.99
B-904L	04-19-2011	1379.79	TPVC	66.76	1313.03
B-904L	07-13-2011	1379.79	TPVC	65.90	1313.89
B-904L	11-02-2011	1379.79	TPVC	66.96	1312.83
B-904L	04-11-2012	1379.79	TPVC	68.36	1311.43
B-904L	07-17-2012	1379.79	TPVC	68.36	1311.43
B-904L	11-07-2012	1379.79	TPVC	68.66	1311.13
B-904L	12-05-2012	1379.79	TPVC	68.77	1311.02
B-904L	04-10-2013	1379.79	TPVC	69.05	1310.74
B-904L	07-09-2013	1379.79	TPVC	68.63	1311.16
B-904L	11-06-2013	1379.79	TPVC	67.91	1311.88
B-904L	04-22-2014	1379.79	TPVC	68.19	1311.60
B-904L	07-15-2014	1379.79	TPVC	68.15	1311.64
B-904L	11-04-2014	1379.79	TPVC	68.45	1311.34
B-904L	04-15-2015	1379.79	TPVC	69.28	1310.51
B-904L	07-21-2015	1379.79	TPVC	69.14	1310.65
B-904L	11-10-2015	1379.79	TPVC	69.25	1310.54
B-904L	04-11-2016	1379.79	TPVC	69.38	1310.41
B-904L	07-11-2016	1379.79	TPVC	69.19	1310.60
B-904L	11-07-2016	1379.79	TPVC	69.71	1310.08
B-904L	04-03-2017	1379.79	TPVC	70.19	1309.60
B-904L	07-26-2017	1379.79	TPVC	69.60	1310.19
B-904L	11-09-2017	1379.79	TPVC	69.45	1310.34
B-904L	04-24-2018	1379.79	TPVC	69.40	1310.39
B-904L	07-11-2018	1379.79	TPVC	69.02	1310.77
B-904L	11-05-2018	1379.79	TPVC	69.50	1310.29
B-904L	04-22-2019	1379.79	TPVC	69.99	1309.80
B-904L	07-08-2019	1379.79	TPVC	69.20	1310.59
B-904L	11-06-2019	1379.79	TPVC	69.23	1310.56
B-904L	04-20-2020	1379.79	TPVC	69.02	1310.77
B-904L	07-16-2020	1379.79	TPVC	68.77	1311.02
B-904L	11-04-2020	1379.79	TPVC	69.29	1310.50
B-904L	04-20-2021	1379.79	TPVC	69.52	1310.27
B-904L	07-06-2021	1379.79	TPVC	69.54	1310.25
B-904L	11-02-2021	1379.79	TPVC	70.14	1309.65
B-904L	04-20-2022	1379.79	TPVC	70.51	1309.28
B-904L	07-12-2022	1379.79	TPVC	70.11	1309.68

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Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-904L	11-01-2022	1379.79	TPVC	70.62	1309.17
B-904L	12-01-2022	1379.79	TPVC	70.69	1309.10
B-904L	03-20-2023	1379.79	TPVC	70.13	1309.66
B-930L	12-01-2022	1376.93	TPVC	69.25	1307.68
B-930L	03-20-2023	1376.93	TPVC	68.67	1308.26
B-914U	04-07-2009	1347.55	TPVC	36.95	1310.60
B-914U	07-14-2009	1347.55	TPVC	36.86	1310.69
B-914U	11-10-2009	1347.55	TPVC	37.02	1310.53
B-914U	04-08-2010	1347.55	TPVC	37.24	1310.31
B-914U	07-14-2010	1347.55	TPVC	36.75	1310.80
B-914U	11-02-2010	1347.55	TPVC	36.82	1310.73
B-914U	04-19-2011	1347.55	TPVC	36.48	1311.07
B-914U	07-13-2011	1347.55	TPVC	35.95	1311.60
B-914U	11-02-2011	1347.55	TPVC	36.85	1310.70
B-914U	04-10-2012	1347.55	TPVC	38.16	1309.39
B-914U	07-18-2012	1347.55	TPVC	38.49	1309.06
B-914U	11-06-2012	1347.55	TPVC	38.68	1308.87
B-914U	04-11-2013	1347.55	TPVC	39.04	1308.51
B-914U	07-09-2013	1347.55	TPVC	38.77	1308.78
B-914U	11-07-2013	1347.55	TPVC	38.05	1309.50
B-914U	04-22-2014	1347.55	TPVC	38.10	1309.45
B-914U	07-14-2014	1347.55	TPVC	38.18	1309.37
B-914U	11-04-2014	1347.55	TPVC	35.80	1311.75
B-914U	04-14-2015	1347.55	TPVC	39.19	1308.36
B-914U	07-22-2015	1347.55	TPVC	39.20	1308.35
B-914U	11-10-2015	1347.55	TPVC	39.45	1308.10
B-914U	04-11-2016	1347.55	TPVC	39.54	1308.01
B-914U	07-11-2016	1347.55	TPVC	39.51	1308.04
B-914U	11-07-2016	1347.55	TPVC	39.94	1307.61
B-914U	04-03-2017	1347.55	TPVC	40.29	1307.26
B-914U	07-26-2017	1347.55	TPVC	39.78	1307.77
B-914U	11-09-2017	1347.55	TPVC	39.68	1307.87
B-914U	04-24-2018	1347.55	TPVC	39.63	1307.92
B-914U	07-11-2018	1347.55	TPVC	39.49	1308.06
B-914U	11-05-2018	1347.55	TPVC	39.90	1307.65
B-914U	04-22-2019	1347.55	TPVC	39.87	1307.68
B-914U	07-08-2019	1347.55	TPVC	39.54	1308.01
B-914U	11-06-2019	1347.55	TPVC	39.38	1308.17
B-914U	04-20-2020	1347.55	TPVC	39.09	1308.46
B-914U	07-16-2020	1347.55	TPVC	39.13	1308.42
B-914U	11-04-2020	1347.55	TPVC	39.38	1308.17
B-914U	04-20-2021	1347.55	TPVC	39.59	1307.96
B-914U	07-05-2021	1347.55	TPVC	39.94	1307.61
B-914U	09-29-2021	1347.55	TPVC	40.25	1307.30
B-914U	11-01-2021	1347.55	TPVC	40.48	1307.07
B-914U	04-20-2022	1347.55	TPVC	40.41	1307.14
B-914U	06-08-2022	1347.55	TPVC	40.52	1307.03
B-914U	07-13-2022	1347.55	TPVC	40.65	1306.90
B-914U	11-01-2022	1347.55	TPVC	40.81	1306.74
B-914U	12-01-2022	1347.55	TPVC	40.92	1306.63
B-914U	03-20-2023	1347.55	TPVC	40.41	1307.14
B-931U	11-02-2022	1331.86	TPVC	27.32	1304.54
B-931U	12-01-2022	1331.86	TPVC	27.31	1304.55
B-931U	03-20-2023	1331.86	TPVC	26.85	1305.01

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Location	Date	Reference Elevation (ft)	Reference Point	Depth to Water (ft)	Water Level Elevation (ft)
B-914L	04-07-2009	1348.64	TPVC	39.48	1309.16
B-914L	07-14-2009	1348.64	TPVC	39.33	1309.31
B-914L	11-10-2009	1348.64	TPVC	39.63	1309.01
B-914L	04-08-2010	1348.64	TPVC	39.76	1308.88
B-914L	07-14-2010	1348.64	TPVC	39.47	1309.17
B-914L	11-03-2010	1348.64	TPVC	39.53	1309.11
B-914L	04-19-2011	1348.64	TPVC	37.82	1310.82
B-914L	07-13-2011	1348.64	TPVC	38.56	1310.08
B-914L	11-02-2011	1348.64	TPVC	39.45	1309.19
B-914L	04-10-2012	1348.64	TPVC	40.80	1307.84
B-914L	07-18-2012	1348.64	TPVC	41.10	1307.54
B-914L	11-06-2012	1348.64	TPVC	41.28	1307.36
B-914L	04-11-2013	1348.64	TPVC	41.70	1306.94
B-914L	07-09-2013	1348.64	TPVC	41.26	1307.38
B-914L	11-07-2013	1348.64	TPVC	40.57	1308.07
B-914L	04-22-2014	1348.64	TPVC	40.62	1308.02
B-914L	07-15-2014	1348.64	TPVC	40.82	1307.82
B-914L	11-04-2014	1348.64	TPVC	41.05	1307.59
B-914L	04-14-2015	1348.64	TPVC	41.67	1306.97
B-914L	07-22-2015	1348.64	TPVC	41.72	1306.92
B-914L	11-10-2015	1348.64	TPVC	41.92	1306.72
B-914L	04-11-2016	1348.64	TPVC	42.07	1306.57
B-914L	07-12-2016	1348.64	TPVC	41.91	1306.73
B-914L	11-07-2016	1348.64	TPVC	42.42	1306.22
B-914L	04-03-2017	1348.64	TPVC	42.82	1305.82
B-914L	07-26-2017	1348.64	TPVC	42.24	1306.40
B-914L	11-09-2017	1348.64	TPVC	42.14	1306.50
B-914L	04-24-2018	1348.64	TPVC	42.08	1306.56
B-914L	07-11-2018	1348.64	TPVC	41.90	1306.74
B-914L	11-05-2018	1348.64	TPVC	42.30	1306.34
B-914L	04-22-2019	1348.64	TPVC	41.53	1307.11
B-914L	07-08-2019	1348.64	TPVC	41.93	1306.71
B-914L	11-06-2019	1348.64	TPVC	41.86	1306.78
B-914L	04-20-2020	1348.64	TPVC	41.66	1306.98
B-914L	07-16-2020	1348.64	TPVC	41.64	1307.00
B-914L	11-04-2020	1348.64	TPVC	41.97	1306.67
B-914L	04-20-2021	1348.64	TPVC	42.15	1306.49
B-914L	07-05-2021	1348.64	TPVC	42.41	1306.23
B-914L	09-29-2021	1348.64	TPVC	42.73	1305.91
B-914L	11-01-2021	1348.64	TPVC	42.95	1305.69
B-914L	04-20-2022	1348.64	TPVC	42.40	1306.24
B-914L	07-13-2022	1348.64	TPVC	43.13	1305.51
B-914L	11-01-2022	1348.64	TPVC	43.43	1305.21
B-914L	12-01-2022	1348.64	TPVC	42.68	1305.96
B-914L	03-20-2023	1348.64	TPVC	42.94	1305.70
B-931L	11-02-2022	1332.07	TPVC	27.67	1304.40
B-931L	12-01-2022	1332.07	TPVC	27.58	1304.49
B-931L	03-20-2023	1332.07	TPVC	27.07	1305.00

1. Sampling performed prior to November 1993 was performed and tabulated by GZA GeoEnvironmental, Inc. of Manchester, New Hampshire. Subsequent sampling and tabulation was performed by Sanborn Head.
2. Elevations are referenced to NAVD 88. To convert to old site datum subtract 6.83 feet.
3. Refer to previous annual reports for historical (generally prior to 2009) reference elevations for locations indicated with a "-".

TABLE A.2
Summary of Monitoring Data – Groundwater Samples
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

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Summary of Monitoring Data – Groundwater Samples
North Country Environmental Services, Inc.
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Permit No. GWP-198704033-B-007

| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

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| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

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North Country Environmental Services, Inc.
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| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

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| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

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Summary of Monitoring Data – Groundwater Samples
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

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North Country Environmental Services, Inc.
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Permit No. GWP-198704033-B-007

| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

TABLE A.2
Summary of Monitoring Data – Groundwater Samples
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

TABLE A.2
Summary of Monitoring Data – Groundwater Samples
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

| Sample Location | Sample Date | Sample Type | Field Parameters / Indicator Parameters / Metals | | | | | | | | | | | | | | | | | | | | | | | | | | Volatile Organic Compounds | | | | | | | | | | | | | | | | | | |

TABLE A.3
Summary of PFAS Groundwater Analytical Results
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Sample Location	Sample Date	Sample Type	Concentrations in ng/L																									
			Perfluoroalkyl Carboxylic Acids											Perfluoroalkyl Sulfonic Acids							Fluorotelomers			Perfluoroalkane Sulfonamides		Perfluoroalkane Sulfonyl Substances		Total of Regulated PFAS	Total PFAS
			Perfluorobutanoic Acid (PFBA) [3]	Perfluoropentanoic Acid (PFPeA) [4]	Perfluorohexanoic Acid (PFHxA) [5]	Perfluoroheptanoic Acid (PFHpA) [6]	Perfluorooctanoic Acid (PFOA) [7]	Perfluorononanoic Acid (PFNA) [8]	Perfluorodecanoic Acid (PFDA) [9]	Perfluoroundecanoic Acid (PFUnA) [10]	Perfluorododecanoic Acid (PFDoA) [11]	Perfluorotridecanoic Acid (PFTrA) [12]	Perfluorotetradecanoic Acid (PFTeA) [13]	Perfluorobutanesulfonic Acid (PFBS) [4S]	Perfluoropentanesulfonic Acid (PFPeS) [5S]	Perfluorohexanesulfonic Acid (PFHxS) [6S]	Perfluoroheptanesulfonic Acid (PFHpS) [7S]	Perfluorooctanesulfonic Acid (PFOS) [8S]	Perfluorononanesulfonic Acid (PFNS) [9S]	Perfluorodecanesulfonic Acid (PFDS) [10S]	1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	Perfluorooctanesulfonamide (FOSA)	N-methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)		
CAS Number			375-22-4	2706-90-3	307-24-4	375-85-9	335-67-1	375-95-1	335-76-2	2058-94-8	307-55-1	72629-94-8	376-06-7	375-73-5	2706-91-4	355-46-4	375-92-8	1763-23-1	68259-12-1	335-77-3	757124-72-4	27619-97-2	39108-34-4	754-91-6	31506-32-8	2991-50-6	2355-31-9	–	–
GW-1 (AGQS)							12	11								18		15											
B-102S	7/25/2017	N	<4.03	<4.03	9.63	6.09	<4.03	<4.03						<4.03		7.64		<4.03										7.64	23.36
B-102S	12/6/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4.77	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	4.77
B-102S	3/20/2023	N	<4	<4	4.12	5.02	4.24	<4	<4	<4	<4	<4	<4	5.5	<4	4.82	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	9.06	23.7
B-102D	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-102D	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-903U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-903U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-929U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-929U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-903L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-903L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-929L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-929L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-904U	7/8/2019	N	<4.82	<4.82	<4.82	<4.82	<4.82	<4.82						<4.82		<4.82		<4.82										ND	ND
B-904U	7/16/2020	N	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<4.28	<21.4	<4.28	<4.28	ND	ND
B-904U	7/6/2021	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-904U	7/12/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-904U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-904U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-930U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-930U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-904L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-904L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-930L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-930L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-914U	7/8/2019	N	<4.18	<4.18	<4.18	<4.18	<4.18	<4.18						<4.18		<4.18		<4.18										ND	ND
B-914U	7/16/2020	N	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	4.87	<22	<4.39	<4.39	ND	4.87
B-914U	7/5/2021	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	4.5	<20	<4	<4	ND	4.5
B-914U	7/13/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-914U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-914U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-931U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-931U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-914L	12/1/2022	N	<4	<4	<4	<4	4.84	<4	<4	<4	<4	<4	<4	7.18	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	4.84	12.02
B-914L	3/20/2023	N	13.7	19.3	17.4	12.1	**19.4**	<4	<4	<4	<4	<4	<4	20.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	19.4	102.1
B-931L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
B-931L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND

TABLE A.3
Summary of PFAS Groundwater Analytical Results
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-007

Sample Location	Sample Date	Sample Type	Concentrations in ng/L																									
			Perfluoroalkyl Carboxylic Acids											Perfluoroalkyl Sulfonic Acids							Fluorotelomers			Perfluoroalkane Sulfonamides		Perfluoroalkane Sulfonyl Substances		Total of Regulated PFAS	Total PFAS
			Perfluorobutanoic Acid (PFBA) [3]	Perfluoropentanoic Acid (PFPeA) [4]	Perfluorohexanoic Acid (PFHxA) [5]	Perfluoroheptanoic Acid (PFHpA) [6]	Perfluorooctanoic Acid (PFOA) [7]	Perfluorononanoic Acid (PFNA) [8]	Perfluorodecanoic Acid (PFDA) [9]	Perfluoroundecanoic Acid (PFUnA) [10]	Perfluorododecanoic Acid (PFDoA) [11]	Perfluorotridecanoic Acid (PFTrA) [12]	Perfluorotetradecanoic Acid (PFTeA) [13]	Perfluorobutanesulfonic Acid (PFBS) [4S]	Perfluoropentanesulfonic Acid (PFPeS) [5S]	Perfluorohexanesulfonic Acid (PFHxS) [6S]	Perfluoroheptanesulfonic Acid (PFHpS) [7S]	Perfluorooctanesulfonic Acid (PFOS) [8S]	Perfluorononanesulfonic Acid (PFNS) [9S]	Perfluorodecanesulfonic Acid (PFDS) [10S]	1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	Perfluorooctanesulfonamide (FOSA)	N-methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)		
CAS Number			375-22-4	2706-90-3	307-24-4	375-85-9	335-67-1	375-95-1	335-76-2	2058-94-8	307-55-1	72629-94-8	376-06-7	375-73-5	2706-91-4	355-46-4	375-92-8	1763-23-1	68259-12-1	335-77-3	757124-72-4	27619-97-2	39108-34-4	754-91-6	31506-32-8	2991-50-6	2355-31-9	–	–
GW-1 (AGQS)							12	11								18		15										
QC_FB	7/25/2017	FB	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04						<4.04		<4.04		<4.04									ND	ND
QC_FB	7/9/2019	FB	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19						<4.19		<4.19		<4.19									ND	ND
QC_FB	7/16/2020	FB	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<22.1	<4.43	<4.43	ND	ND
QC_FB	7/7/2021	FB	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
QC_FB	7/13/2022	FB	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
QC_FB	12/1/2022	FB	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND
QC_FB	3/20/2023	FB	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<20	<4	<4	ND	ND

Notes:

1. Samples were collected by Sanborn Head personnel on the dates indicated and analyzed for PFAS by Vista Analytical Laboratory (Vista) of El Dorado Hills, California (except April 2019) by USEPA Method 537 (modified) with isotope dilution. Vista was subcontracted through Eastern Analytical, Inc. (EAI) of Concord, New Hampshire.
   Sample Locations denoted "QC_FB" indicate a quality control field blank sample.

2. A sample type of "N" indicates a normal sample. A sample type of "FB" indicates a field blank.

3. Results are presented in nanograms per liter (ng/L) which are equivalent to parts per trillion (ppt).

4. "<" indicates the analyte was not detected above the listed laboratory reporting limit.
   Blank cells indicate the sample was not analyzed for that analyte.

5. "GW-1" refers to the New Hampshire GW-1 Groundwater Standards as defined in New Hampshire Department of Environmental Services (NHDES) Contaminated Sites Risk Characterization and Management Policy (RCMP) (January 1998, with 2000 through 2018 revisions/addenda). GW-1 Groundwater Standards are intended to be equivalent to the Ambient Groundwater Quality Standards (AGQSs) promulgated in Env-Or 600 (June 2015 with October 2016, September 2018, September 2019, May 2020, January 2021, and July 2021 amendments). For analytes where GW-1 and AGQS values differ, the values presented in this table reflect the AGQSs in the latest Env-Or 600 update. The AGQS/GW-1 Groundwater Standards are intended to be protective of groundwater as a source of drinking water.

6. [3] = number of carbons in the alkyl chain for perfluorinated carboxylic acids (PFCAs). The carbon included in the carboxylic functional group is non-fluorinated and the remaining carbons (i.e., alkyl chain) are fluorinated.
   [4S] = number of carbons in the alkyl chain for perfluorinated sulfonic acids (PFSAs). All of the carbons are fluorinated.

7. Bold values exceed the GW-1 (AGQS) Groundwater Standard.

APPENDIX B

GROUNDWATER FIELD SAMPLING SUMMARY FORM

Groundwater Quality Field Sampling Summary

SANBORN HEAD	Project Number: 2637.10	Date(s): 3/20/2023
	Project Name: North Country Environmental Services, Inc.	Project Manager: T. White, M. Estabrooks
	Project Location: Bethlehem, New Hampshire	Collector(s): MTS, CJPL
pH, Conductivity, Temperature Meter(s): Oakton PC 450/YSI 55 (DO) Water Level Meter(s): Heron Dipper T Turbidity: Hach 2100Q		Weather: Clear, 10-40s °F

Field Measurements

Sampling Location	Sample Date	Sample Time	Ref. Point	Well Dia.	Ref. Point Elev. (ft)	Depth to Water (ft)	Water Table Elev. (ft)	Depth to Bottom Installed (ft bgs)	Depth to Bottom Plunked July 2021 (ft Ref Pt)	Surface Completion Type: Standpipe (SP) Vault (V)	Approx. PVC Height (ft)		pH (S.U.)	Specific Conductance (µS/cm)	Temp. (°C)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Well Secured?		Approx. Gallons Purged	Target 3x Well Volume?	Purge/Sample Device	Comment No.
											July 2017 Height	AG or BG?						On Arrival	After Sampling				
B-102S	03/20/23	13:40	TPVC	1.5"	1344.77	39.90	1304.87	38.3	41.20	SP	0.10	AG	6.61	115.3	9.3	8.31	205	Y	Y	0.5	Y	Ded. Waterra	2,5
B-102D	03/20/23	14:01	TPVC	1.5"	1344.02	38.21	1305.81	61	61.06	SP	1.65	AG	6.80	105.4	11.5	1.43	260	Y	Y	6.75	Y	Ded. Waterra	2,5
B-903U	03/20/23	11:45	TPVC	2"	1384.77	73.16	1311.61	73	77.34	SP	2.90	AG	7.07	90.54	7.2	8.02	456	Y	Y	2	Y	Ded. Bailer	1,5
B-903L	03/20/23	11:48	TPVC	2"	1384.51	73.23	1311.28	106	104.01	SP	3.15	AG	7.96	108.8	7.6	2.08	830	Y	Y	17.25	Y	Ded. Waterra	2,5
B-904U	03/20/23	9:50	TPVC	2"	1379.79	69.92	1309.87	72	74.68	SP	2.10	AG	7.66	105.1	8.8	2.55	96.2	Y	Y	2.5	Y	Ded. Bailer	1,5
B-904L	03/20/23	10:00	TPVC	2"	1379.79	70.13	1309.66	118	119.52	SP	2.15	AG	7.02	93.93	8.3	6.58	>1,000	Y	Y	15	N	Ded. Waterra	2,3,5
B-914U	03/20/23	14:20	TPVC	2"	1347.55	40.41	1307.14	44	46.40	SP	0.05	AG	6.70	76.15	10.9	5.35	>1,000	Y	Y	3	Y	Ded. Bailer	1,5
B-914L	03/20/23	14:21	TPVC	2"	1348.64	42.94	1305.70	81	81.77	SP	1.20	AG	7.08	197.2	5.5	4.71	133	Y	Y	6	N	Ded. Waterra	2,3,5
B-929U	03/20/23	12:42	TPVC	2"	1376.06	42.54	1333.52	55.2	57.92[§]	SP	2.7[¥]	AG	6.57	83.91	7.7	9.53	>1,000	Y	Y	7.5	Y	Ded. Bailer	1,5
B-929L	03/20/23	12:30	TPVC	2"	1375.99	46.87	1329.12	95.1	97.80[§]	SP	2.7[¥]	AG	6.93	83.28	7.1	10.42	>1,000	Y	Y	10	N	Ded. Waterra	2,3,5
B-930U	03/20/23	10:55	TPVC	2"	1376.69	42.33	1334.36	50.1	52.79[§]	SP	2.7[¥]	AG	7.26	95.96	6.5	9.60	>1,000	Y	Y	5.25	Y	Ded. Bailer	1,5
B-930L	03/20/23	10:54	TPVC	2"	1376.93	68.67	1308.26	114	116.52[§]	SP	2.7[¥]	AG	7.72	112.9	6.4	1.91	778	Y	Y	23	Y	Ded. Waterra	2,5
B-931U	03/20/23	8:55	TPVC	2"	1331.86	26.85	1305.01	34.2	36.83[§]	SP	2.7[¥]	AG	7.62	95.22	7.1	2.53	>1,000	Y	Y	5	Y	Ded. Bailer	1,5
B-931L	03/20/23	8:45	TPVC	2"	1332.07	27.07	1305.00	65.9	66.80[§]	SP	2.7[¥]	AG	7.27	107.1	5.6	3.17	983	Y	Y	19.25	Y	Ded. Waterra	2,5
QC_FB	03/20/23	14:43	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4,5

Comments

AG = Above ground
BG = Below ground
1. The monitoring well was purged using a dedicated polyethylene bailer prior to collecting the groundwater sample (using the bailer).
2. The monitoring well was purged using a dedicated Waterra® inertial pump and polyethylene tubing prior to collecting the groundwater sample (directly from the pump discharge line).
3. Monitoring well purged near dry. Sample collected upon sufficient recharge.
4. Field blank was collected by pouring laboratory-provided PFAS-free water into a laboratory-provided sampling container. The field blank was collected in the vicinity of monitoring wells B-914U/L.
5. Sampled for PFAS. Only PFAS samples were screened for turbidity to support laboratory analysis.
6. "§" indicates depth to bottom plunked post well development November 2022.
"¥" indicates height measured March 2023.

APPENDIX C

ANALYTICAL LABORATORY REPORTS

Eastern Analytical, Inc.
professional laboratory and drilling services

Matt Estabrooks
Sanborn, Head & Associates, Inc. (NH)
20 Foundry Street
Concord , NH 03301

Laboratory Report for:

Eastern Analytical, Inc. ID: 257414
Client Identification: NCES | Groundwater / 2637.10
Date Received: 3/20/2023

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Certifications:
Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:
- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director — Date: 3.30.23

SAMPLE CONDITIONS PAGE

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Temperature upon receipt (°C): 0.9 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
257414.01	B-102S_20230320	3/20/23	3/20/23 13:40	aqueous		Adheres to Sample Acceptance Policy
257414.02	B-102D_20230320	3/20/23	3/20/23 14:01	aqueous		Adheres to Sample Acceptance Policy
257414.03	B-903U_20230320	3/20/23	3/20/23 11:45	aqueous		Adheres to Sample Acceptance Policy
257414.04	B-903L_20230320	3/20/23	3/20/23 11:48	aqueous		Adheres to Sample Acceptance Policy
257414.05	B-904U_20230320	3/20/23	3/20/23 09:50	aqueous		Adheres to Sample Acceptance Policy
257414.06	B-904L_20230320	3/20/23	3/20/23 10:00	aqueous		Adheres to Sample Acceptance Policy
257414.07	B-914U_20230320	3/20/23	3/20/23 14:20	aqueous		Adheres to Sample Acceptance Policy
257414.08	B-914L_20230320	3/20/23	3/20/23 14:21	aqueous		Adheres to Sample Acceptance Policy
257414.09	B-929U_20230320	3/20/23	3/20/23 12:42	aqueous		Adheres to Sample Acceptance Policy
257414.1	B-929L_20230320	3/20/23	3/20/23 12:30	aqueous		Adheres to Sample Acceptance Policy
257414.11	B-930U_20230320	3/20/23	3/20/23 10:55	aqueous		Adheres to Sample Acceptance Policy
257414.12	B-930L_20230320	3/20/23	3/20/23 10:54	aqueous		Adheres to Sample Acceptance Policy
257414.13	B-931U_20230320	3/20/23	3/20/23 08:55	aqueous		Adheres to Sample Acceptance Policy
257414.14	B-931L_20230320	3/20/23	3/20/23 08:45	aqueous		Adheres to Sample Acceptance Policy
257414.15	TB-GW-01_20230320	3/20/23	3/20/23 14:44	aqueous		Adheres to Sample Acceptance Policy
257414.16	TB-LL-GW-01_20230320	3/20/23	3/20/23 14:44	aqueous		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- *Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.*
- *Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.*
- *Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.*
- *Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.*

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Dichlorodifluoromethane	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2
Vinyl chloride	< 1	< 1	< 1	< 1
Bromomethane	< 2	< 2	< 2	< 2
Chloroethane	< 2	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 2	< 2	< 2
Diethyl Ether	< 2	< 2	< 2	< 2
Acetone	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30
Methylene chloride	< 1	< 1	< 1	< 1
Carbon disulfide	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	< 1	< 1	< 1
Ethyl-t-butyl ether(ETBE)	< 2	< 2	< 2	< 2
Isopropyl ether(DIPE)	< 2	< 2	< 2	< 2
tert-amyl methyl ether(TAME)	< 2	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 1	< 1	< 1
2,2-Dichloropropane	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 10	< 10	< 10
Bromochloromethane	< 1	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10
Chloroform	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	< 1	< 1	< 1	< 1
Carbon tetrachloride	< 1	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 1	< 1	< 1
Benzene	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 1	< 1	< 1	< 1
Trichloroethene	< 1	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 1	< 1	< 1
Dibromomethane	< 1	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dioxane	< 50	< 50	< 50	< 50
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	< 1	< 1	< 1	< 1
2-Hexanone	< 10	< 10	< 10	< 10
Tetrachloroethene	< 1	< 1	< 1	< 1
1,3-Dichloropropane	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1
Bromobenzene	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 2	< 2	< 2	< 2
1,2,3-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**90 %R**	**90 %R**	**90 %R**	**91 %R**
1,2-Dichlorobenzene-d4 (surr)	**107 %R**	**108 %R**	**107 %R**	**106 %R**
Toluene-d8 (surr)	**96 %R**	**97 %R**	**96 %R**	**97 %R**
1,2-Dichloroethane-d4 (surr)	**104 %R**	**104 %R**	**104 %R**	**103 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Dichlorodifluoromethane	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2
Vinyl chloride	< 1	< 1	< 1	< 1
Bromomethane	< 2	< 2	< 2	< 2
Chloroethane	< 2	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 2	< 2	< 2
Diethyl Ether	< 2	< 2	< 2	< 2
Acetone	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30
Methylene chloride	< 1	< 1	< 1	< 1
Carbon disulfide	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	< 1	< 1	< 1
Ethyl-t-butyl ether(ETBE)	< 2	< 2	< 2	< 2
Isopropyl ether(DIPE)	< 2	< 2	< 2	< 2
tert-amyl methyl ether(TAME)	< 2	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 1	< 1	< 1
2,2-Dichloropropane	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 10	< 10	< 10
Bromochloromethane	< 1	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10
Chloroform	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	< 1	< 1	< 1	< 1
Carbon tetrachloride	< 1	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 1	< 1	< 1
Benzene	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 1	< 1	< 1	< 1
Trichloroethene	< 1	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 1	< 1	< 1
Dibromomethane	< 1	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dioxane	< 50	< 50	< 50	< 50
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	< 1	< 1	< 1	< 1
2-Hexanone	< 10	< 10	< 10	< 10
Tetrachloroethene	< 1	< 1	< 1	< 1
1,3-Dichloropropane	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1
Bromobenzene	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 2	< 2	< 2	< 2
1,2,3-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**90 %R**	**90 %R**	**92 %R**	**91 %R**
1,2-Dichlorobenzene-d4 (surr)	**106 %R**	**107 %R**	**105 %R**	**105 %R**
Toluene-d8 (surr)	**96 %R**	**96 %R**	**96 %R**	**96 %R**
1,2-Dichloroethane-d4 (surr)	**103 %R**	**103 %R**	**103 %R**	**104 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Dichlorodifluoromethane	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2
Vinyl chloride	< 1	< 1	< 1	< 1
Bromomethane	< 2	< 2	< 2	< 2
Chloroethane	< 2	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 2	< 2	< 2
Diethyl Ether	< 2	< 2	< 2	< 2
Acetone	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30
Methylene chloride	< 1	< 1	< 1	< 1
Carbon disulfide	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	< 1	< 1	< 1
Ethyl-t-butyl ether(ETBE)	< 2	< 2	< 2	< 2
Isopropyl ether(DIPE)	< 2	< 2	< 2	< 2
tert-amyl methyl ether(TAME)	< 2	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 1	< 1	< 1
2,2-Dichloropropane	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 10	< 10	< 10
Bromochloromethane	< 1	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10
Chloroform	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	< 1	< 1	< 1	< 1
Carbon tetrachloride	< 1	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 1	< 1	< 1
Benzene	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 1	< 1	< 1	< 1
Trichloroethene	< 1	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 1	< 1	< 1
Dibromomethane	< 1	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dioxane	< 50	< 50	< 50	< 50
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	< 1	< 1	< 1	< 1
2-Hexanone	< 10	< 10	< 10	< 10
Tetrachloroethene	< 1	< 1	< 1	< 1
1,3-Dichloropropane	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	DGM	DGM	DGM	DGM
Method:	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1
Ethylbenzene	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1
Bromobenzene	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 2	< 2	< 2	< 2
1,2,3-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**91 %R**	**90 %R**	**91 %R**	**91 %R**
1,2-Dichlorobenzene-d4 (surr)	**105 %R**	**106 %R**	**104 %R**	**105 %R**
Toluene-d8 (surr)	**96 %R**	**96 %R**	**95 %R**	**97 %R**
1,2-Dichloroethane-d4 (surr)	**103 %R**	**104 %R**	**104 %R**	**104 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-931U_20230320	B-931L_20230320	TB-GW-01_20230320
Lab Sample ID:	257414.13	257414.14	257414.15
Matrix:	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/22/23	3/22/23
Analyst:	DGM	DGM	DGM
Method:	8260C	8260C	8260C
Dilution Factor:	1	1	1
Dichlorodifluoromethane	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2
Vinyl chloride	< 1	< 1	< 1
Bromomethane	< 2	< 2	< 2
Chloroethane	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 2	< 2
Diethyl Ether	< 2	< 2	< 2
Acetone	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30
Methylene chloride	< 1	< 1	< 1
Carbon disulfide	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	< 1	< 1
Ethyl-t-butyl ether(ETBE)	< 2	< 2	< 2
Isopropyl ether(DIPE)	< 2	< 2	< 2
tert-amyl methyl ether(TAME)	< 2	< 2	< 2
trans-1,2-Dichloroethene	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 1	< 1
2,2-Dichloropropane	< 1	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 10	< 10
Bromochloromethane	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 10	< 10
Chloroform	< 1	< 1	< 1
1,1,1-Trichloroethane	< 1	< 1	< 1
Carbon tetrachloride	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 1	< 1
Benzene	< 1	< 1	< 1
1,2-Dichloroethane	< 1	< 1	< 1
Trichloroethene	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 1	< 1
Dibromomethane	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 0.5	< 0.5
1,4-Dioxane	< 50	< 50	< 50
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5
Toluene	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	< 1	< 1	< 1
2-Hexanone	< 10	< 10	< 10
Tetrachloroethene	< 1	< 1	< 1
1,3-Dichloropropane	< 1	< 1	< 1
Dibromochloromethane	< 1	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 1	< 1

LABORATORY REPORT

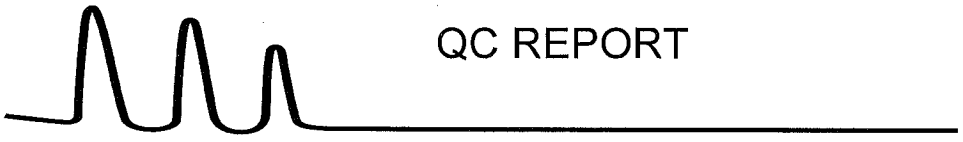
EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-931U_20230320	B-931L_20230320	TB-GW-01_20230320
Lab Sample ID:	257414.13	257414.14	257414.15
Matrix:	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/22/23	3/22/23
Analyst:	DGM	DGM	DGM
Method:	8260C	8260C	8260C
Dilution Factor:	1	1	1
Ethylbenzene	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1
Styrene	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1
Bromobenzene	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 1	< 1
1,3,5-Trimethylbenzene	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5
Naphthalene	< 2	< 2	< 2
1,2,3-Trichlorobenzene	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**91 %R**	**88 %R**	**89 %R**
1,2-Dichlorobenzene-d4 (surr)	**105 %R**	**107 %R**	**107 %R**
Toluene-d8 (surr)	**96 %R**	**97 %R**	**97 %R**
1,2-Dichloroethane-d4 (surr)	**104 %R**	**103 %R**	**103 %R**

B-931L_20230320, TB-GW-01_20230320: tert-Butyl Alcohol (TBA) exhibited recovery below acceptance limits in the Quality Control sample(s). The analyte(s) were not detected in the sample(s).



QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)** **Batch ID:** 63815095168

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 2	22 (108 %R)	23 (114 %R) (6 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
Chloromethane	< 2	21 (106 %R)	23 (113 %R) (6 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
Vinyl chloride	< 1	21 (107 %R)	23 (115 %R) (7 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Bromomethane	< 2	20 (100 %R)	22 (108 %R) (8 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
Chloroethane	< 2	22 (109 %R)	23 (115 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Trichlorofluoromethane	< 2	20 (99 %R)	21 (105 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Diethyl Ether	< 2	17 (86 %R)	20 (100 %R) (15 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Acetone	< 10	16 (82 %R)	17 (85 %R) (3 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
1,1-Dichloroethene	< 0.5	18 (92 %R)	19 (96 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
tert-Butyl Alcohol (TBA)	< 30	71 (71 %R)	71 (71 %R) (0 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Methylene chloride	< 1	18 (92 %R)	19 (95 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Carbon disulfide	< 2	18 (92 %R)	19 (97 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 1	17 (86 %R)	17 (87 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Ethyl-t-butyl ether(ETBE)	< 2	17 (86 %R)	18 (88 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Isopropyl ether(DIPE)	< 2	19 (94 %R)	21 (106 %R) (12 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
tert-amyl methyl ether(TAME)	< 2	16 (81 %R)	17 (84 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 1	18 (88 %R)	18 (92 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,1-Dichloroethane	< 1	21 (103 %R)	21 (107 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
2,2-Dichloropropane	< 1	19 (97 %R)	20 (100 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 1	20 (99 %R)	21 (105 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
2-Butanone(MEK)	< 10	18 (88 %R)	18 (91 %R) (3 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
Bromochloromethane	< 1	21 (104 %R)	21 (107 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 10	18 (89 %R)	19 (93 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Chloroform	< 1	20 (99 %R)	21 (105 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,1,1-Trichloroethane	< 1	19 (95 %R)	20 (101 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Carbon tetrachloride	< 1	19 (96 %R)	20 (102 %R) (6 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,1-Dichloropropene	< 1	19 (94 %R)	20 (98 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Benzene	< 1	20 (100 %R)	21 (105 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2-Dichloroethane	< 1	19 (95 %R)	20 (98 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Trichloroethene	< 1	19 (93 %R)	20 (98 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2-Dichloropropane	< 1	20 (101 %R)	21 (106 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Dibromomethane	< 1	19 (96 %R)	20 (99 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Bromodichloromethane	< 0.5	19 (97 %R)	20 (101 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,4-Dioxane	< 50	< 50 (78 %R)	< 50 (81 %R) (4 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
4-Methyl-2-pentanone(MIBK)	< 10	16 (81 %R)	17 (83 %R) (3 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.5	19 (95 %R)	20 (99 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Toluene	< 1	19 (96 %R)	20 (101 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
trans-1,3-Dichloropropene	< 0.5	20 (102 %R)	21 (104 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,1,2-Trichloroethane	< 1	20 (102 %R)	21 (104 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
2-Hexanone	< 10	14 (69 %R)	14 (69 %R) (1 RPD)	3/21/2023	ug/L	40 - 160	20	8260C
Tetrachloroethene	< 1	19 (97 %R)	20 (100 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,3-Dichloropropane	< 1	20 (98 %R)	20 (100 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Dibromochloromethane	< 1	20 (100 %R)	20 (102 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.5	19 (95 %R)	19 (97 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Chlorobenzene	< 1	19 (96 %R)	20 (101 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,1,1,2-Tetrachloroethane	< 1	20 (100 %R)	21 (104 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)** **Batch ID:** 63815095168

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Ethylbenzene	< 1	19 (97 %R)	20 (102 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
mp-Xylene	< 1	40 (100 %R)	42 (105 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
o-Xylene	< 1	20 (100 %R)	21 (104 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Styrene	< 1	18 (90 %R)	20 (98 %R) (8 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Bromoform	< 2	21 (106 %R)	22 (108 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
IsoPropylbenzene	< 1	19 (94 %R)	20 (98 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Bromobenzene	< 1	19 (95 %R)	19 (97 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 1	20 (99 %R)	20 (100 %R) (1 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.5	18 (92 %R)	19 (93 %R) (1 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
n-Propylbenzene	< 1	20 (98 %R)	20 (102 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
2-Chlorotoluene	< 1	20 (101 %R)	21 (105 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
4-Chlorotoluene	< 1	19 (97 %R)	20 (100 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 1	20 (98 %R)	20 (102 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
tert-Butylbenzene	< 1	20 (98 %R)	21 (103 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 1	21 (104 %R)	22 (108 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
sec-Butylbenzene	< 1	21 (103 %R)	21 (107 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,3-Dichlorobenzene	< 1	19 (95 %R)	20 (98 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
p-Isopropyltoluene	< 1	20 (99 %R)	21 (103 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,4-Dichlorobenzene	< 1	18 (90 %R)	19 (93 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2-Dichlorobenzene	< 1	19 (97 %R)	20 (100 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
n-Butylbenzene	< 1	20 (98 %R)	20 (102 %R) (4 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 2	19 (97 %R)	20 (98 %R) (1 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,3,5-Trichlorobenzene	< 1	20 (99 %R)	20 (101 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 1	20 (98 %R)	20 (101 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Hexachlorobutadiene	< 0.5	19 (95 %R)	19 (97 %R) (2 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
Naphthalene	< 2	16 (82 %R)	17 (84 %R) (3 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.5	21 (103 %R)	21 (105 %R) (1 RPD)	3/21/2023	ug/L	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	89 %R	99 %R	99 %R	3/21/2023	% Rec	70 - 130	20	8260C
1,2-Dichlorobenzene-d4 (surr)	107 %R	100 %R	99 %R	3/21/2023	% Rec	70 - 130	20	8260C
Toluene-d8 (surr)	97 %R	101 %R	101 %R	3/21/2023	% Rec	70 - 130	20	8260C
1,2-Dichloroethane-d4 (surr)	104 %R	98 %R	98 %R	3/21/2023	% Rec	70 - 130	20	8260C

*/! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)** **Batch ID:** 63815173954

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 2	22 (110 %R)	21 (103 %R) (7 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
Chloromethane	< 2	24 (118 %R)	22 (111 %R) (6 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
Vinyl chloride	< 1	22 (110 %R)	21 (103 %R) (6 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Bromomethane	< 2	20 (98 %R)	19 (94 %R) (4 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
Chloroethane	< 2	23 (114 %R)	22 (108 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Trichlorofluoromethane	< 2	20 (102 %R)	19 (97 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Diethyl Ether	< 2	18 (88 %R)	17 (87 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Acetone	< 10	17 (83 %R)	16 (81 %R) (2 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
1,1-Dichloroethene	< 0.5	19 (96 %R)	18 (92 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
tert-Butyl Alcohol (TBA)	< 30	* 68 (68 %R)	* 68 (68 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Methylene chloride	< 1	18 (92 %R)	18 (90 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Carbon disulfide	< 2	19 (95 %R)	18 (91 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 1	17 (84 %R)	17 (83 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Ethyl-t-butyl ether(ETBE)	< 2	16 (80 %R)	16 (79 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Isopropyl ether(DIPE)	< 2	18 (90 %R)	17 (87 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
tert-amyl methyl ether(TAME)	< 2	15 (75 %R)	15 (75 %R) (0 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 1	18 (91 %R)	18 (88 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,1-Dichloroethane	< 1	21 (103 %R)	20 (99 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
2,2-Dichloropropane	< 1	19 (96 %R)	18 (92 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 1	20 (102 %R)	20 (100 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
2-Butanone(MEK)	< 10	18 (89 %R)	18 (88 %R) (1 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
Bromochloromethane	< 1	21 (104 %R)	21 (103 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 10	18 (91 %R)	18 (88 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Chloroform	< 1	21 (103 %R)	20 (100 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,1,1-Trichloroethane	< 1	20 (98 %R)	19 (94 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Carbon tetrachloride	< 1	20 (100 %R)	19 (96 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,1-Dichloropropene	< 1	20 (98 %R)	19 (94 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Benzene	< 1	21 (103 %R)	20 (100 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2-Dichloroethane	< 1	19 (96 %R)	19 (94 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Trichloroethene	< 1	19 (97 %R)	19 (93 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2-Dichloropropane	< 1	20 (102 %R)	20 (100 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Dibromomethane	< 1	19 (97 %R)	19 (96 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Bromodichloromethane	< 0.5	19 (97 %R)	19 (95 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,4-Dioxane	< 50	< 50 (80 %R)	< 50 (81 %R) (1 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
4-Methyl-2-pentanone(MIBK)	< 10	17 (85 %R)	17 (84 %R) (1 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.5	19 (94 %R)	19 (93 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Toluene	< 1	20 (100 %R)	19 (96 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
trans-1,3-Dichloropropene	< 0.5	20 (100 %R)	20 (98 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,1,2-Trichloroethane	< 1	21 (104 %R)	20 (101 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
2-Hexanone	< 10	16 (78 %R)	15 (75 %R) (4 RPD)	3/22/2023	ug/L	40 - 160	20	8260C
Tetrachloroethene	< 1	20 (101 %R)	19 (95 %R) (6 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,3-Dichloropropane	< 1	20 (100 %R)	19 (97 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Dibromochloromethane	< 1	20 (99 %R)	19 (97 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.5	19 (95 %R)	19 (93 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Chlorobenzene	< 1	20 (99 %R)	19 (96 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,1,1,2-Tetrachloroethane	< 1	20 (100 %R)	19 (97 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)** **Batch ID:** 63815173954

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Ethylbenzene	< 1	20 (100 %R)	19 (96 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
mp-Xylene	< 1	41 (104 %R)	40 (99 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
o-Xylene	< 1	20 (102 %R)	20 (99 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Styrene	< 1	20 (98 %R)	18 (90 %R) (9 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Bromoform	< 2	21 (103 %R)	20 (102 %R) (1 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
IsoPropylbenzene	< 1	19 (97 %R)	19 (93 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Bromobenzene	< 1	19 (97 %R)	19 (93 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 1	20 (101 %R)	20 (98 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.5	19 (93 %R)	18 (90 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
n-Propylbenzene	< 1	20 (102 %R)	19 (97 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
2-Chlorotoluene	< 1	21 (105 %R)	20 (99 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
4-Chlorotoluene	< 1	20 (100 %R)	19 (95 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 1	20 (101 %R)	19 (97 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
tert-Butylbenzene	< 1	20 (102 %R)	19 (97 %R) (6 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 1	21 (107 %R)	20 (102 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
sec-Butylbenzene	< 1	21 (107 %R)	20 (101 %R) (6 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,3-Dichlorobenzene	< 1	19 (97 %R)	19 (93 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
p-Isopropyltoluene	< 1	20 (102 %R)	19 (97 %R) (6 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,4-Dichlorobenzene	< 1	18 (92 %R)	18 (89 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2-Dichlorobenzene	< 1	20 (99 %R)	19 (95 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
n-Butylbenzene	< 1	20 (101 %R)	19 (96 %R) (5 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 2	19 (95 %R)	19 (93 %R) (2 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,3,5-Trichlorobenzene	< 1	20 (100 %R)	19 (96 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 1	20 (99 %R)	19 (96 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Hexachlorobutadiene	< 0.5	19 (97 %R)	18 (91 %R) (7 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
Naphthalene	< 2	16 (82 %R)	16 (80 %R) (3 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.5	21 (104 %R)	20 (100 %R) (4 RPD)	3/22/2023	ug/L	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	90 %R	99 %R	99 %R	3/22/2023	% Rec	70 - 130	20	8260C
1,2-Dichlorobenzene-d4 (surr)	107 %R	100 %R	99 %R	3/22/2023	% Rec	70 - 130	20	8260C
Toluene-d8 (surr)	97 %R	102 %R	100 %R	3/22/2023	% Rec	70 - 130	20	8260C
1,2-Dichloroethane-d4 (surr)	104 %R	97 %R	97 %R	3/22/2023	% Rec	70 - 130	20	8260C

*/I Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	MKB	MKB	MKB	MKB
Method:	8260B SIM	8260B SIM	8260B SIM	8260B SIM
Dilution Factor:	1	1	1	1
1,4-Dioxane	< 0.25	< 0.25	< 0.25	< 0.25
4-Bromofluorobenzene (surr)	**101 %R**	**100 %R**	**100 %R**	**101 %R**
Toluene-d8 (surr)	**100 %R**	**100 %R**	**100 %R**	**100 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	MKB	MKB	MKB	MKB
Method:	8260B SIM	8260B SIM	8260B SIM	8260B SIM
Dilution Factor:	1	1	1	1
1,4-Dioxane	< 0.25	< 0.25	< 0.25	< 0.25
4-Bromofluorobenzene (surr)	**100 %R**	**100 %R**	**99 %R**	**101 %R**
Toluene-d8 (surr)	**100 %R**	**100 %R**	**100 %R**	**100 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	MKB	MKB	MKB	MKB
Method:	8260B SIM	8260B SIM	8260B SIM	8260B SIM
Dilution Factor:	1	1	1	1
1,4-Dioxane	< 0.25	< 0.25	< 0.25	< 0.25
4-Bromofluorobenzene (surr)	**100 %R**	**100 %R**	**101 %R**	**100 %R**
Toluene-d8 (surr)	**100 %R**	**100 %R**	**100 %R**	**100 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-931U_20230320	B-931L_20230320	TB-LL-GW-01_20230320
Lab Sample ID:	257414.13	257414.14	257414.16
Matrix:	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L
Date of Analysis:	3/21/23	3/21/23	3/21/23
Analyst:	MKB	MKB	MKB
Method:	8260B SIM	8260B SIM	8260B SIM
Dilution Factor:	1	1	1
1,4-Dioxane	< 0.25	< 0.25	< 0.25
4-Bromofluorobenzene (surr)	**100 %R**	**99 %R**	**99 %R**
Toluene-d8 (surr)	**100 %R**	**100 %R**	**99 %R**

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Batch ID: 638149-92777/A032123DIOX1

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,4-Dioxane	< 0.2	4.2 (83 %R)	4.4 (88 %R) (5 RPD)	3/21/2023	ug/L	70 - 130	20	8260B
4-Bromofluorobenzene (surr)	99 %R	98 %R	99 %R	3/21/2023	% Rec	70 - 130	50	8260B
Toluene-d8 (surr)	99 %R	100 %R	99 %R	3/21/2023	% Rec	70 - 130	50	8260B

*/! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/21/23	3/21/23	3/21/23	3/21/23
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
alpha-Terpineol	< 5	< 5	< 5	< 5
Phenol	< 1	< 1	< 1	< 1
2-Chlorophenol	< 1	< 1	< 1	< 1
2,4-Dichlorophenol	< 1	< 1	< 1	< 1
2,4,5-Trichlorophenol	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	< 1	< 1	< 1	< 1
Pentachlorophenol	< 5	< 5	< 5	< 5
2-Nitrophenol	< 5	< 5	< 5	< 5
4-Nitrophenol	< 5	< 5	< 5	< 5
2,4-Dinitrophenol	< 10	< 10	< 10	< 10
2-Methylphenol	< 1	< 1	< 1	< 1
3/4-Methylphenol	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	< 5	< 5	< 5	< 5
4-Chloro-3-methylphenol	< 1	< 1	< 1	< 1
4,6-Dinitro-2-methylphenol	< 5	< 5	< 5	< 5
Benzoic Acid	< 50	< 50	< 50	< 50
N-Nitrosodimethylamine	< 1	< 1	< 1	< 1
n-Nitroso-di-n-propylamine	< 0.5	< 0.5	< 0.5	< 0.5
n-Nitrosodiphenylamine	< 1	< 1	< 1	< 1
bis(2-Chloroethyl)ether	< 1	< 1	< 1	< 1
bis(2-chloroisopropyl)ether	< 1	< 1	< 1	< 1
bis(2-Chloroethoxy)methane	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
Acetophenone	< 10	< 10	< 10	< 10
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
2-Chloronaphthalene	< 1	< 1	< 1	< 1
4-Chlorophenyl-phenylether	< 1	< 1	< 1	< 1
4-Bromophenyl-phenylether	< 1	< 1	< 1	< 1
Hexachloroethane	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 1	< 1	< 1	< 1
Hexachlorocyclopentadiene	< 5	< 5	< 5	< 5
Hexachlorobenzene	< 1	< 1	< 1	< 1
4-Chloroaniline	< 1	< 1	< 1	< 1
2,3-Dichloroaniline	< 1	< 1	< 1	< 1
2-Nitroaniline	< 5	< 5	< 5	< 5
3-Nitroaniline	< 5	< 5	< 5	< 5
4-Nitroaniline	< 5	< 5	< 5	< 5
Aniline	< 1	< 1	< 1	< 1
Benzyl alcohol	< 10	< 10	< 10	< 10
Nitrobenzene	< 1	< 1	< 1	< 1
Isophorone	< 1	< 1	< 1	< 1
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2
Benzidine (estimated)	< 5	< 5	< 5	< 5
3,3'-Dichlorobenzidine	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/21/23	3/21/23	3/21/23	3/21/23
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/21/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
Pyridine	< 5	< 5	< 5	< 5
Azobenzene	< 1	< 1	< 1	< 1
Carbazole	< 1	< 1	< 1	< 1
Dimethylphthalate	< 1	< 1	< 1	< 1
Diethylphthalate	< 5	< 5	< 5	< 5
Di-n-butylphthalate	< 5	< 5	< 5	< 5
Butylbenzylphthalate	< 5	< 5	< 5	< 5
bis(2-Ethylhexyl)phthalate	< 5	< 5	< 5	< 5
Di-n-octylphthalate	< 5	< 5	< 5	< 5
Dibenzofuran	< 1	< 1	< 1	< 1
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[a]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[b]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[k]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[a]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Indeno[1,2,3-cd]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz[a,h]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[g,h,i]perylene	< 0.1	< 0.1	< 0.1	< 0.1
n-Decane	< 5	< 5	< 5	< 5
n-Octadecane	< 5	< 5	< 5	< 5
2-Fluorophenol (surr)	**39 %R**	**36 %R**	**37 %R**	**35 %R**
Phenol-d6 (surr)	**28 %R**	**27 %R**	**26 %R**	**26 %R**
2,4,6-Tribromophenol (surr)	**82 %R**	**82 %R**	**82 %R**	**81 %R**
Nitrobenzene-D5 (surr)	**80 %R**	**73 %R**	**77 %R**	**73 %R**
2-Fluorobiphenyl (surr)	**84 %R**	**80 %R**	**81 %R**	**81 %R**
p-Terphenyl-D14 (surr)	**78 %R**	**79 %R**	**82 %R**	**79 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/21/23	3/21/23	3/21/23	3/23/23
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/23/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
alpha-Terpineol	< 5	< 5	< 5	< 5
Phenol	< 1	< 1	< 1	< 1
2-Chlorophenol	< 1	< 1	< 1	< 1
2,4-Dichlorophenol	< 1	< 1	< 1	< 1
2,4,5-Trichlorophenol	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	< 1	< 1	< 1	< 1
Pentachlorophenol	< 5	< 5	< 5	< 5
2-Nitrophenol	< 5	< 5	< 5	< 5
4-Nitrophenol	< 5	< 5	< 5	< 5
2,4-Dinitrophenol	< 10	< 10	< 10	< 10
2-Methylphenol	< 1	< 1	< 1	< 1
3/4-Methylphenol	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	< 5	< 5	< 5	< 5
4-Chloro-3-methylphenol	< 1	< 1	< 1	< 1
4,6-Dinitro-2-methylphenol	< 5	< 5	< 5	< 5
Benzoic Acid	< 50	< 50	< 50	< 50
N-Nitrosodimethylamine	< 1	< 1	< 1	< 1
n-Nitroso-di-n-propylamine	< 0.5	< 0.5	< 0.5	< 0.5
n-Nitrosodiphenylamine	< 1	< 1	< 1	< 1
bis(2-Chloroethyl)ether	< 1	< 1	< 1	< 1
bis(2-chloroisopropyl)ether	< 1	< 1	< 1	< 1
bis(2-Chloroethoxy)methane	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
Acetophenone	< 10	< 10	< 10	< 10
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
2-Chloronaphthalene	< 1	< 1	< 1	< 1
4-Chlorophenyl-phenylether	< 1	< 1	< 1	< 1
4-Bromophenyl-phenylether	< 1	< 1	< 1	< 1
Hexachloroethane	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 1	< 1	< 1	< 1
Hexachlorocyclopentadiene	< 5	< 5	< 5	< 5
Hexachlorobenzene	< 1	< 1	< 1	< 1
4-Chloroaniline	< 1	< 1	< 1	< 1
2,3-Dichloroaniline	< 1	< 1	< 1	< 1
2-Nitroaniline	< 5	< 5	< 5	< 5
3-Nitroaniline	< 5	< 5	< 5	< 5
4-Nitroaniline	< 5	< 5	< 5	< 5
Aniline	< 1	< 1	< 1	< 1
Benzyl alcohol	< 10	< 10	< 10	< 10
Nitrobenzene	< 1	< 1	< 1	< 1
Isophorone	< 1	< 1	< 1	< 1
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2
Benzidine (estimated)	< 5	< 5	< 5	< 5
3,3'-Dichlorobenzidine	< 1	< 1	< 1	< 1

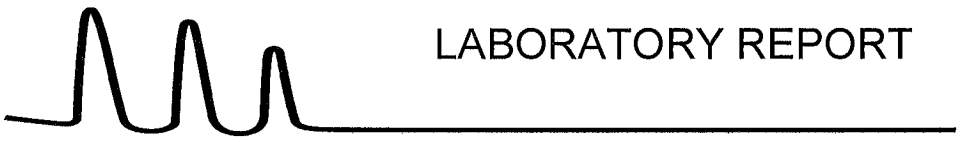
LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/21/23	3/21/23	3/21/23	3/23/23
Date of Analysis:	3/21/23	3/21/23	3/21/23	3/23/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
Pyridine	< 5	< 5	< 5	< 5
Azobenzene	< 1	< 1	< 1	< 1
Carbazole	< 1	< 1	< 1	< 1
Dimethylphthalate	< 1	< 1	< 1	< 1
Diethylphthalate	< 5	< 5	< 5	< 5
Di-n-butylphthalate	< 5	< 5	< 5	< 5
Butylbenzylphthalate	< 5	< 5	< 5	< 5
bis(2-Ethylhexyl)phthalate	< 5	< 5	< 5	< 5
Di-n-octylphthalate	< 5	< 5	< 5	< 5
Dibenzofuran	< 1	< 1	< 1	< 1
Naphthalene	< 0.1	< 0.1	**0.14**	< 0.1
2-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1	**0.23**	< 0.1
Acenaphthene	< 0.1	< 0.1	**0.13**	< 0.1
Fluorene	< 0.1	< 0.1	**0.18**	< 0.1
Phenanthrene	< 0.1	< 0.1	**1.6**	< 0.1
Anthracene	< 0.1	< 0.1	**0.46**	< 0.1
Fluoranthene	< 0.1	< 0.1	**3.5**	< 0.1
Pyrene	< 0.1	< 0.1	**2.9**	< 0.1
Benzo[a]anthracene	< 0.1	< 0.1	**1.6**	< 0.1
Chrysene	< 0.1	< 0.1	**2.1**	< 0.1
Benzo[b]fluoranthene	< 0.1	< 0.1	**2.7**	< 0.1
Benzo[k]fluoranthene	< 0.1	< 0.1	**1.0**	< 0.1
Benzo[a]pyrene	< 0.1	< 0.1	**2.0**	< 0.1
Indeno[1,2,3-cd]pyrene	< 0.1	< 0.1	**1.1**	< 0.1
Dibenz[a,h]anthracene	< 0.1	< 0.1	**0.23**	< 0.1
Benzo[g,h,i]perylene	< 0.1	< 0.1	**0.98**	< 0.1
n-Decane	< 5	< 5	< 5	< 5
n-Octadecane	< 5	< 5	< 5	< 5
2-Fluorophenol (surr)	**29 %R**	**35 %R**	**32 %R**	**39 %R**
Phenol-d6 (surr)	**21 %R**	**25 %R**	**24 %R**	**28 %R**
2,4,6-Tribromophenol (surr)	**72 %R**	**77 %R**	**90 %R**	**84 %R**
Nitrobenzene-D5 (surr)	**64 %R**	**68 %R**	**64 %R**	**78 %R**
2-Fluorobiphenyl (surr)	**70 %R**	**73 %R**	**74 %R**	**82 %R**
p-Terphenyl-D14 (surr)	**76 %R**	**73 %R**	**76 %R**	**78 %R**



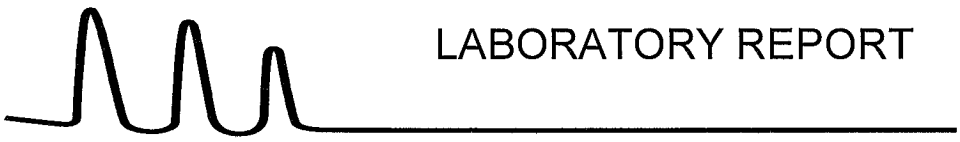
LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23	3/23/23	3/23/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
alpha-Terpineol	< 5	< 5	< 5	< 5
Phenol	< 1	< 1	< 1	< 1
2-Chlorophenol	< 1	< 1	< 1	< 1
2,4-Dichlorophenol	< 1	< 1	< 1	< 1
2,4,5-Trichlorophenol	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	< 1	< 1	< 1	< 1
Pentachlorophenol	< 5	< 5	< 5	< 5
2-Nitrophenol	< 5	< 5	< 5	< 5
4-Nitrophenol	< 5	< 5	< 5	< 5
2,4-Dinitrophenol	< 10	< 10	< 10	< 10
2-Methylphenol	< 1	< 1	< 1	< 1
3/4-Methylphenol	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	< 5	< 5	< 5	< 5
4-Chloro-3-methylphenol	< 1	< 1	< 1	< 1
4,6-Dinitro-2-methylphenol	< 5	< 5	< 5	< 5
Benzoic Acid	< 50	< 50	< 50	< 50
N-Nitrosodimethylamine	< 1	< 1	< 1	< 1
n-Nitroso-di-n-propylamine	< 0.5	< 0.5	< 0.5	< 0.5
n-Nitrosodiphenylamine	< 1	< 1	< 1	< 1
bis(2-Chloroethyl)ether	< 1	< 1	< 1	< 1
bis(2-chloroIsopropyl)ether	< 1	< 1	< 1	< 1
bis(2-Chloroethoxy)methane	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1
Acetophenone	< 10	< 10	< 10	< 10
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1
2-Chloronaphthalene	< 1	< 1	< 1	< 1
4-Chlorophenyl-phenylether	< 1	< 1	< 1	< 1
4-Bromophenyl-phenylether	< 1	< 1	< 1	< 1
Hexachloroethane	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 1	< 1	< 1	< 1
Hexachlorocyclopentadiene	< 5	< 5	< 5	< 5
Hexachlorobenzene	< 1	< 1	< 1	< 1
4-Chloroaniline	< 1	< 1	< 1	< 1
2,3-Dichloroaniline	< 1	< 1	< 1	< 1
2-Nitroaniline	< 5	< 5	< 5	< 5
3-Nitroaniline	< 5	< 5	< 5	< 5
4-Nitroaniline	< 5	< 5	< 5	< 5
Anilline	< 1	< 1	< 1	< 1
Benzyl alcohol	< 10	< 10	< 10	< 10
Nitrobenzene	< 1	< 1	< 1	< 1
Isophorone	< 1	< 1	< 1	< 1
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2
Benzidine (estimated)	< 5	< 5	< 5	< 5
3,3'-Dichlorobenzidine	< 1	< 1	< 1	< 1



LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23	3/23/23	3/23/23
Analyst:	JMR	JMR	JMR	JMR
Method:	8270E	8270E	8270E	8270E
Dilution Factor:	1	1	1	1
Pyridine	< 5	< 5	< 5	< 5
Azobenzene	< 1	< 1	< 1	< 1
Carbazole	< 1	< 1	< 1	< 1
Dimethylphthalate	< 1	< 1	< 1	< 1
Diethylphthalate	< 5	< 5	< 5	< 5
Di-n-butylphthalate	< 5	< 5	< 5	< 5
Butylbenzylphthalate	< 5	< 5	< 5	< 5
bis(2-Ethylhexyl)phthalate	< 5	< 5	< 5	< 5
Di-n-octylphthalate	< 5	< 5	< 5	< 5
Dibenzofuran	< 1	< 1	< 1	< 1
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
1-Methylnaphthalene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[a]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[b]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[k]fluoranthene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[a]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Indeno[1,2,3-cd]pyrene	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz[a,h]anthracene	< 0.1	< 0.1	< 0.1	< 0.1
Benzo[g,h,i]perylene	< 0.1	< 0.1	< 0.1	< 0.1
n-Decane	< 5	< 5	< 5	< 5
n-Octadecane	< 5	< 5	< 5	< 5
2-Fluorophenol (surr)	**42 %R**	**42 %R**	**45 %R**	**41 %R**
Phenol-d6 (surr)	**30 %R**	**30 %R**	**33 %R**	**30 %R**
2,4,6-Tribromophenol (surr)	**87 %R**	**87 %R**	**94 %R**	**89 %R**
Nitrobenzene-D5 (surr)	**86 %R**	**80 %R**	**85 %R**	**78 %R**
2-Fluorobiphenyl (surr)	**89 %R**	**85 %R**	**91 %R**	**86 %R**
p-Terphenyl-D14 (surr)	**82 %R**	**74 %R**	**83 %R**	**82 %R**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-931U_20230320	B-931L_20230320
Lab Sample ID:	257414.13	257414.14
Matrix:	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23
Units:	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23
Analyst:	JMR	JMR
Method:	8270E	8270E
Dilution Factor:	1	1
alpha-Terpineol	< 5	< 5
Phenol	< 1	< 1
2-Chlorophenol	< 1	< 1
2,4-Dichlorophenol	< 1	< 1
2,4,5-Trichlorophenol	< 1	< 1
2,4,6-Trichlorophenol	< 1	< 1
Pentachlorophenol	< 5	< 5
2-Nitrophenol	< 5	< 5
4-Nitrophenol	< 5	< 5
2,4-Dinitrophenol	< 10	< 10
2-Methylphenol	< 1	< 1
3/4-Methylphenol	< 1	< 1
2,4-Dimethylphenol	< 5	< 5
4-Chloro-3-methylphenol	< 1	< 1
4,6-Dinitro-2-methylphenol	< 5	< 5
Benzoic Acid	< 50	< 50
N-Nitrosodimethylamine	< 1	< 1
n-Nitroso-di-n-propylamine	< 0.5	< 0.5
n-Nitrosodiphenylamine	< 1	< 1
bis(2-Chloroethyl)ether	< 1	< 1
bis(2-chloroisopropyl)ether	< 1	< 1
bis(2-Chloroethoxy)methane	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1
Acetophenone	< 10	< 10
1,4-Dichlorobenzene	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1
2-Chloronaphthalene	< 1	< 1
4-Chlorophenyl-phenylether	< 1	< 1
4-Bromophenyl-phenylether	< 1	< 1
Hexachloroethane	< 1	< 1
Hexachlorobutadiene	< 1	< 1
Hexachlorocyclopentadiene	< 5	< 5
Hexachlorobenzene	< 1	< 1
4-Chloroaniline	< 1	< 1
2,3-Dichloroaniline	< 1	< 1
2-Nitroaniline	< 5	< 5
3-Nitroaniline	< 5	< 5
4-Nitroaniline	< 5	< 5
Aniline	< 1	< 1
Benzyl alcohol	< 10	< 10
Nitrobenzene	< 1	< 1
Isophorone	< 1	< 1
2,4-Dinitrotoluene	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2
Benzidine (estimated)	< 5	< 5
3,3'-Dichlorobenzidine	< 1	< 1

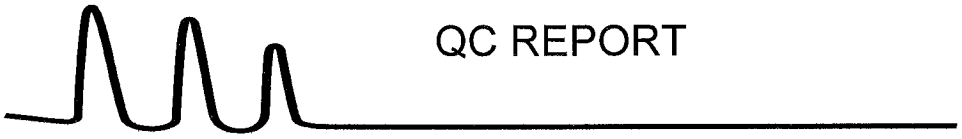
LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-931U_20230320	B-931L_20230320
Lab Sample ID:	257414.13	257414.14
Matrix:	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23
Units:	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23
Analyst:	JMR	JMR
Method:	8270E	8270E
Dilution Factor:	1	1
Pyridine	< 5	< 5
Azobenzene	< 1	< 1
Carbazole	< 1	< 1
Dimethylphthalate	< 1	< 1
Diethylphthalate	< 5	< 5
Di-n-butylphthalate	< 5	< 5
Butylbenzylphthalate	< 5	< 5
bis(2-Ethylhexyl)phthalate	< 5	< 5
Di-n-octylphthalate	< 5	< 5
Dibenzofuran	< 1	< 1
Naphthalene	< 0.1	< 0.1
2-Methylnaphthalene	< 0.1	< 0.1
1-Methylnaphthalene	< 0.1	< 0.1
Acenaphthylene	< 0.1	< 0.1
Acenaphthene	< 0.1	< 0.1
Fluorene	< 0.1	< 0.1
Phenanthrene	< 0.1	< 0.1
Anthracene	< 0.1	< 0.1
Fluoranthene	< 0.1	< 0.1
Pyrene	< 0.1	< 0.1
Benzo[a]anthracene	< 0.1	< 0.1
Chrysene	< 0.1	< 0.1
Benzo[b]fluoranthene	< 0.1	< 0.1
Benzo[k]fluoranthene	< 0.1	< 0.1
Benzo[a]pyrene	< 0.1	< 0.1
Indeno[1,2,3-cd]pyrene	< 0.1	< 0.1
Dibenz[a,h]anthracene	< 0.1	< 0.1
Benzo[g,h,i]perylene	< 0.1	< 0.1
n-Decane	< 5	< 5
n-Octadecane	< 5	< 5
2-Fluorophenol (surr)	**39 %R**	**45 %R**
Phenol-d6 (surr)	**27 %R**	**32 %R**
2,4,6-Tribromophenol (surr)	**87 %R**	**93 %R**
Nitrobenzene-D5 (surr)	**80 %R**	**88 %R**
2-Fluorobiphenyl (surr)	**88 %R**	**93 %R**
p-Terphenyl-D14 (surr)	**84 %R**	**87 %R**



QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Batch ID: 638149-80497/A032123ABN1

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
alpha-Terpineol	< 5	17 (68 %R)	17 (68 %R) (0 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Phenol	< 1	13 (25 %R)	13 (26 %R) (1 RPD)	3/21/2023	ug/L	15 - 130	20	8270E
2-Chlorophenol	< 1	28 (55 %R)	28 (57 %R) (3 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
2,4-Dichlorophenol	< 1	32 (65 %R)	33 (66 %R) (1 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
2,4,5-Trichlorophenol	< 1	39 (78 %R)	39 (79 %R) (1 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
2,4,6-Trichlorophenol	< 1	38 (76 %R)	38 (76 %R) (1 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
Pentachlorophenol	< 5	43 (86 %R)	46 (92 %R) (7 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
2-Nitrophenol	< 5	34 (68 %R)	35 (69 %R) (3 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
4-Nitrophenol	< 5	17 (35 %R)	19 (39 %R) (11 RPD)	3/21/2023	ug/L	15 - 130	20	8270E
2,4-Dinitrophenol	< 10	46 (92 %R)	49 (99 %R) (7 RPD)	3/21/2023	ug/L	15 - 130	20	8270E
2-Methylphenol	< 1	26 (52 %R)	26 (53 %R) (0 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
3/4-Methylphenol	< 1	27 (54 %R)	27 (54 %R) (0 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
2,4-Dimethylphenol	< 5	29 (58 %R)	29 (57 %R) (2 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
4-Chloro-3-methylphenol	< 1	38 (76 %R)	38 (76 %R) (0 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
4,6-Dinitro-2-methylphenol	< 5	51 (101 %R)	54 (109 %R) (7 RPD)	3/21/2023	ug/L	30 - 130	20	8270E
Benzoic Acid	< 50	< 50 (16 %R)	* < 50 (14 %R) (11 RPD)	3/21/2023	ug/L	15 - 130	20	8270E
N-Nitrosodimethylamine	< 1	10 (40 %R)	10 (42 %R) (4 RPD)	3/21/2023	ug/L	15 - 140	20	8270E
n-Nitroso-di-n-propylamine	< 0.5	16 (65 %R)	16 (65 %R) (0 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
n-Nitrosodiphenylamine	< 1	20 (80 %R)	22 (86 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
bis(2-Chloroethyl)ether	< 1	14 (57 %R)	15 (58 %R) (3 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
bis(2-chloroisopropyl)ether	< 1	13 (53 %R)	14 (54 %R) (2 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
bis(2-Chloroethoxy)methane	< 1	16 (65 %R)	17 (66 %R) (2 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
1,3-Dichlorobenzene	< 1	13 (53 %R)	14 (55 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Acetophenone	< 10	16 (64 %R)	16 (65 %R) (2 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
1,4-Dichlorobenzene	< 1	13 (52 %R)	14 (55 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
1,2-Dichlorobenzene	< 1	14 (54 %R)	14 (57 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
1,2,4-Trichlorobenzene	< 1	14 (58 %R)	15 (60 %R) (4 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
2-Chloronaphthalene	< 1	17 (68 %R)	17 (70 %R) (2 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
4-Chlorophenyl-phenylether	< 1	20 (78 %R)	20 (82 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
4-Bromophenyl-phenylether	< 1	20 (81 %R)	22 (88 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Hexachloroethane	< 1	13 (51 %R)	13 (53 %R) (4 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Hexachlorobutadiene	< 1	14 (56 %R)	14 (58 %R) (4 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Hexachlorocyclopentadiene	< 5	7.4 (29 %R)	7.4 (30 %R) (0 RPD)	3/21/2023	ug/L	15 - 140	20	8270E
Hexachlorobenzene	< 1	21 (82 %R)	22 (89 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
4-Chloroaniline	< 1	17 (69 %R)	18 (71 %R) (3 RPD)	3/21/2023	ug/L	15 - 140	20	8270E
2,3-Dichloroaniline	< 1	19 (74 %R)	19 (75 %R) (2 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
2-Nitroaniline	< 5	21 (82 %R)	22 (86 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
3-Nitroaniline	< 5	21 (83 %R)	22 (89 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
4-Nitroaniline	< 5	22 (86 %R)	23 (94 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Aniline	< 1	14 (57 %R)	15 (59 %R) (4 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzyl alcohol	< 10	15 (60 %R)	15 (60 %R) (1 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Nitrobenzene	< 1	15 (60 %R)	16 (62 %R) (4 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Isophorone	< 1	17 (67 %R)	17 (67 %R) (0 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
2,4-Dinitrotoluene	< 2	23 (91 %R)	24 (98 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
2,6-Dinitrotoluene	< 2	21 (84 %R)	23 (90 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzidine (estimated)	< 5	< 5 (16 %R)	9.4 (38 %R) (80 RPD) !	3/21/2023	ug/L	1 - 200	50	8270E

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Batch ID: 638149-80497/A032123ABN1

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
3,3'-Dichlorobenzidine	< 1	22 (89 %R)	25 (98 %R) (10 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Pyridine	< 5	9.6 (39 %R)	10 (40 %R) (4 RPD)	3/21/2023	ug/L	15 - 140	20	8270E
Azobenzene	< 1	19 (77 %R)	21 (82 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Carbazole	< 1	22 (88 %R)	24 (95 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Dimethylphthalate	< 1	21 (84 %R)	23 (91 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Diethylphthalate	< 5	22 (89 %R)	24 (96 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Di-n-butylphthalate	< 5	23 (94 %R)	25 (102 %R) (9 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Butylbenzylphthalate	< 5	24 (98 %R)	26 (105 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
bis(2-Ethylhexyl)phthalate	< 5	23 (93 %R)	25 (101 %R) (9 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Di-n-octylphthalate	< 5	24 (97 %R)	26 (105 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Dibenzofuran	< 1	19 (75 %R)	20 (78 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Naphthalene	< 0.1	15 (60 %R)	16 (63 %R) (4 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
2-Methylnaphthalene	< 0.1	17 (66 %R)	17 (68 %R) (3 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
1-Methylnaphthalene	< 0.1	16 (65 %R)	16 (66 %R) (2 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Acenaphthylene	< 0.1	17 (66 %R)	17 (69 %R) (3 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Acenaphthene	< 0.1	18 (72 %R)	18 (74 %R) (3 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Fluorene	< 0.1	19 (77 %R)	20 (80 %R) (5 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Phenanthrene	< 0.1	20 (79 %R)	21 (86 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Anthracene	< 0.1	20 (79 %R)	21 (86 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Fluoranthene	< 0.1	20 (81 %R)	22 (89 %R) (9 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Pyrene	< 0.1	19 (77 %R)	21 (83 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzo[a]anthracene	< 0.1	19 (77 %R)	21 (84 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Chrysene	< 0.1	21 (83 %R)	23 (90 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzo[b]fluoranthene	< 0.1	21 (83 %R)	22 (90 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzo[k]fluoranthene	< 0.1	22 (87 %R)	24 (95 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzo[a]pyrene	< 0.1	20 (81 %R)	22 (88 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Indeno[1,2,3-cd]pyrene	< 0.1	21 (85 %R)	23 (92 %R) (8 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Dibenz[a,h]anthracene	< 0.1	21 (83 %R)	22 (90 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
Benzo[g,h,i]perylene	< 0.1	22 (86 %R)	23 (93 %R) (7 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
n-Decane	< 5	12 (48 %R)	12 (50 %R) (3 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
n-Octadecane	< 5	21 (82 %R)	22 (87 %R) (6 RPD)	3/21/2023	ug/L	40 - 140	20	8270E
2-Fluorophenol (surr)	44 %R	33 %R	34 %R	3/21/2023	% Rec	15 - 110		8270E
Phenol-d6 (surr)	31 %R	24 %R	25 %R	3/21/2023	% Rec	15 - 110		8270E
2,4,6-Tribromophenol (surr)	66 %R	87 %R	93 %R	3/21/2023	% Rec	15 - 110		8270E
Nitrobenzene-D5 (surr)	81 %R	61 %R	63 %R	3/21/2023	% Rec	30 - 130		8270E
2-Fluorobiphenyl (surr)	84 %R	67 %R	69 %R	3/21/2023	% Rec	30 - 130		8270E
p-Terphenyl-D14 (surr)	81 %R	84 %R	89 %R	3/21/2023	% Rec	30 - 130		8270E

*/I Flagged analyte recoverles deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Batch ID: 638151-52751/A032323ABN1

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
alpha-Terpineol	< 5	22 (86 %R)	21 (84 %R) (3 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Phenol	< 1	16 (32 %R)	16 (32 %R) (0 RPD)	3/23/2023	ug/L	15 - 130	20	8270E
2-Chlorophenol	< 1	36 (72 %R)	36 (72 %R) (0 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
2,4-Dichlorophenol	< 1	42 (83 %R)	41 (82 %R) (1 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
2,4,5-Trichlorophenol	< 1	45 (91 %R)	44 (88 %R) (4 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
2,4,6-Trichlorophenol	< 1	45 (91 %R)	44 (88 %R) (3 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
Pentachlorophenol	< 5	48 (96 %R)	45 (90 %R) (6 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
2-Nitrophenol	< 5	45 (90 %R)	45 (89 %R) (1 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
4-Nitrophenol	< 5	19 (38 %R)	18 (36 %R) (6 RPD)	3/23/2023	ug/L	15 - 130	20	8270E
2,4-Dinitrophenol	< 10	54 (108 %R)	52 (104 %R) (4 RPD)	3/23/2023	ug/L	15 - 130	20	8270E
2-Methylphenol	< 1	34 (68 %R)	34 (67 %R) (0 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
3/4-Methylphenol	< 1	34 (68 %R)	34 (67 %R) (2 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
2,4-Dimethylphenol	< 5	39 (78 %R)	36 (72 %R) (8 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
4-Chloro-3-methylphenol	< 1	45 (89 %R)	43 (86 %R) (4 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
4,6-Dinitro-2-methylphenol	< 5	57 (114 %R)	54 (107 %R) (6 RPD)	3/23/2023	ug/L	30 - 130	20	8270E
Benzoic Acid	< 50	< 50 (28 %R)	< 50 (26 %R) (4 RPD)	3/23/2023	ug/L	15 - 130	20	8270E
N-Nitrosodimethylamine	< 1	13 (52 %R)	13 (52 %R) (0 RPD)	3/23/2023	ug/L	15 - 140	20	8270E
n-Nitroso-di-n-propylamine	< 0.5	21 (83 %R)	20 (82 %R) (2 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
n-Nitrosodiphenylamine	< 1	22 (89 %R)	21 (84 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
bis(2-Chloroethyl)ether	< 1	19 (76 %R)	19 (76 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
bis(2-chloroisopropyl)ether	< 1	18 (71 %R)	18 (71 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
bis(2-Chloroethoxy)methane	< 1	21 (84 %R)	21 (83 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
1,3-Dichlorobenzene	< 1	17 (69 %R)	17 (68 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Acetophenone	< 10	21 (83 %R)	20 (82 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
1,4-Dichlorobenzene	< 1	19 (74 %R)	18 (73 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
1,2-Dichlorobenzene	< 1	18 (70 %R)	18 (71 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
1,2,4-Trichlorobenzene	< 1	19 (75 %R)	19 (75 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
2-Chloronaphthalene	< 1	21 (84 %R)	21 (82 %R) (2 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
4-Chlorophenyl-phenylether	< 1	22 (89 %R)	21 (85 %R) (4 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
4-Bromophenyl-phenylether	< 1	23 (90 %R)	21 (86 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Hexachloroethane	< 1	17 (67 %R)	17 (67 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Hexachlorobutadiene	< 1	18 (74 %R)	18 (73 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Hexachlorocyclopentadiene	< 5	15 (58 %R)	14 (57 %R) (3 RPD)	3/23/2023	ug/L	15 - 140	20	8270E
Hexachlorobenzene	< 1	23 (91 %R)	22 (86 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
4-Chloroaniline	< 1	22 (88 %R)	22 (87 %R) (2 RPD)	3/23/2023	ug/L	15 - 140	20	8270E
2,3-Dichloroaniline	< 1	22 (89 %R)	22 (86 %R) (3 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
2-Nitroaniline	< 5	24 (97 %R)	23 (93 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
3-Nitroaniline	< 5	24 (95 %R)	23 (90 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
4-Nitroaniline	< 5	24 (96 %R)	23 (91 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Aniline	< 1	18 (73 %R)	18 (74 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzyl alcohol	< 10	19 (76 %R)	19 (76 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Nitrobenzene	< 1	20 (78 %R)	20 (78 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Isophorone	< 1	21 (84 %R)	20 (82 %R) (3 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
2,4-Dinitrotoluene	< 2	25 (101 %R)	24 (95 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
2,6-Dinitrotoluene	< 2	24 (97 %R)	23 (91 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzidine (estimated)	< 5	14 (58 %R)	14 (55 %R) (5 RPD)	3/23/2023	ug/L	1 - 200	50	8270E

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Batch ID: 638151-52751/A032323ABN1

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
3,3'-Dichlorobenzidine	< 1	25 (101 %R)	23 (94 %R) (7 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Pyridine	< 5	12 (49 %R)	12 (49 %R) (1 RPD)	3/23/2023	ug/L	15 - 140	20	8270E
Azobenzene	< 1	22 (87 %R)	21 (83 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Carbazole	< 1	24 (95 %R)	22 (90 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Dimethylphthalate	< 1	24 (94 %R)	23 (90 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Diethylphthalate	< 5	24 (98 %R)	23 (92 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Di-n-butylphthalate	< 5	25 (101 %R)	24 (95 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Butylbenzylphthalate	< 5	27 (108 %R)	25 (102 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
bis(2-Ethylhexyl)phthalate	< 5	26 (103 %R)	24 (97 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Di-n-octylphthalate	< 5	28 (110 %R)	26 (104 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Dibenzofuran	< 1	22 (87 %R)	21 (84 %R) (4 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Naphthalene	< 0.1	19 (77 %R)	19 (78 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
2-Methylnaphthalene	< 0.1	21 (85 %R)	21 (84 %R) (1 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
1-Methylnaphthalene	< 0.1	20 (82 %R)	20 (80 %R) (2 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Acenaphthylene	< 0.1	20 (80 %R)	19 (77 %R) (3 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Acenaphthene	< 0.1	21 (85 %R)	21 (83 %R) (3 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Fluorene	< 0.1	22 (87 %R)	21 (83 %R) (4 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Phenanthrene	< 0.1	22 (87 %R)	20 (81 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Anthracene	< 0.1	22 (87 %R)	20 (82 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Fluoranthene	< 0.1	22 (87 %R)	21 (83 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Pyrene	< 0.1	21 (86 %R)	20 (81 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzo[a]anthracene	< 0.1	21 (85 %R)	20 (80 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Chrysene	< 0.1	23 (90 %R)	21 (86 %R) (6 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzo[b]fluoranthene	< 0.1	23 (94 %R)	22 (87 %R) (7 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzo[k]fluoranthene	< 0.1	24 (94 %R)	23 (91 %R) (3 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzo[a]pyrene	< 0.1	22 (90 %R)	21 (84 %R) (7 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Indeno[1,2,3-cd]pyrene	< 0.1	22 (90 %R)	21 (85 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Dibenz[a,h]anthracene	< 0.1	22 (87 %R)	21 (83 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
Benzo[g,h,i]perylene	< 0.1	22 (89 %R)	21 (85 %R) (4 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
n-Decane	< 5	16 (63 %R)	16 (63 %R) (0 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
n-Octadecane	< 5	23 (92 %R)	22 (87 %R) (5 RPD)	3/23/2023	ug/L	40 - 140	20	8270E
2-Fluorophenol (surr)	41 %R	43 %R	43 %R	3/23/2023	% Rec	15 - 110		8270E
Phenol-d6 (surr)	30 %R	31 %R	31 %R	3/23/2023	% Rec	15 - 110		8270E
2,4,6-Tribromophenol (surr)	88 %R	96 %R	89 %R	3/23/2023	% Rec	15 - 110		8270E
Nitrobenzene-D5 (surr)	76 %R	81 %R	79 %R	3/23/2023	% Rec	30 - 130		8270E
2-Fluorobiphenyl (surr)	85 %R	84 %R	82 %R	3/23/2023	% Rec	30 - 130		8270E
p-Terphenyl-D14 (surr)	90 %R	92 %R	87 %R	3/23/2023	% Rec	30 - 130		8270E

*/! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23	3/23/23	3/23/23
Analyst:	WOD	WOD	WOD	WOD
Method:	8011/504	8011/504	8011/504	8011/504
Dilution Factor:	1	1	1	1
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.02
Dibromochloropropane (DBCP)	< 0.02	< 0.02	< 0.02	< 0.02
1,1,1,2-Tetrachloroethane (surr)	**87 %R**	**83 %R**	**86 %R**	**85 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23	3/23/23	3/23/23
Analyst:	WOD	WOD	WOD	WOD
Method:	8011/504	8011/504	8011/504	8011/504
Dilution Factor:	1	1	1	1
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.02
Dibromochloropropane (DBCP)	< 0.02	< 0.02	< 0.02	< 0.02
1,1,1,2-Tetrachloroethane (surr)	**85 %R**	**82 %R**	**91 %R**	**90 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12
Matrix:	aqueous	aqueous	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23
Units:	ug/L	ug/L	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23	3/23/23	3/23/23
Analyst:	WOD	WOD	WOD	WOD
Method:	8011/504	8011/504	8011/504	8011/504
Dilution Factor:	1	1	1	1
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.02
Dibromochloropropane (DBCP)	< 0.02	< 0.02	< 0.02	< 0.02
1,1,1,2-Tetrachloroethane (surr)	**89 %R**	**91 %R**	**87 %R**	**91 %R**

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-931U_20230320	B-931L_20230320
Lab Sample ID:	257414.13	257414.14
Matrix:	aqueous	aqueous
Date Sampled:	3/20/23	3/20/23
Date Received:	3/20/23	3/20/23
Units:	ug/L	ug/L
Date of Extraction/Prep:	3/23/23	3/23/23
Date of Analysis:	3/23/23	3/23/23
Analyst:	WOD	WOD
Method:	8011/504	8011/504
Dilution Factor:	1	1
1,2-Dibromoethane(EDB)	< 0.02	< 0.02
Dibromochloropropane (DBCP)	< 0.02	< 0.02
1,1,1,2-Tetrachloroethane (surr)	**81 %R**	**90 %R**

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Batch ID: 638151-56360/A032323E5041

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,2-Dibromoethane(EDB)	< 0.02	0.096 (96 %R)	0.099 (99 %R) (3 RPD)	3/23/2023	ug/L	70 - 130	20	8011/504
Dibromochloropropane (DBCP)	< 0.02	0.093 (93 %R)	0.095 (95 %R) (2 RPD)	3/23/2023	ug/L	70 - 130	20	8011/504
1,1,1,2-Tetrachloroethane (surr)	87 %R	84 %R	86 %R	3/23/2023	% Rec	65 - 135	20	8011/504

*/! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320		Analysis			
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23					
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23	Units	Date	Time	Method	Analyst
Bromide	< 0.1	< 0.1	< 0.1	< 0.1	mg/L	03/21/23	10:01	300.0	ALM
Sulfate	**19**	**6.6**	**4.6**	**4.1**	mg/L	03/21/23	10:01	300.0	ALM
Chloride	**3.7**	**1.6**	**1.9**	< 1	mg/L	03/21/23	10:01	300.0	ALM
Nitrate-N	**0.50**	< 0.5	**0.89**	< 0.5	mg/L	03/21/23	10:01	300.0	ALM
TKN	< 0.5	**0.61**	< 0.5	< 0.5	mg/L	03/24/23	12:56	$4500N_{org}C/NH3D$	GRS
COD	< 10	< 10	< 10	< 10	mg/L	03/21/23	13:45	H8000	JCS

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320		Analysis			
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23					
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23	Units	Date	Time	Method	Analyst
Bromide	< 0.1	< 0.1	< 0.1	< 0.1	mg/L	03/21/23	10:59	300.0	ALM
Sulfate	**4.9**	**6.5**	**5.3**	**20**	mg/L	03/21/23	10:59	300.0	ALM
Chloride	**2**	**1.7**	**2.5**	**14**	mg/L	03/21/23	10:59	300.0	ALM
Nitrate-N	**0.52**	< 0.5	< 0.5	< 0.5	mg/L	03/21/23	10:59	300.0	ALM
TKN	< 0.5	< 0.5	< 0.5	< 0.5	mg/L	03/24/23	13:07	$4500N_{org}C/NH3D$	GRS
COD	< 10	< 10	**45**	< 10	mg/L	03/21/23	13:45	H8000	JCS

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320					
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23					
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23		Analysis			
					Units	Date	Time	Method	Analyst
Bromide	< 0.1	< 0.1	< 0.1	< 0.1	mg/L	03/21/23	11:57	300.0	ALM
Sulfate	**7**	**6.9**	**7.7**	**4.7**	mg/L	03/21/23	11:57	300.0	ALM
Chloride	**1.8**	**1.7**	< 1	< 1	mg/L	03/21/23	11:57	300.0	ALM
Nitrate-N	**1.9**	**1.3**	< 0.5	< 0.5	mg/L	03/21/23	11:57	300.0	ALM
TKN	< 0.5	< 0.5	< 0.5	< 0.5	mg/L	03/24/23	13:17	$4500N_{org}C/NH3D$	GRS
COD	< 10	< 10	< 10	< 10	mg/L	03/21/23	13:45	H8000	JCS

Sample ID:	B-931U_20230320	B-931L_20230320						
Lab Sample ID:	257414.13	257414.14						
Matrix:	aqueous	aqueous						
Date Sampled:	3/20/23	3/20/23		Analysis				
Date Received:	3/20/23	3/20/23	Units	Date	Time	Method	Analyst	
Bromide	< 0.1	< 0.1	mg/L	03/21/23	14:07	300.0	ALM	
Sulfate	**5.9**	**7.7**	mg/L	03/21/23	14:07	300.0	ALM	
Chloride	**1.9**	**2.1**	mg/L	03/21/23	14:07	300.0	ALM	
Nitrate-N	< 0.5	< 0.5	mg/L	03/21/23	14:07	300.0	ALM	
TKN	< 0.5	< 0.5	mg/L	03/24/23	13:42	$4500N_{org}C/NH3D$	GRS	
COD	< 10	< 10	mg/L	03/21/23	13:45	H8000	JCS	

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Bromide	< 0.1	2.1 (104 %R)	2.1 (104 %R) (1 RPD)	mg/L	3/21/23	90 - 110	20	300.0
Sulfate	< 1	21 (104 %R)	21 (103 %R) (1 RPD)	mg/L	3/21/23	90 - 110	20	300.0
Chloride	< 1	20 (102 %R)	20 (102 %R) (1 RPD)	mg/L	3/21/23	90 - 110	20	300.0
Nitrate-N	< 0.5	1.9 (93 %R)	1.9 (93 %R) (1 RPD)	mg/L	3/21/23	90 - 110	20	300.0
TKN	< 0.5	10 (100 %R)	9.9 (99 %R) (1 RPD)	mg/L	3/24/23	90 - 111	20	4500N_{org}C/NH3D-11
COD	< 10	100 (103 %R)	110 (109 %R) (5 RPD)	mg/L	3/21/23	85 - 115	20	H8000

*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-102S_20230320	B-102D_20230320	B-903U_20230320	B-903L_20230320					
Lab Sample ID:	257414.01	257414.02	257414.03	257414.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23					
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Arsenic	< 0.0005	**0.060**	< 0.0005	**0.0083**	AqDis	mg/L	3/21/23	200.8	DS
Barium	**0.090**	**0.0092**	**0.0066**	**0.0067**	AqDis	mg/L	3/21/23	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Iron	< 0.05	**9.9**	< 0.05	< 0.05	AqDis	mg/L	3/21/23	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Manganese	**2.0**	**1.2**	< 0.005	**0.037**	AqDis	mg/L	3/21/23	200.8	DS
Nickel	**0.0019**	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS

Sample ID:	B-904U_20230320	B-904L_20230320	B-914U_20230320	B-914L_20230320					
Lab Sample ID:	257414.05	257414.06	257414.07	257414.08					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23					
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Arsenic	**0.00055**	**0.0029**	**0.0013**	< 0.0005	AqDis	mg/L	3/21/23	200.8	DS
Barium	**0.0040**	**0.014**	**0.0093**	**0.038**	AqDis	mg/L	3/21/23	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Iron	< 0.05	**0.085**	< 0.05	< 0.05	AqDis	mg/L	3/21/23	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Manganese	< 0.005	**0.080**	**0.087**	< 0.005	AqDis	mg/L	3/21/23	200.8	DS
Nickel	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS

LABORATORY REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Sample ID:	B-929U_20230320	B-929L_20230320	B-930U_20230320	B-930L_20230320					
Lab Sample ID:	257414.09	257414.1	257414.11	257414.12					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	3/20/23	3/20/23	3/20/23	3/20/23					
Date Received:	3/20/23	3/20/23	3/20/23	3/20/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Arsenic	< 0.0005	< 0.0005	< 0.0005	**0.0051**	AqDis	mg/L	3/21/23	200.8	DS
Barium	**0.0065**	**0.0090**	**0.0084**	**0.0096**	AqDis	mg/L	3/21/23	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Chromium	**0.0013**	**0.0012**	**0.0019**	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Iron	< 0.05	**0.091**	< 0.05	< 0.05	AqDis	mg/L	3/21/23	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Manganese	< 0.005	**0.0095**	< 0.005	**0.071**	AqDis	mg/L	3/21/23	200.8	DS
Nickel	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS

Sample ID:	B-931U_20230320	B-931L_20230320						
Lab Sample ID:	257414.13	257414.14						
Matrix:	aqueous	aqueous						
Date Sampled:	3/20/23	3/20/23						
Date Received:	3/20/23	3/20/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**	
Antimony	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Arsenic	**0.00068**	< 0.0005	AqDis	mg/L	3/21/23	200.8	DS	
Barium	**0.0035**	**0.0077**	AqDis	mg/L	3/21/23	200.8	DS	
Beryllium	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Cadmium	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Chromium	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Iron	< 0.05	< 0.05	AqDis	mg/L	3/21/23	200.8	DS	
Lead	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Manganese	< 0.005	**0.065**	AqDis	mg/L	3/21/23	200.8	DS	
Nickel	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Silver	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	
Thallium	< 0.001	< 0.001	AqDis	mg/L	3/21/23	200.8	DS	

QC REPORT

EAI ID#: **257414**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | Groundwater / 2637.10**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Antimony	< 0.001	0.21 (104 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Arsenic	< 0.0005	0.20 (101 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Barium	< 0.001	0.21 (103 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Beryllium	< 0.001	0.21 (103 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Cadmium	< 0.001	0.21 (103 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Chromium	< 0.001	0.19 (97 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Iron	< 0.05	10 (100 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Lead	< 0.001	0.20 (101 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Manganese	< 0.005	0.19 (96 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Nickel	< 0.001	0.19 (95 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Silver	< 0.001	0.0098 (98 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8
Thallium	< 0.001	0.20 (102 %R)	NA	mg/L	3/21/23	85 - 115	20	200.8

*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.

Page 1 of 2

Chain-of-Custody Record

Fc

257414

Sample ID	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	Analyses Requested: VOCs 8260B	Low Level 1,4-Dioxane	Low Level EDB/DBCP	TKN, COD	Bromide, Chloride, Nitrate, Sulfate	Dissolved Metals List A	ABNs	# of Containers	NOTES MeOH Vial #
B-102S_202303 20	3/20/23 1340	GW	G	X	X	X	X	X	X	X	10	
B-102D_202303	1401	GW	G	X	X	X	X	X	X	X	10	
B-903U_202303	1145	GW	G	X	X	X	X	X	X	X	10	
B-903L_202303	1148	GW	G	X	X	X	X	X	X	X	10	
B-904U_202303	0950	GW	G	X	X	X	X	X	X	X	10	
B-904L_202303	1000	GW	G	X	X	X	X	X	X	X	10	
B-914U_202303	1420	GW	G	X	X	X	X	X	X	X	10	
B-914L_202303	1421	GW	G	X	X	X	X	X	X	X	10	
B-929U_202303	1242	GW	G	X	X	X	X	X	X	X	10	
B-929L_202303	1230	GW	G	X	X	X	X	X	X	X	10	
Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drining Water; WW-Waste Water; AQ-Aqueous Preservative: H-HCl; N-HNO3; S-H2SO4; Na-NaOH; M-MeOH; NSO-Na2S2O3				H	Ice	NSO	S	Ice	N	Ice		

Project Manager: M. Estabrooks / T. White

Company: Sanborn, Head & Associates, Inc.

Address: 20 Foundry Street

City: Concord State: NH Zip: 03301

Phone 603-229-1900 Ext.:

Fax: 603-229-1919

E-Mail: mestabrooks@sanbornhead.com

Site Name: NCES | Groundwater

Project # 2637.10

State: NH

Regulatory Program: NPDES: RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:

Quote #: PO#:

Date Needed: Standard TAT

Temp. 0.9 °C ICE

QA/QC

Reporting Level

A **B** C

or

Presumptive Certainty

Reporting Options

Prelims: Yes or No

If Yes: Fax or PDF

Electonic Options

No Fax | E-Mail | PDF | Equis

Metals: Lists Below **Samples Field Filtered:** YES

A: Fe, Mn, As, Ba, Cd, Cr, Pb, Sb, Be, Ni, Ag, Tl

B:

C:

D:

Sampler(s): MTS, CJPL

Relinquished By:	Date:	Time:	Received By:
	3/20/23	1643	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Notes: (i.e., Special Detection Limits, Billing Info, If Different)

Trip blank(s) prepared by EAI.

Bill NCES.

*Report 1,4-dioxane to 0.25 ug/l RL

*Hold Final report until EQuIS EDD ready.

Site History:

Suspected Contamination:

Field Readings:

Eastern Analytical, Inc.
professional laboratory & drilling services

51 Antrim Ave | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customerservice@eailabs.com | www.eailabs.com

Chain-of-Custody Record

Page 2 of 2

For Lab Use: 257414

Sample ID	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOCs 8260B	Low Level 1,4-Dioxane	Low Level EDB/DBCP	TKN, COD	Bromide, Chloride, Nitrate, Sulfate	Dissolved Metals List A	ABNs	# of Containers	NOTES MeOH Vial #
B-930U_202303 20	3/20/23 1055	GW	G	X	X	X	X	X	X	X	10	
B-930L_202303	1054	GW	G	X	X	X	X	X	X	X	10	
B-931U_202303	0855	GW	G	X	X	X	X	X	X	X	10	
B-931L_202303	0845	GW	G	X	X	X	X	X	X	X	10	
TB-GW-01_202303	1444	AQ	-	X							2	
TB-LL-GW-01_202303	1444	AQ	-		X						2	
Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drining Water; WW-Waste Water; AQ-Aqueous Preservative: H-HCl; N-HNO3; S-H2SO4; Na-NaOH; M-MeOH; NSO-Na2S2O3				H	Ice	NSO	S	Ice	N	Ice		

Analyses Requested

Project Manager:	M. Estabrooks / T. White
Company:	Sanborn, Head & Associates, Inc.
Address:	20 Foundry Street
City:	Concord State: NH Zip: 03301
Phone	603-229-1900 Ext.:
Fax:	603-229-1919
E-Mail:	mestabrooks@sanbornhead.com
Site Name:	NCES | Groundwater
Project #	2637.10
State:	NH

Regulatory Program: NPDES: RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:

Quote #: PO#:

Date Needed: Standard TAT

Temp 0-9 °C 1C4

QA/QC

Reporting Level

A **B** C

or

Presumptive Certainty

Reporting Options

Prelims: Yes or No

If Yes: Fax or PDF

Electonic Options

No Fax | E-Mail | PDF | Equis

Metals: Lists Below **Samples Field Filtered:** YES

A: Fe, Mn, As, Ba, Cd, Cr, Pb, Sb, Be, Ni, Ag, Tl

B:

C:

D:

Sampler(s): MTS CJPL

Relinquished By:	Date:	Time:	Received By:
	3/20/23	1643	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Notes: (i.e., Special Detection Limits, Billing Info, If Different)

Trip blank(s) prepared by EAI.

Bill NCES.

*Report 1,4-dioxane to 0.25 ug/l RL

*Hold Final report until EQuIS EDD ready.

Site History:

Suspected Contamination:

Field Readings:

Eastern Analytical, Inc.
Professional laboratory & drilling services

51 Antrim Ave | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customerservice@eailabs.com | www.eailabs.com

Eastern Analytical, Inc.
professional laboratory and drilling services

Matt Estabrooks
Sanborn, Head & Associates, Inc. (NH)
6 Bedford Farms Drive, Suite 201
Bedford , NH 03110

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 257415
Client Identification: NCES | PFAS / 2637.10
Date Received: 3/20/2023

Dear Estabrooks :

Enclosed please find the report of analysis for the above identified project. As discussed, analyses were subcontracted and are listed as follows:

Analysis:	Subcontract - PFAS EPA Method 537mod
Subcontractor Lab:	Enthalpy Analytical

A complete copy of the report is attached. This report may not be reproduced except in full, without the written approval of the laboratory.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw
Lorraine Olashaw, Lab Director

4.18.23
Date

SAMPLE CONDITIONS PAGE

EAI ID#: **257415**

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **NCES | PFAS / 2637.10**

Temperature upon receipt (°C): 0.9 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled		Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
257415.01	B-102S_20230320	3/20/23	3/20/23	13:40	aqueous		Adheres to Sample Acceptance Policy
257415.02	B-102D_20230320	3/20/23	3/20/23	14:01	aqueous		Adheres to Sample Acceptance Policy
257415.03	B-903U_20230320	3/20/23	3/20/23	11:45	aqueous		Adheres to Sample Acceptance Policy
257415.04	B-903L_20230320	3/20/23	3/20/23	11:48	aqueous		Adheres to Sample Acceptance Policy
257415.05	B-904U_20230320	3/20/23	3/20/23	09:50	aqueous		Adheres to Sample Acceptance Policy
257415.06	B-904L_20230320	3/20/23	3/20/23	10:00	aqueous		Adheres to Sample Acceptance Policy
257415.07	B-914U_20230320	3/20/23	3/20/23	14:20	aqueous		Adheres to Sample Acceptance Policy
257415.08	B-914L_20230320	3/20/23	3/20/23	14:21	aqueous		Adheres to Sample Acceptance Policy
257415.09	B-929U_20230320	3/20/23	3/20/23	12:42	aqueous		Adheres to Sample Acceptance Policy
257415.1	B-929L_20230320	3/20/23	3/20/23	12:30	aqueous		Adheres to Sample Acceptance Policy
257415.11	B-930U_20230320	3/20/23	3/20/23	10:55	aqueous		Adheres to Sample Acceptance Policy
257415.12	B-930L_20230320	3/20/23	3/20/23	10:54	aqueous		Adheres to Sample Acceptance Policy
257415.13	B-931U_20230320	3/20/23	3/20/23	08:55	aqueous		Adheres to Sample Acceptance Policy
257415.14	B-931L_20230320	3/20/23	3/20/23	08:45	aqueous		Adheres to Sample Acceptance Policy
257415.15	FB-01_20230320	3/20/23	3/20/23	14:43	aqueous		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- *Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.*
- *Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.*
- *Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.*
- *Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.*

ENTHALPY ANALYTICAL

April 13, 2023

Enthalpy Analytical - El Dorado Hills
Work Order No. 2303204

Ms. Jennifer Laramie
Eastern Analytical, Inc.
51 Antrim Avenue
Concord, NH 03301

Dear Ms. Laramie,

Enclosed are the results for the sample set received at Enthalpy Analytical - EDH on March 24, 2023 under your Project Name '257415 NH 2089'.

Enthalpy Analytical - EDH is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at rajwinder.kaur@enthalpy.com.

Thank you for choosing Enthalpy Analytical - EDH as part of your analytical support team.

Sincerely,

Rajwinder Kaur
Project Manager

Enthalpy Analytical - EDH Work Order No. 2303204
Case Narrative

Sample Condition on Receipt:

Fifteen aqueous samples were received and stored securely in accordance with Enthalpy Analytical - EDH standard operating procedures and EPA methodology. The samples were received in good condition and within the recommended temperature requirements. Sample ID discrepancies were noted for the samples between the container labels and the Chain-of-Custody (CoC). The sample IDs have been reported as listed on the CoC.

Analytical Notes:

PFAS Isotope Dilution/LC-MSMS Method Compliant with Table B-15 of DoD QSM 5.3 (Aqueous)

The following samples contained particulate and were centrifuged prior to extraction:

Laboratory ID	Sample Name
2303204-02	B-102D_20230320
2303204-03	B-903U_20230320
2303204-04	B-903L_20230320
2303204-06	B-904L_20230320
2303204-07	B-914U_20230320
2303204-09	B-929U_20230320
2303204-10	B-929L_20230320
2303204-11	B-930U_20230320
2303204-12	B-930L_20230320
2303204-13	B-931U_20230320
2303204-14	B-931L_20230320

The samples were extracted and analyzed for a selected list of PFAS using Isotope Dilution and LC-MS/MS compliant with Table B-15 of DoD QSM 5.3. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

Holding Times

The samples were extracted and analyzed within the hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the Reporting Limits (RL). The OPR recoveries were within the method acceptance criteria.

The labeled standard recoveries outside the acceptance criteria are flagged with an "H" qualifier. The responses of the internal standards with low recoveries were greater than 10:1 signal-to-noise, which is the limit generally

considered acceptable for accurate quantitation by isotope dilution analysis.

TABLE OF CONTENTS

ENTHALPY ANALYTICAL

Sample Inventory Report

Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2303204-01	B-102S_20230320	20-Mar-23 13:40	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-02	B-102D_20230320	20-Mar-23 14:01	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-03	B-903U_20230320	20-Mar-23 11:45	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-04	B-903L_20230320	20-Mar-23 11:48	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-05	B-904U_20230320	20-Mar-23 09:50	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-06	B-904L_20230320	20-Mar-23 10:00	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-07	B-914U_20230320	20-Mar-23 14:20	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-08	B-914L_20230320	20-Mar-23 14:21	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-09	B-929U_20230320	20-Mar-23 12:42	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-10	B-929L_20230320	20-Mar-23 12:30	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-11	B-930U_20230320	20-Mar-23 10:55	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-12	B-930L_20230320	20-Mar-23 10:54	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-13	B-931U_20230320	20-Mar-23 08:55	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-14	B-931L_20230320	20-Mar-23 08:45	24-Mar-23 10:19	Polypropylene, 250mL
				Polypropylene, 250mL
2303204-15	FB-01_20230320	20-Mar-23 14:43	24-Mar-23 10:19	Polypropylene, 250mL

ANALYTICAL RESULTS

ENTHALPY ANALYTICAL

Sample ID: Method Blank — **PFAS Isotope Dilution Table B-15**

Client Data
Name: Eastern Analytical, Inc. Matrix: Aqueous
Project: 257415 NH 2089

Laboratory Data
Lab Sample: B23C261-BLK1 Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	80.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C3-PFPeA	IS	99.4	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C3-PFBS	IS	121	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-4:2 FTS	IS	94.7	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-PFHxA	IS	98.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C4-PFHpA	IS	95.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C3-PFHxS	IS	107	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-6:2 FTS	IS	97.2	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-PFOA	IS	99.3	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C5-PFNA	IS	88.9	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C8-PFOSA	IS	83.1	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C8-PFOS	IS	95.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1

ENTHALPY ANALYTICAL

Sample ID: Method Blank — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	B23C261-BLK1	Column:	BEH C18
Project:	257415 NH 2089						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C2-PFDA	IS	90.0	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-8:2 FTS	IS	86.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
d3-MeFOSAA	IS	74.0	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
d5-EtFOSAA	IS	73.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-PFUnA	IS	85.7	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-PFDoA	IS	75.9	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
d3-MeFOSA	IS	29.2	50 - 150	H	B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1
13C2-PFTeDA	IS	80.3	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:01	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: OPR

PFAS Isotope Dilution Table B-15

Client Data

Name: Eastern Analytical, Inc.
Project: 257415 NH 2089
Matrix: Aqueous

Laboratory Data

Lab Sample: B23C261-BS1
Column: BEH C18

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	37.8	40.0	94.4	73 - 129		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFPeA	2706-90-3	34.6	40.0	86.6	72 - 129		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFBS	375-73-5	36.5	40.4	90.4	72 - 130		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
4:2 FTS	757124-72-4	41.9	40.0	105	63 - 143		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFHxA	307-24-4	37.7	40.0	94.1	72 - 129		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFPeS	2706-91-4	32.8	40.4	81.2	71 - 127		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFHpA	375-85-9	38.2	40.0	95.6	72 - 130		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFHxS	355-46-4	41.3	40.0	103	68 - 131		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
6:2 FTS	27619-97-2	38.1	40.0	95.2	64 - 140		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFOA	335-67-1	43.2	40.0	108	71 - 133		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFHpS	375-92-8	42.7	40.0	107	69 - 134		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFNA	375-95-1	38.6	40.0	96.5	69 - 130		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFOSA	754-91-6	37.9	40.0	94.6	67 - 137		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFOS	1763-23-1	39.3	40.0	98.2	65 - 140		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFDA	335-76-2	41.5	40.0	104	71 - 129		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
8:2 FTS	39108-34-4	40.3	40.0	101	67 - 138		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFNS	68259-12-1	35.0	40.4	86.5	69 - 127		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
MeFOSAA	2355-31-9	37.6	40.0	94.0	65 - 136		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
EtFOSAA	2991-50-6	38.2	40.0	95.6	61 - 135		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFUnA	2058-94-8	38.7	40.0	96.8	69 - 133		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFDS	335-77-3	38.7	40.0	96.7	53 - 142		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFDoA	307-55-1	36.6	40.0	91.5	72 - 134		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
MeFOSA	31506-32-8	35.5	40.0	88.7	68 - 141		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFTrDA	72629-94-8	43.3	40.0	108	65 - 144		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
PFTeDA	376-06-7	40.7	40.0	102	71 - 132		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	78.1	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C3-PFPeA	IS	98.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C3-PFBS	IS	124	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-4:2 FTS	IS	93.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-PFHxA	IS	93.4	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C4-PFHpA	IS	97.1	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C3-PFHxS	IS	101	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-6:2 FTS	IS	89.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-PFOA	IS	90.4	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1

ENTHALPY ANALYTICAL

Sample ID: OPR — **PFAS Isotope Dilution Table B-15**

Client Data

Name: Eastern Analytical, Inc.
Project: 257415 NH 2089
Matrix: Aqueous

Laboratory Data

Lab Sample: B23C261-BS1
Column: BEH C18

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C5-PFNA	IS	88.1	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C8-PFOSA	IS	79.4	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C8-PFOS	IS	88.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-PFDA	IS	83.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-8:2 FTS	IS	89.0	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
d3-MeFOSAA	IS	73.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
d5-EtFOSAA	IS	72.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-PFUnA	IS	81.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-PFDoA	IS	75.2	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
d3-MeFOSA	IS	33.8	50 - 150	H	B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1
13C2-PFTeDA	IS	77.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 13:11	1

ENTHALPY ANALYTICAL

Sample ID: B-102S_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-01	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 13:40	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFBS	375-73-5	5.50	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFHxA	307-24-4	4.12	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFHpA	375-85-9	5.02	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFHxS	355-46-4	4.82	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFOA	335-67-1	4.24	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	86.6	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C3-PFPeA	IS	96.8	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C3-PFBS	IS	108	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-4:2 FTS	IS	80.6	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-PFHxA	IS	90.1	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C4-PFHpA	IS	92.2	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C3-PFHxS	IS	108	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-6:2 FTS	IS	85.8	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-PFOA	IS	90.5	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C5-PFNA	IS	85.0	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C8-PFOSA	IS	71.6	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1

ENTHALPY ANALYTICAL

Sample ID: B-102S_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-01	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 13:40	Date Received:	24-Mar-23 10:19		
Location:	257415						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	84.9	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-PFDA	IS	82.0	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-8:2 FTS	IS	79.4	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
d3-MeFOSAA	IS	61.8	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
d5-EtFOSAA	IS	56.5	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-PFUnA	IS	74.5	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-PFDoA	IS	63.2	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
d3-MeFOSA	IS	23.0	50 - 150	H	B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1
13C2-PFTeDA	IS	70.7	50 - 150		B23C261	28-Mar-23	0.267 L	30-Mar-23 13:43	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-102D_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-02	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:01	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	71.5	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C3-PFPeA	IS	101	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C3-PFBS	IS	130	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-4:2 FTS	IS	90.9	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-PFHxA	IS	102	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C4-PFHpA	IS	102	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C3-PFHxS	IS	115	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-6:2 FTS	IS	103	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-PFOA	IS	100	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C5-PFNA	IS	93.9	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C8-PFOSA	IS	84.7	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1

ENTHALPY ANALYTICAL

Sample ID: B-102D_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:01
Location:	257415		

Laboratory Data

Lab Sample:	2303204-02	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	94.2	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-PFDA	IS	89.7	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-8:2 FTS	IS	84.8	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
d3-MeFOSAA	IS	71.4	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
d5-EtFOSAA	IS	71.4	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-PFUnA	IS	92.2	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-PFDoA	IS	79.0	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
d3-MeFOSA	IS	34.6	50 - 150	H	B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1
13C2-PFTeDA	IS	82.8	50 - 150		B23C261	28-Mar-23	0.254 L	30-Mar-23 13:53	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-903U_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-03	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 11:45	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	70.1	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C3-PFPeA	IS	94.2	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C3-PFBS	IS	121	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-4:2 FTS	IS	91.6	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-PFHxA	IS	99.1	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C4-PFHpA	IS	98.9	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C3-PFHxS	IS	109	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-6:2 FTS	IS	87.5	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-PFOA	IS	95.0	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C5-PFNA	IS	90.4	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C8-PFOSA	IS	72.7	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1

ENTHALPY ANALYTICAL

Sample ID: B-903U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-03	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 11:45	Date Received:	24-Mar-23 10:19		
Location:	257415						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	96.5	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-PFDA	IS	86.8	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-8:2 FTS	IS	85.8	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
d3-MeFOSAA	IS	79.4	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
d5-EtFOSAA	IS	78.0	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-PFUnA	IS	85.3	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-PFDoA	IS	72.7	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
d3-MeFOSA	IS	26.1	50 - 150	H	B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1
13C2-PFTeDA	IS	81.4	50 - 150		B23C261	28-Mar-23	0.244 L	30-Mar-23 14:04	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-903L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-04	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 11:48	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	71.3	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C3-PFPeA	IS	101	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C3-PFBS	IS	130	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-4:2 FTS	IS	87.6	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-PFHxA	IS	98.2	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C4-PFHpA	IS	97.4	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C3-PFHxS	IS	118	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-6:2 FTS	IS	98.6	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-PFOA	IS	99.3	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C5-PFNA	IS	89.5	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C8-PFOSA	IS	79.9	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1

ENTHALPY ANALYTICAL

Sample ID: B-903L_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-04	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 11:48	Date Received:	24-Mar-23 10:19		
Location:	257415						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	99.4	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-PFDA	IS	89.4	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-8:2 FTS	IS	85.2	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
d3-MeFOSAA	IS	73.5	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
d5-EtFOSAA	IS	72.6	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-PFUnA	IS	83.0	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-PFDoA	IS	73.5	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
d3-MeFOSA	IS	22.5	50 - 150	H	B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1
13C2-PFTeDA	IS	76.7	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 14:14	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-904U_20230320 **PFAS Isotope Dilution Table B-15**

Client Data

Name: Eastern Analytical, Inc.
Project: 257415 NH 2089
Location: 257415
Matrix: Aqueous
Date Collected: 20-Mar-23 09:50

Laboratory Data

Lab Sample: 2303204-05
Date Received: 24-Mar-23 10:19
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	83.7	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C3-PFPeA	IS	98.0	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C3-PFBS	IS	120	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-4:2 FTS	IS	90.3	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-PFHxA	IS	95.6	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C4-PFHpA	IS	98.7	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C3-PFHxS	IS	100	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-6:2 FTS	IS	99.4	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-PFOA	IS	98.7	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C5-PFNA	IS	89.8	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C8-PFOSA	IS	66.0	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1

ENTHALPY ANALYTICAL

Sample ID: B-904U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 09:50
Location:	257415		

Laboratory Data

Lab Sample:	2303204-05	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	94.9	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-PFDA	IS	88.9	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-8:2 FTS	IS	80.2	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
d3-MeFOSAA	IS	69.4	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
d5-EtFOSAA	IS	60.8	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-PFUnA	IS	80.7	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-PFDoA	IS	68.0	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
d3-MeFOSA	IS	18.8	50 - 150	H	B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1
13C2-PFTeDA	IS	77.5	50 - 150		B23C261	28-Mar-23	0.252 L	30-Mar-23 14:25	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-904L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-06	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 10:00	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	76.8	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C3-PFPeA	IS	101	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C3-PFBS	IS	125	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-4:2 FTS	IS	99.8	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-PFHxA	IS	96.5	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C4-PFHpA	IS	98.4	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C3-PFHxS	IS	116	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-6:2 FTS	IS	88.6	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-PFOA	IS	101	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C5-PFNA	IS	95.0	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C8-PFOSA	IS	78.7	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1

ENTHALPY ANALYTICAL

Sample ID: B-904L_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 10:00
Location:	257415		

Laboratory Data

Lab Sample:	2303204-06	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	96.6	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-PFDA	IS	93.6	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-8:2 FTS	IS	86.4	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
d3-MeFOSAA	IS	73.9	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
d5-EtFOSAA	IS	67.5	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-PFUnA	IS	85.5	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-PFDoA	IS	71.6	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
d3-MeFOSA	IS	24.3	50 - 150	H	B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1
13C2-PFTeDA	IS	70.1	50 - 150		B23C261	28-Mar-23	0.260 L	30-Mar-23 14:36	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-914U_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-07	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:20	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	67.1	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C3-PFPeA	IS	97.2	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C3-PFBS	IS	118	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-4:2 FTS	IS	89.3	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-PFHxA	IS	92.4	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C4-PFHpA	IS	94.2	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C3-PFHxS	IS	119	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-6:2 FTS	IS	90.8	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-PFOA	IS	87.4	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C5-PFNA	IS	82.9	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C8-PFOSA	IS	72.6	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1

ENTHALPY ANALYTICAL

Sample ID: B-914U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:20
Location:	257415		

Laboratory Data

Lab Sample:	2303204-07	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	84.1	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-PFDA	IS	84.7	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-8:2 FTS	IS	80.2	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
d3-MeFOSAA	IS	64.6	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
d5-EtFOSAA	IS	63.3	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-PFUnA	IS	82.4	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-PFDoA	IS	65.1	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
d3-MeFOSA	IS	27.1	50 - 150	H	B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1
13C2-PFTeDA	IS	67.3	50 - 150		B23C261	28-Mar-23	0.262 L	30-Mar-23 14:46	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-914L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-08	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:21	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	13.7	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFPeA	2706-90-3	19.3	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFBS	375-73-5	20.2	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFHxA	307-24-4	17.4	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFHpA	375-85-9	12.1	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFOA	335-67-1	19.4	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	76.5	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C3-PFPeA	IS	101	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C3-PFBS	IS	115	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-4:2 FTS	IS	95.2	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-PFHxA	IS	97.8	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C4-PFHpA	IS	102	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C3-PFHxS	IS	111	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-6:2 FTS	IS	99.3	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-PFOA	IS	100	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C5-PFNA	IS	92.6	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C8-PFOSA	IS	76.6	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1

ENTHALPY ANALYTICAL

Sample ID: B-914L_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:21
Location:	257415		

Laboratory Data

Lab Sample:	2303204-08	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	92.2	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-PFDA	IS	87.9	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-8:2 FTS	IS	80.4	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
d3-MeFOSAA	IS	71.8	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
d5-EtFOSAA	IS	71.3	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-PFUnA	IS	84.2	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-PFDoA	IS	76.5	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
d3-MeFOSA	IS	30.6	50 - 150	H	B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1
13C2-PFTeDA	IS	90.0	50 - 150		B23C261	28-Mar-23	0.256 L	30-Mar-23 14:57	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-929U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name: Eastern Analytical, Inc.
Project: 257415 NH 2089
Location: 257415
Matrix: Aqueous
Date Collected: 20-Mar-23 12:42

Laboratory Data

Lab Sample: 2303204-09
Date Received: 24-Mar-23 10:19
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	67.1	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C3-PFPeA	IS	99.4	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C3-PFBS	IS	110	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-4:2 FTS	IS	88.2	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-PFHxA	IS	93.4	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C4-PFHpA	IS	98.5	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C3-PFHxS	IS	109	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-6:2 FTS	IS	88.9	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-PFOA	IS	95.5	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C5-PFNA	IS	90.8	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C8-PFOSA	IS	79.2	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1

ENTHALPY ANALYTICAL

Sample ID: B-929U_20230320 **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 12:42
Location:	257415		

Laboratory Data

Lab Sample:	2303204-09	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	90.2	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-PFDA	IS	83.0	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-8:2 FTS	IS	71.5	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
d3-MeFOSAA	IS	65.7	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
d5-EtFOSAA	IS	64.0	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-PFUnA	IS	84.0	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-PFDoA	IS	68.2	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
d3-MeFOSA	IS	30.8	50 - 150	H	B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1
13C2-PFTeDA	IS	58.6	50 - 150		B23C261	28-Mar-23	0.258 L	30-Mar-23 15:39	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-929L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-10	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 12:30	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	71.3	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C3-PFPeA	IS	93.2	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C3-PFBS	IS	114	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-4:2 FTS	IS	94.0	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-PFHxA	IS	93.2	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C4-PFHpA	IS	95.8	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C3-PFHxS	IS	104	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-6:2 FTS	IS	82.5	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-PFOA	IS	89.0	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C5-PFNA	IS	88.5	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C8-PFOSA	IS	69.8	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1

ENTHALPY ANALYTICAL

Sample ID: B-929L_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 12:30
Location:	257415		

Laboratory Data

Lab Sample:	2303204-10	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	88.2	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-PFDA	IS	85.6	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-8:2 FTS	IS	70.3	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
d3-MeFOSAA	IS	58.4	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
d5-EtFOSAA	IS	61.0	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-PFUnA	IS	77.6	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-PFDoA	IS	57.5	50 - 150		B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
d3-MeFOSA	IS	23.9	50 - 150	H	B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1
13C2-PFTeDA	IS	46.3	50 - 150	H	B23C261	28-Mar-23	0.264 L	30-Mar-23 15:50	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-930U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 10:55
Location:	257415		

Laboratory Data

Lab Sample:	2303204-11	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	73.7	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C3-PFPeA	IS	91.8	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C3-PFBS	IS	92.4	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-4:2 FTS	IS	87.8	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-PFHxA	IS	90.6	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C4-PFHpA	IS	88.8	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C3-PFHxS	IS	104	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-6:2 FTS	IS	86.6	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-PFOA	IS	88.4	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C5-PFNA	IS	80.6	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C8-PFOSA	IS	70.2	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1

ENTHALPY ANALYTICAL

Sample ID: B-930U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 10:55
Location:	257415		

Laboratory Data

Lab Sample:	2303204-11	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	83.5	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-PFDA	IS	79.7	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-8:2 FTS	IS	76.1	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
d3-MeFOSAA	IS	57.1	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
d5-EtFOSAA	IS	53.8	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-PFUnA	IS	71.0	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-PFDoA	IS	57.0	50 - 150		B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
d3-MeFOSA	IS	20.8	50 - 150	H	B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1
13C2-PFTeDA	IS	34.7	50 - 150	H	B23C261	28-Mar-23	0.261 L	30-Mar-23 16:00	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-930L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-12	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 10:54	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	83.2	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C3-PFPeA	IS	103	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C3-PFBS	IS	120	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-4:2 FTS	IS	96.1	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-PFHxA	IS	97.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C4-PFHpA	IS	103	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C3-PFHxS	IS	113	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-6:2 FTS	IS	91.3	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-PFOA	IS	99.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C5-PFNA	IS	93.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C8-PFOSA	IS	72.3	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1

ENTHALPY ANALYTICAL

Sample ID: B-930L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-12	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 10:54	Date Received:	24-Mar-23 10:19		
Location:	257415						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	96.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-PFDA	IS	86.4	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-8:2 FTS	IS	87.0	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
d3-MeFOSAA	IS	77.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
d5-EtFOSAA	IS	65.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-PFUnA	IS	85.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-PFDoA	IS	74.3	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
d3-MeFOSA	IS	19.6	50 - 150	H	B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1
13C2-PFTeDA	IS	66.0	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:11	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-931U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-13	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 08:55	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	64.7	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C3-PFPeA	IS	96.0	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C3-PFBS	IS	97.4	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-4:2 FTS	IS	87.3	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-PFHxA	IS	97.0	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C4-PFHpA	IS	99.3	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C3-PFHxS	IS	109	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-6:2 FTS	IS	91.2	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-PFOA	IS	93.9	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C5-PFNA	IS	85.5	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C8-PFOSA	IS	72.6	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1

ENTHALPY ANALYTICAL

Sample ID: B-931U_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-13	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 08:55	Date Received:	24-Mar-23 10:19		
Location:	257415						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	89.6	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-PFDA	IS	88.4	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-8:2 FTS	IS	83.3	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
d3-MeFOSAA	IS	66.0	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
d5-EtFOSAA	IS	62.7	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-PFUnA	IS	81.7	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-PFDoA	IS	65.4	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
d3-MeFOSA	IS	24.1	50 - 150	H	B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1
13C2-PFTeDA	IS	71.4	50 - 150		B23C261	28-Mar-23	0.253 L	30-Mar-23 16:21	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: B-931L_20230320 **PFAS Isotope Dilution Table B-15**

Client Data

Name: Eastern Analytical, Inc.
Project: 257415 NH 2089
Location: 257415
Matrix: Aqueous
Date Collected: 20-Mar-23 08:45

Laboratory Data

Lab Sample: 2303204-14
Date Received: 24-Mar-23 10:19
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	72.9	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C3-PFPeA	IS	95.7	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C3-PFBS	IS	105	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-4:2 FTS	IS	96.9	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-PFHxA	IS	94.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C4-PFHpA	IS	95.0	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C3-PFHxS	IS	111	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-6:2 FTS	IS	97.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-PFOA	IS	97.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C5-PFNA	IS	91.1	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C8-PFOSA	IS	77.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1

ENTHALPY ANALYTICAL

Sample ID: B-931L_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 08:45
Location:	257415		

Laboratory Data

Lab Sample:	2303204-14	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	89.9	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-PFDA	IS	84.9	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-8:2 FTS	IS	73.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
d3-MeFOSAA	IS	71.8	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
d5-EtFOSAA	IS	65.6	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-PFUnA	IS	79.4	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-PFDoA	IS	67.2	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
d3-MeFOSA	IS	28.7	50 - 150	H	B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1
13C2-PFTeDA	IS	74.5	50 - 150		B23C261	28-Mar-23	0.250 L	30-Mar-23 16:32	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

ENTHALPY ANALYTICAL

Sample ID: FB-01_20230320 **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2303204-15	Column:	BEH C18
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:43	Date Received:	24-Mar-23 10:19		
Location:	257415						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFPeA	2706-90-3	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFBS	375-73-5	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
4:2 FTS	757124-72-4	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFHxA	307-24-4	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFPeS	2706-91-4	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFHpA	375-85-9	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFHxS	355-46-4	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
6:2 FTS	27619-97-2	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFOA	335-67-1	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFHpS	375-92-8	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFNA	375-95-1	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFOSA	754-91-6	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFOS	1763-23-1	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFDA	335-76-2	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
8:2 FTS	39108-34-4	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFNS	68259-12-1	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
MeFOSAA	2355-31-9	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
EtFOSAA	2991-50-6	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFUnA	2058-94-8	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFDS	335-77-3	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFDoA	307-55-1	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
MeFOSA	31506-32-8	ND	20.0		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFTrDA	72629-94-8	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
PFTeDA	376-06-7	ND	4.00		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	80.8	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C3-PFPeA	IS	97.9	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C3-PFBS	IS	116	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-4:2 FTS	IS	98.2	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-PFHxA	IS	90.8	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C4-PFHpA	IS	98.7	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C3-PFHxS	IS	108	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-6:2 FTS	IS	92.2	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-PFOA	IS	93.4	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C5-PFNA	IS	82.9	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C8-PFOSA	IS	67.2	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1

ENTHALPY ANALYTICAL

Sample ID: FB-01_20230320 — **PFAS Isotope Dilution Table B-15**

Client Data

Name:	Eastern Analytical, Inc.	Matrix:	Aqueous
Project:	257415 NH 2089	Date Collected:	20-Mar-23 14:43
Location:	257415		

Laboratory Data

Lab Sample:	2303204-15	Column:	BEH C18
Date Received:	24-Mar-23 10:19		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C8-PFOS	IS	87.6	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-PFDA	IS	83.6	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-8:2 FTS	IS	86.1	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
d3-MeFOSAA	IS	60.9	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
d5-EtFOSAA	IS	61.0	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-PFUnA	IS	77.0	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-PFDoA	IS	63.8	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
d3-MeFOSA	IS	14.5	50 - 150	H	B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1
13C2-PFTeDA	IS	77.2	50 - 150		B23C261	28-Mar-23	0.255 L	30-Mar-23 16:42	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
RL	For 537.1, the reported RLs are the MRLs.
TEQ	Toxic Equivalency, sum of the toxic equivalency factors (TEF) multiplied by the sample concentrations.
TEQMax	TEQ calculation that uses the detection limit as the concentration for non-detects
TEQMin	TEQ calculation that uses zero as the concentration for non-detects
TEQRisk	TEQ calculation that uses ½ the detection limit as the concentration for non-detects
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Enthalpy Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	21-023-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2020018
Massachusetts Department of Environmental Protection	M-CA413
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	2211390
New Hampshire Environmental Accreditation Program	207721
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Ohio Environmental Protection Agency	87778
Oregon Laboratory Accreditation Program	4042-021
Texas Commission on Environmental Quality	T104704189-22-13
Vermont Department of Health	VT-4042
Virginia Department of General Services	11276
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 257415 Page 1

Sample ID	Date Sampled	Matrix	aParameters 230324 2.9°C	Sample Notes
B-102S_20230320	3/20/2023 13:40	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-102D_20230320	3/20/2023 14:01	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-903U_20230320	3/20/2023 11:45	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-903L_20230320	3/20/2023 11:48	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	

EAI ID# 257415 Project State: NH
Project ID: 2089

Company Vista Analytical Laboratory
Address 1104 Windfield Way
Address El Dorado Hills, CA 95762
Account #
Phone # (916) 673-1520

Results Needed: Preferred Date: Standard
RUSH Due Date: _____

QC Deliverables
☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:
Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Please report Sulfonic Acids. PFAS by Method 537 modified with isotope dilution (Compound List attached). Report to RL (no J-flags) Report standard project RLs: ~20 ng/l for MeFOSA; ~4 ng/L for all other compounds

PO #:59440 EAI ID# 257415

Data Deliverable (circle)
Excel NH EMD EQuIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: _____

Relinquished by	Date/Time	Received by
[signature]	3/23/23 1600	UPS
UPS	03/24/23 10:19	[signature]
Relinquished by	Date/Time	Received by

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# **257415** Page 2

Sample ID	Date Sampled	Matrix	aParameters 230324	Sample Notes
B-904U_20230320	3/20/2023 09:50	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-904L_20230320	3/20/2023 10:00	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-914U_20230320	3/20/2023 14:20	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-914L_20230320	3/20/2023 14:21	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	

EAI ID# **257415** Project State: NH

Project ID: 2089

Company Vista Analytical Laboratory
Address 1104 Windfield Way
Address El Dorado Hills, CA 95762
Account #
Phone # (916) 673-1520

Results Needed: Preferred Date: Standard

RUSH Due Date: _____

QC Deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Please report Sulfonic Acids. PFAS by Method 537 modified with isotope dilution (Compound List attached). Report to RL (no J-flags) Report standard project RLs: ~20 ng/l for MeFOSA; ~4 ng/L for all other compounds

PO #:59440 EAI ID# **257415**

Data Deliverable (circle)

Excel NH EMD EQuIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: _____

Relinquished by	Date/Time	Received by
WS	03/24/23 10:19	
Relinquished by	Date/Time	Received by

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# **257415** Page 3

Sample ID	Date Sampled	Matrix	aParameters 2303204	Sample Notes
B-929U_20230320	3/20/2023 12:42	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-929L_20230320	3/20/2023 12:30	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-930U_20230320	3/20/2023 10:55	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-930L_20230320	3/20/2023 10:54	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	

EAI ID# **257415** Project State: NH
Project ID: 2089

Company Vista Analytical Laboratory
Address 1104 Windfield Way
Address El Dorado Hills, CA 95762
Account #
Phone # (916) 673-1520

Results Needed: Preferred Date: Standard
RUSH Due Date: ________

QC Deliverables
☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:
Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Please report Sulfonic Acids. PFAS by Method 537 modified with isotope dilution (Compound List attached). Report to RL (no J-flags) Report standard project RLs: ~20 ng/l for MeFOSA; ~4 ng/L for all other compounds

PO #: 59440 EAI ID# **257415**

Data Deliverable (circle)
Excel NH EMD EQuIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: ____________

Relinquished by	Date/Time	Received by
[signature]	3/23/23 1000 WPS	
WPS	03/24/23 10:18	[signature]

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 257415 Page 4

2303204

Sample ID	Date Sampled	Matrix	aParameters	Sample Notes
B-931U_20230320	3/20/2023 08:55	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
B-931L_20230320	3/20/2023 08:45	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	
FB-01_20230320	3/20/2023 14:43	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 modified	

EAI ID# 257415 **Project State: NH**

Project ID: 2089

Company Vista Analytical Laboratory
Address 1104 Windfield Way
Address El Dorado Hills, CA 95762
Account #
Phone # (916) 673-1520

Results Needed: Preferred Date: Standard

RUSH Due Date: _____

QC Deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Please report Sulfonic Acids. PFAS by Method 537 modified with isotope dilution (Compound List attached). Report to RL (no J-flags) Report standard project RLs: ~20 ng/l for MeFOSA; ~4 ng/L for all other compounds

PO #: 59440 **EAI ID# 257415**

Data Deliverable (circle)

Excel NH EMD EQuIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: _____

Relinquished by	Date/Time	Received by
[signature]	3/23/23 1600 UPS	
WPI	03/24/23 0919	[signature]
Relinquished by	**Date/Time**	**Received by**

EAI 257415

PFAS DoD 25 Compounds 2303204

Analyte Name	CAS #	Analyte
4:2 Fluorotelomer sulfonate	757124-72-4	4:2-FTS
6:2 Fluorotelomer sulfonate	27619-97-2	6:2-FTS
8:2 Fluorotelomer sulfonate	39108-34-4	8:2-FTS
N-ethyl perfluorooctanesulfonamidoacetic acid	2991-50-6	NEtFOSAA
N-methyl perfluorooctanesulfonamidoacetic acid	2355-31-9	NMeFOSAA
Perfluorooctanesulfonic acid	1763-23-1	PFOS
Perfluorobutanesulfonic acid	375-73-5	PFBS
Perfluorobutanoic acid	375-22-4	PFBA
Perfluorodecanesulfonic acid	335-77-3	PFDS
Perfluorodecanoic acid	335-76-2	PFDA
Perfluorododecanoic acid	307-55-1	PFDoA
Perfluoroheptanesulfonic acid	375-92-8	PFHpS
Perfluoroheptanoic acid	375-85-9	PFHpA
Perfluorohexanesulfonoic acid	355-46-4	PFHxS
Perfluorohexanoic acid	307-24-4	PFHxA
Perfluorononane sulfonic acid	68259-12-1	PFNS
Perfluorononanoic acid	375-95-1	PFNA
Perfluorooctanoic acid	335-67-1	PFOA
Perfluoropentane sulfonic acid	2706-91-4	PFPeS
Perfluoropentanoic acid	2706-90-3	PFPeA
Perfluorotetradecanoic acid	376-06-7	PFTeDA
Perfluorotridecanoic acid	72629-94-8	PFTrDA
Perfluoroundecanoic acid	2058-94-8	PFUnA/PFUdA
N-methylperfluorooctanesulfonamide	31506-32-8	N-MeFOSA
Perfluorooctanesulfonamide	754-91-6	PFOSA

Sample Log-In Checklist

ENTHALPY ANALYTICAL

Page # 1 of 1

Work Order #: 2303204 TAT Std

Samples Arrival:	Date/Time: 03/24/23 10:19	Initials: JH	Location: WR-2 Shelf/Rack: NA

Delivered By:	FedEx	UPS	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Techni Ice	Dry Ice	None

Temp °C: 2.4 (uncorrected)	Probe used: Y / N	Thermometer ID: IR-3
Temp °C: 2.4 (corrected)		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?			✓
Airbill ✓ Trk # 1Z X46 599 01 9946 416	✓		
Shipping Documentation Present?	✓		

Shipping Container	Enthalpy	Client	Retain	Return	Dispose

Chain of Custody / Sample Documentation Present?	✓		
Chain of Custody / Sample Documentation Complete?	✓		
Holding Time Acceptable?	✓		

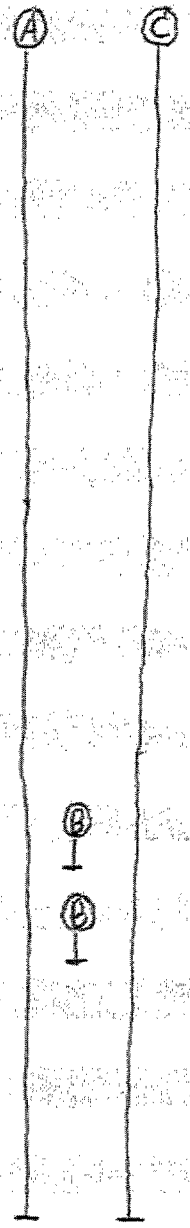
Logged In:	Date/Time: 03/24/23 10:43	Initials: JH	Location: R-13, WR-2 Shelf/Rack: A-1 F-5

COC Anomaly/Sample Acceptance Form completed?	✓		

Comments:

CoC/Label Reconciliation Report WO# 2303204

LabNumber	CoC Sample ID		SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2303204-01	A B-102S_20230320	☐	257415	20-Mar-23 13:40 ☑	Polypropylene, 250mL	Aqueous	
2303204-01	B B-102S_20230320	☐	257415	20-Mar-23 13:40 ☑	Polypropylene, 250mL	Aqueous	
2303204-02	A B-102D_20230320	☐	257415	20-Mar-23 14:01 ☑	Polypropylene, 250mL	Aqueous	
2303204-02	B B-102D_20230320	☐	257415	20-Mar-23 14:01 ☑	Polypropylene, 250mL	Aqueous	
2303204-03	A B-903U_20230320	☐	257415	20-Mar-23 11:45 ☑	Polypropylene, 250mL	Aqueous	
2303204-03	B B-903U_20230320	☐	257415	20-Mar-23 11:45 ☑	Polypropylene, 250mL	Aqueous	
2303204-04	A B-903L_20230320	☐	257415	20-Mar-23 11:48 ☑	Polypropylene, 250mL	Aqueous	
2303204-04	B B-903L_20230320	☐	257415	20-Mar-23 11:48 ☑	Polypropylene, 250mL	Aqueous	
2303204-05	A B-904U_20230320	☐	257415	20-Mar-23 09:50 ☑	Polypropylene, 250mL	Aqueous	
2303204-05	B B-904U_20230320	☐	257415	20-Mar-23 09:50 ☑	Polypropylene, 250mL	Aqueous	
2303204-06	A B-904L_20230320	☐	257415	20-Mar-23 10:00 ☑	Polypropylene, 250mL	Aqueous	
2303204-06	B B-904L_20230320	☐	257415	20-Mar-23 10:00 ☑	Polypropylene, 250mL	Aqueous	
2303204-07	A B-914U_20230320	☐	257415	20-Mar-23 14:20 ☑	Polypropylene, 250mL	Aqueous	
2303204-07	B B-914U_20230320	☐	257415	20-Mar-23 14:20 ☑	Polypropylene, 250mL	Aqueous	
2303204-08	A B-914L_20230320	☐	257415	20-Mar-23 14:21 ☑	Polypropylene, 250mL	Aqueous	
2303204-08	B B-914L_20230320	☐	257415	20-Mar-23 14:21 ☑	Polypropylene, 250mL	Aqueous	
2303204-09	A B-929U_20230320	☐	257415	20-Mar-23 12:42 ☑	Polypropylene, 250mL	Aqueous	
2303204-09	B B-929U_20230320	☐	257415	20-Mar-23 12:42 ☑	Polypropylene, 250mL	Aqueous	
2303204-10	A B-929L_20230320	☐	257415	20-Mar-23 12:30 ☑	Polypropylene, 250mL	Aqueous	
2303204-10	B B-929L_20230320	☐	257415	20-Mar-23 12:30 ☑	Polypropylene, 250mL	Aqueous	
2303204-11	A B-930U_20230320	☐	257415	20-Mar-23 10:55 ☑	Polypropylene, 250mL	Aqueous	
2303204-11	B B-930U_20230320	☐	257415	20-Mar-23 10:55 ☑	Polypropylene, 250mL	Aqueous	
2303204-12	A B-930L_20230320	☐	257415	20-Mar-23 10:54 ☑	Polypropylene, 250mL	Aqueous	
2303204-12	B B-930L_20230320	☐	257415	20-Mar-23 10:54 ☑	Polypropylene, 250mL	Aqueous	
2303204-13	A B-931U_20230320	☐	257415	20-Mar-23 08:55 ☑	Polypropylene, 250mL	Aqueous	
2303204-13	B B-931U_20230320	☐	257415	20-Mar-23 08:55 ☑	Polypropylene, 250mL	Aqueous	
2303204-14	A B-931L_20230320	☐	257415	20-Mar-23 08:45 ☑	Polypropylene, 250mL	Aqueous	
2303204-14	B B-931L_20230320	☐	257415	20-Mar-23 08:45 ☑	Polypropylene, 250mL	Aqueous	



2303204-15 A FB-01 20230320 ☐ A C D 257415 20-Mar-23 14:43 ☑ Polypropylene, 250mL Aqueous

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?		✓	✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)	✓		

Preservation Documented: Na2S2O3 (Trizma T6 C) NH4CH3CO2 None Other

Verifed by/Date: BAC 03/25/23

Comments:

A Underlined section not present on Sample ID, time and date reconciled.

B ~5% particulate present.

D No Backup.

ENTHALPY ANALYTICAL

ANOMALY FORM

Work Order # 2307204

Initial/Date		The following checked issues were noted during sample receipt and login:
_____	☐	**1. The samples were received out of temperature at (WI-PHT):** _____ Was Ice present: Yes No Melted Blue Ice
_____	☐	2. The Chain-of-Custody (CoC) was not relinquished properly.
_____	☐	3. The CoC did not include collection time(s). 00:00 will be used unless notified otherwise.
_____	☐	4. The sample(s) did not include a sample collection time. All or Sample Name: _____
8/2/23	☑	5. A sample ID discrepancy was found. See the Reconciliation report. The CoC Sample ID will be used unless notified otherwise.
_____	☐	6. A sample date and/or time discrepancy was found. See the Reconciliation report. The CoC Sample date/time will be used unless notified otherwise.
_____	☐	**7. The CoC did not include a sample matrix. The following sample matrix will be used:** _____
_____	☐	**8. Insufficent volume received for analysis. All or Sample Name:** _____
_____	☐	9. The backup bottle was received broken. Sample Name: _____
_____	☐	**10. CoC not received, illegible or destroyed.**
_____	☐	**11. The sample(s) were received out of holding time. All or Sample Name:** _____
_____	☐	**12. The CoC did not include an analysis. All or Sample Name:** _____
_____	☐	**13. Sample(s) received without collection date. All or Sample Name:** _____
_____	☐	**14. Sample(s) not received. All or Sample Name:** _____
_____	☐	**15. Sample(s) received broken. All or Sample Name:** _____
_____	☐	**16. An incorrect container-type was used. All or Sample Name:** _____
_____	☐	17. The Field Reagent Blank (FRB) preservative was from a different lot than the field samples. Will proceed with analysis and narrate unless notified otherwise.
_____	☐	18. Other:

Bolded items require sign-off

Client Contacted: _____

Date of Contact: _____

Lab Project Manager: _____

Resolution:

Chain-of-Custody Record

Page 1 of 2

For 257415

Sample ID	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	Analyses Requested: PFAS- Mod 537 - DoD 25 Compound List	Field Turbidity (NTU)	# of Containers	NOTES MeOH Vial #
B-102S_20230320	3/20/23 1340	GW	G	X	205	2	
B-102D_202303	1401	GW	G	X	260	2	
B-903U_202303	1145	GW	G	X	456	2	
B-903L_202303	1148	GW	G	X	830	2	
B-904U_202303	0950	GW	G	X	96.2	2	
B-904L_202303	1000	GW	G	X	OR	2	
B-914U_202303	1420	GW	G	X	OR	2	
B-914L_202303	1421	GW	G	X	133	2	
B-929U_202303	1242	GW	G	X	OR	2	
B-929L_202303	1230	GW	G	X	OR	2	
				ICE			

Report standard project RLs: ~20 ng/l for MeFOSA; ~4 ng/L for all other compounds

Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drining Water; WW-Waste Water; AQ-Aqueous; L-Leachate
Preservative: H-HCl; N-HNO3; S-H2SO4; Na-NaOH; M-MeOH; NSO-Na2S2O3

Project Manager:	M. Estabrooks / T. White
Company:	Sanborn, Head & Associates, Inc.
Address:	20 Foundry Street
City:	Concord State: NH Zip: 03301
Phone	603-229-1900 Ext.:
Fax:	603-229-1919
E-Mail:	mestabrooks.sanbornhead.com
Site Name:	NCES | PFAS
Project #	2637.10
State:	NH

Regulatory Program: NPDES: RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:

Quote #: PO#:

Date Needed:

QA/QC

Reporting Level

A **B** C

or

Presumptive Certainty

Reporting Options

Prelims: Yes or No

If Yes: Fax or PDF

Electonic Options

No Fax | E-Mail | PDF | Equis

Temp. 0-4 °C ice

Sampler(s): MTS, CJPL

Metals: **Samples Field Filtered:**

A:

B:

C:

Notes: (i.e., Special Detection Limits, Billing Info, If Different)

Bill NCES.
Sub Vista
1) Please Report Sulfonic Acids
2) PFAS by Method 537 modified with isotope dilution (Compound List Attached)
3) Report to RL (no J-flags)

Relinquished By:	Date:	Time:	Received By:
	3/20/23	1643	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Field Readings:

Eastern Analytical, Inc.
51 Antrim Ave | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customerservice@eailabs.com | www.eailabs.com

Page 2 of 2

Chain-of-Custody Record

For Lab 257415

Sample ID	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	PFAS- Mod 537 - DoD 25 Compound List	Field Turbidity (NTU)	# of Containers	NOTES MeOH Vial #
B-930U_20230320	3/20/23 1055	GW	G	X	OR	2	
B-930L_202303	1054	GW	G	X	778	2	
B-931U_202303	0855	GW	G	X	OR	2	
B-931L_202303	0845	GW	G	X	983	2	
FB-01_202303	1443	AQ	G	X	—	1	

Analyses Requested

Report standard project RLs: ~20 ng/l for MeFOSA; ~4 ng/L for all other compounds

Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drining Water; WW-Waste Water; AQ-Aqueous; L-Leachate
Preservative: H-HCl; N-HNO3; S-H2SO4; Na-NaOH; M-MeOH; NSO-Na2S2O3

ICE

Project Manager:	M. Estabrooks / T. White
Company:	Sanborn, Head & Associates, Inc.
Address:	20 Foundry Street
City:	Concord State: NH Zip: 03301
Phone	603-229-1900 Ext.:
Fax:	603-229-1919
E-Mail:	mestabrooks.sanbornhead.com
Site Name:	NCES | PFAS
Project #	2637.10
State:	NH

Regulatory Program: NPDES: RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:

Quote #: PO#:

Date Needed:

QA/QC

Reporting Level

A **B** C

or

Presumptive Certainty

Reporting Options

Prelims: Yes or No

If Yes: Fax or PDF

Electonic Options

No Fax | E-Mail | PDF | Equis

Temp. 0.9 °C ice

Sampler(s): MTS, CJPL

Relinquished By:	Date:	Time:	Received By:
	3/20/23	1643	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Metals: **Samples Field Filtered:**

A:

B:

C:

Notes: (i.e., Special Detection Limits, Billing Info, If Different)

Bill NCES.
Sub Vista
1) Please Report Sulfonic Acids
2) PFAS by Method 537 modified with isotope dilution (Compound List Attached)
3) Report to RL (no J-flags)

Field Readings:

Eastern Analytical, Inc.
51 Antrim Ave | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customerservice@eailabs.com | www.eailabs.com

APPENDIX D

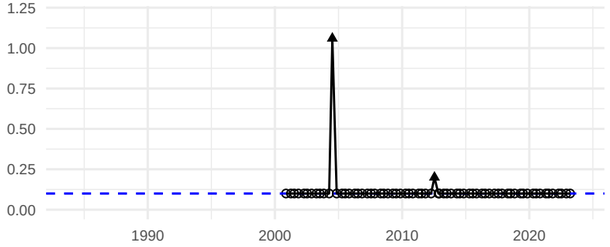
TIME SERIES PLOTS

GROUNDWATER ANALYTICAL RESULTS
(Field and Indicator Parameters, VOCs)

B−903U

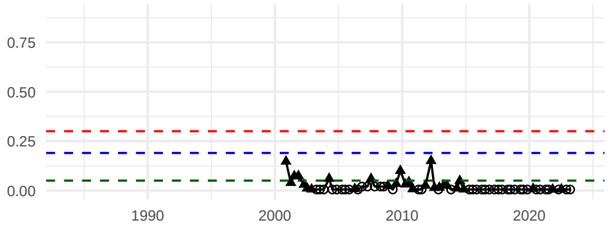
Groundwater Elevation (ft) :

Bromide (mg/L) :



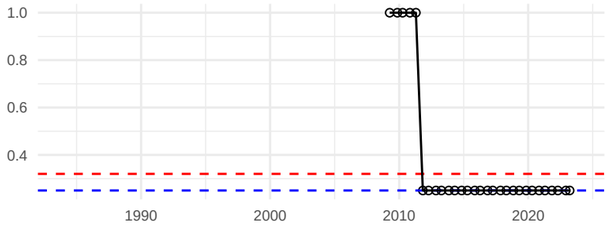
Dissolved Manganese (mg/L) :

AGQS: 0.3 mg/L SMCL: 0.05 mg/L



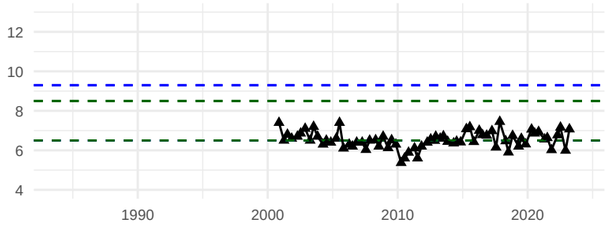
Dioxane (1,4−) (ug/L) :

AGQS: 0.32 ug/L



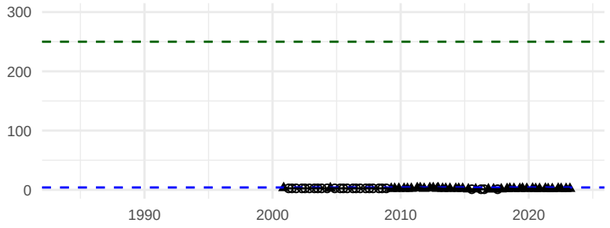
pH (SU) :

SMCL: 6.5 − 8.5 SU



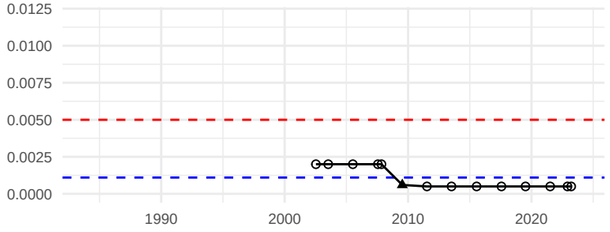
Chloride (mg/L) :

SMCL: 250 mg/L

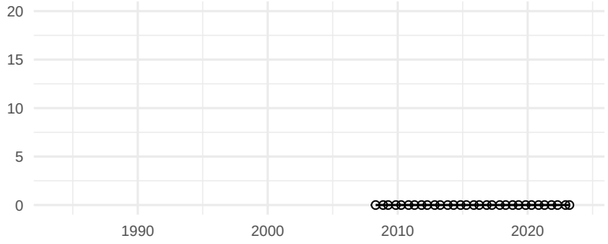


Dissolved Arsenic (mg/L) :

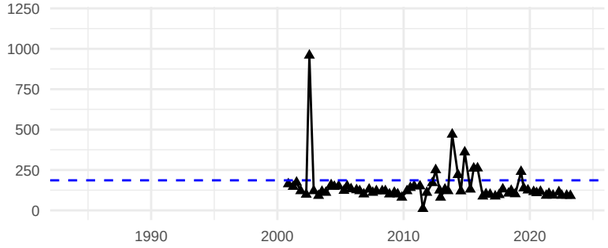
AGQS: 0.005 mg/L



Total VOCs (ug/L) :

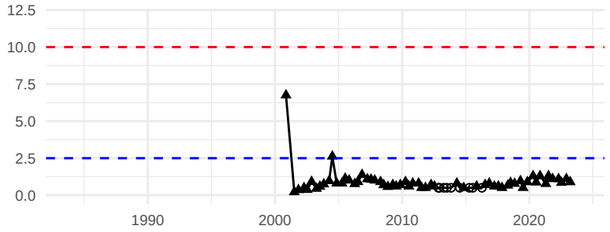


Specific Conductance (uS/cm) :



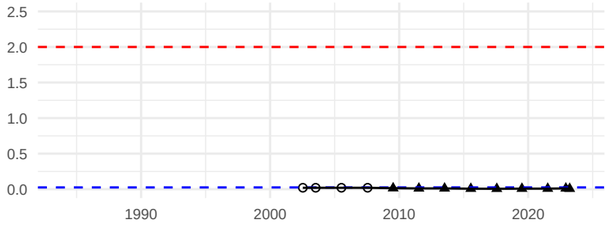
Nitrate (mg/L) :

AGQS: 10 mg/L



Dissolved Barium (mg/L) :

AGQS: 2 mg/L



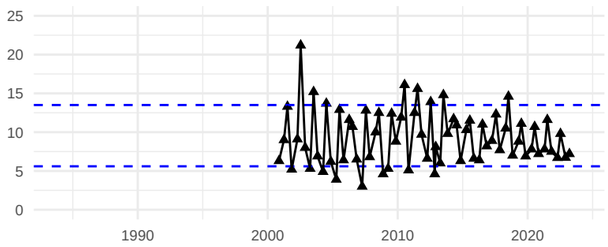
Result

- Detect
- Non−Detect

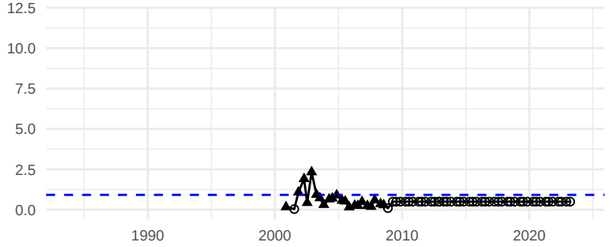
Standard

- AGQS
- SMCL
- Background

Temperature (C) :

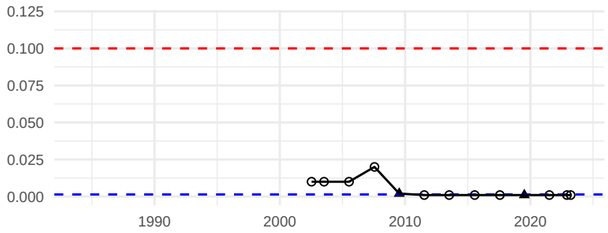


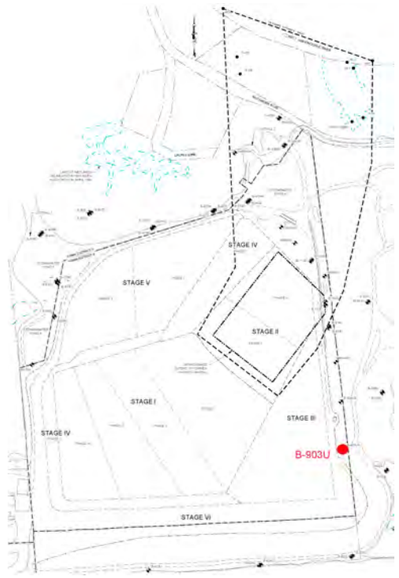
Total Kjeldahl Nitrogen (TKN) (mg/L) :



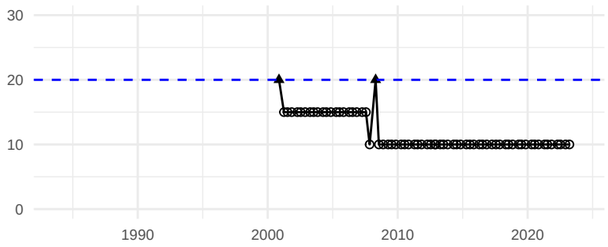
Dissolved Chromium (mg/L) :

AGQS: 0.1 mg/L



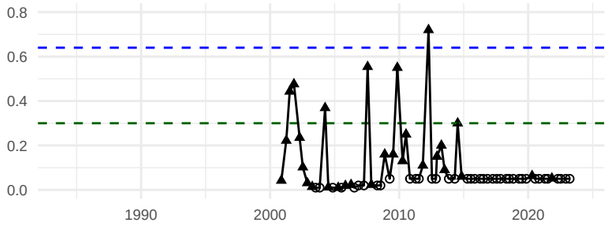


Chemical Oxygen Demand (mg/L) :



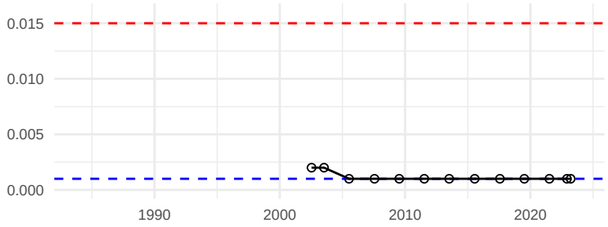
Dissolved Iron (mg/L) :

SMCL: 0.3 mg/L



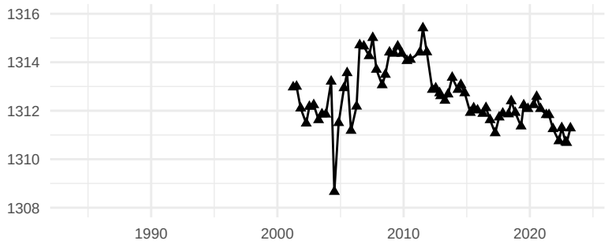
Dissolved Lead (mg/L) :

AGQS: 0.015 mg/L

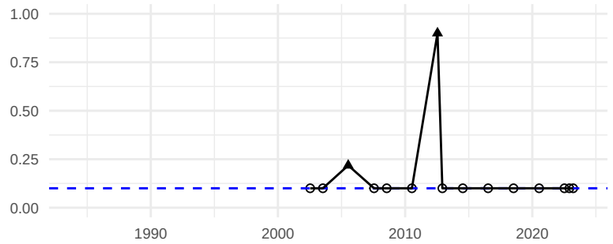


B−903L

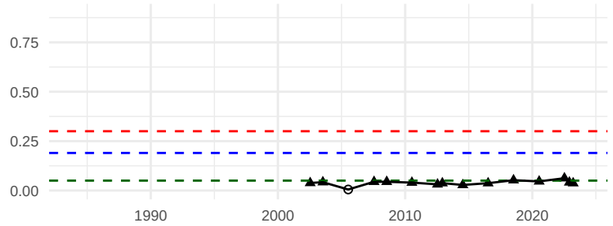
Groundwater Elevation (ft) :



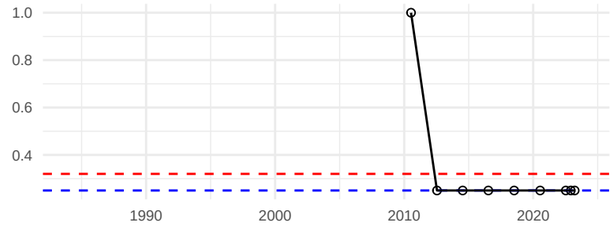
Bromide (mg/L) :



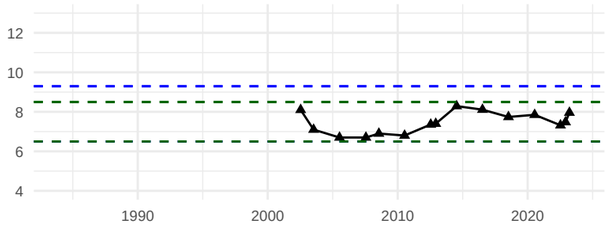
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



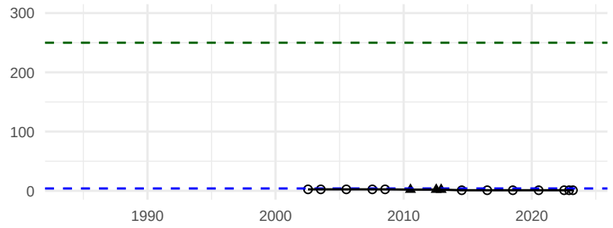
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



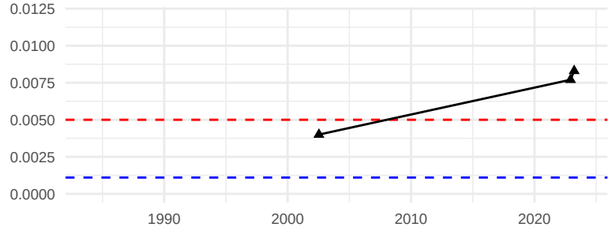
pH (SU) :
SMCL: 6.5 − 8.5 SU



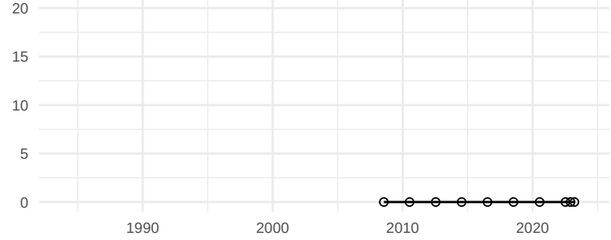
Chloride (mg/L) :
SMCL: 250 mg/L



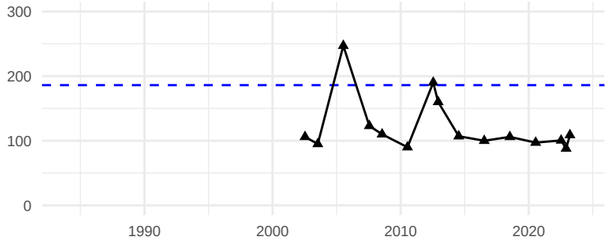
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



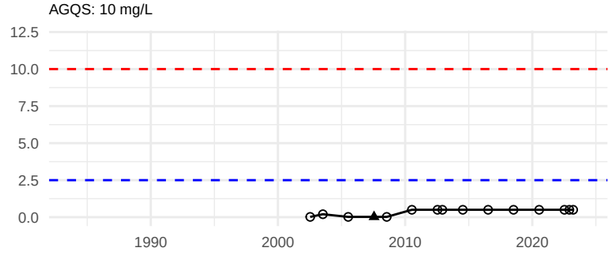
Total VOCs (ug/L) :



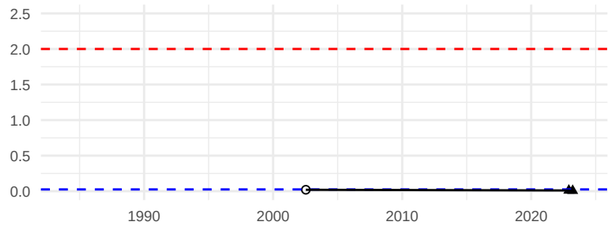
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



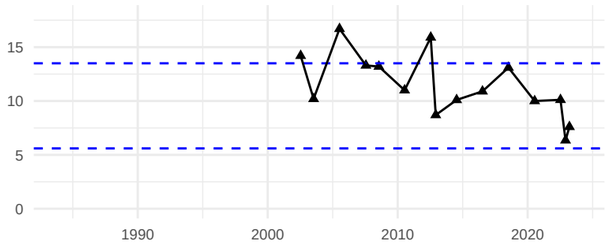
Result

- Detect
- Non−Detect

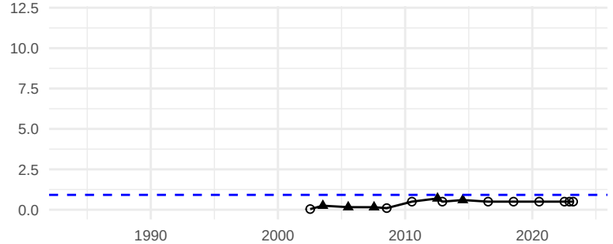
Standard

- AGQS
- SMCL
- Background

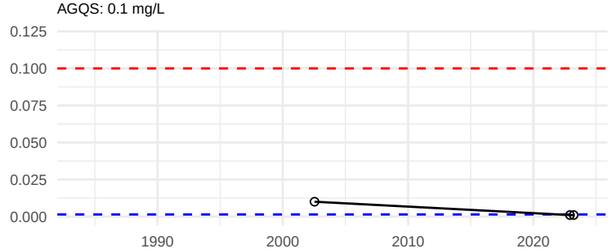
Temperature (C) :

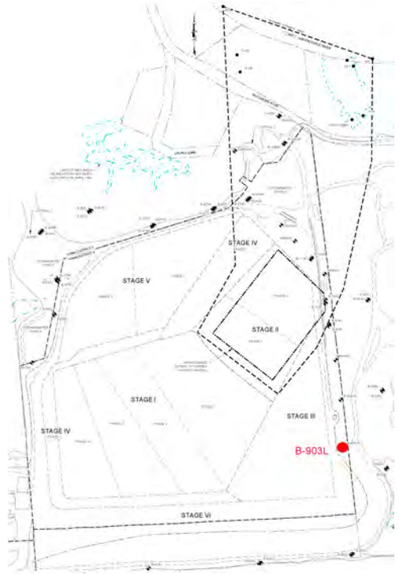


Total Kjeldahl Nitrogen (TKN) (mg/L) :

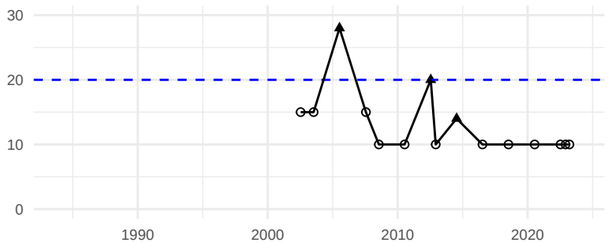


Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

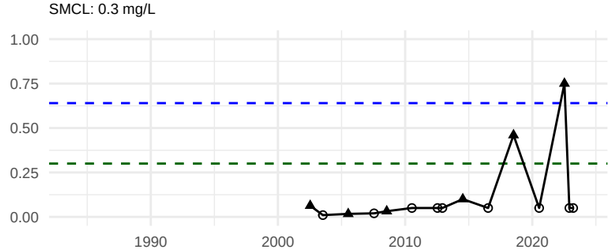




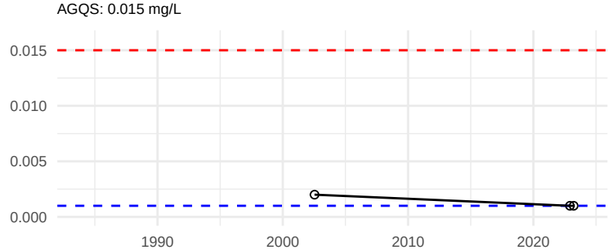
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L

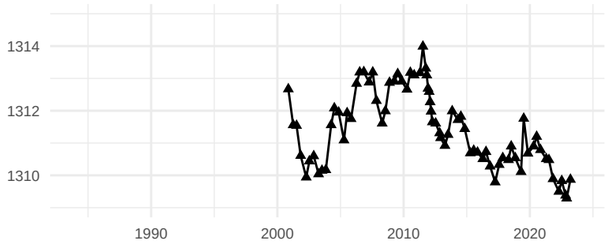


Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L

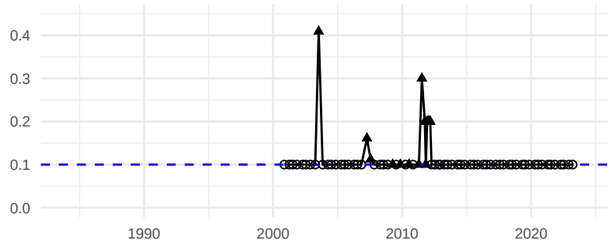


B−904U

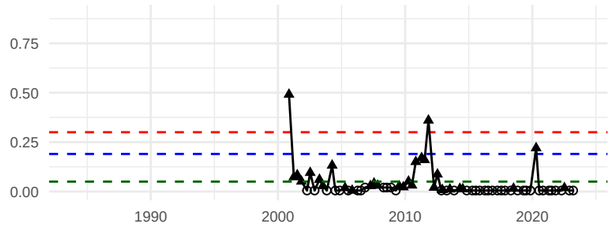
Groundwater Elevation (ft) :



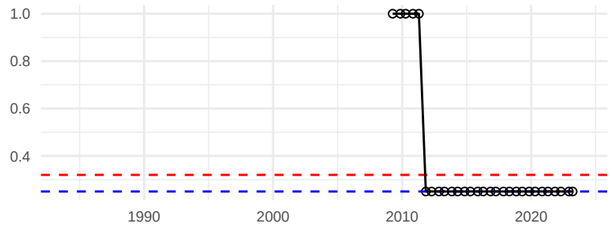
Bromide (mg/L) :



Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L

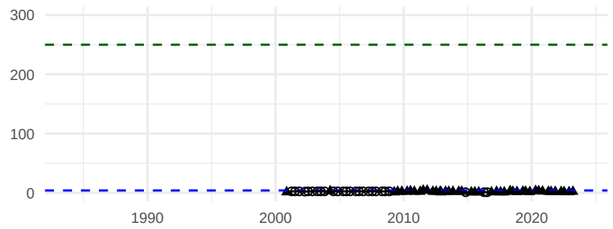


Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L

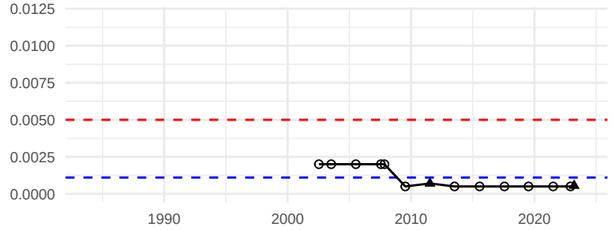


pH (SU) :
SMCL: 6.5 − 8.5 SU

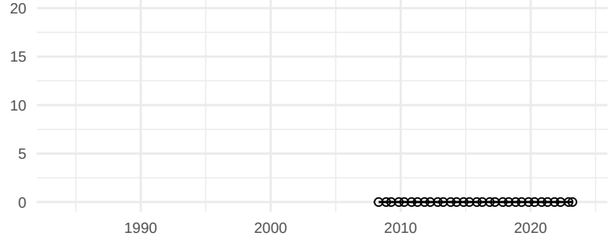
Chloride (mg/L) :
SMCL: 250 mg/L



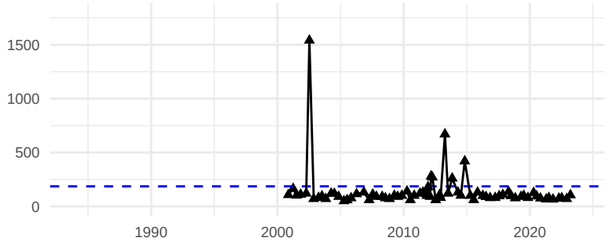
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



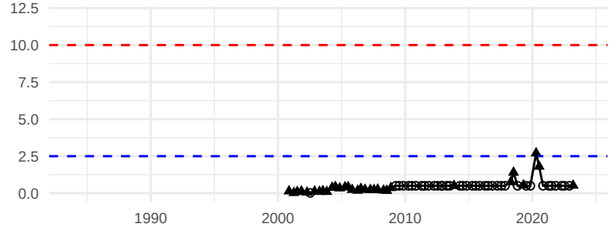
Total VOCs (ug/L) :



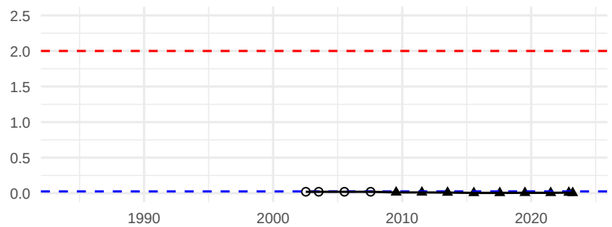
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



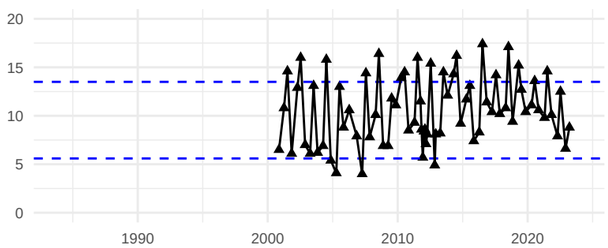
Result

- Detect
- Non−Detect

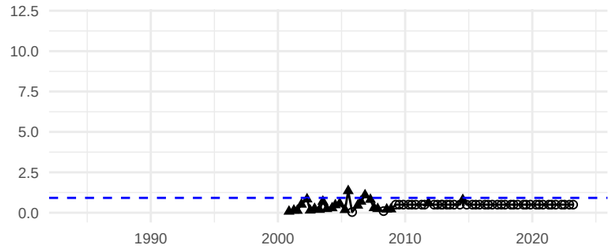
Standard

- AGQS
- SMCL
- Background

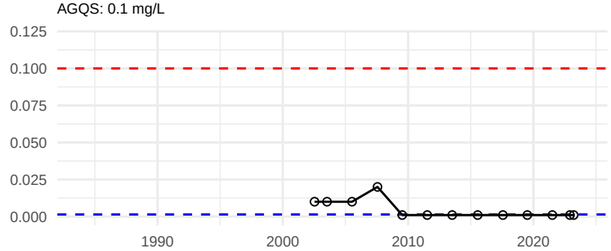
Temperature (C) :

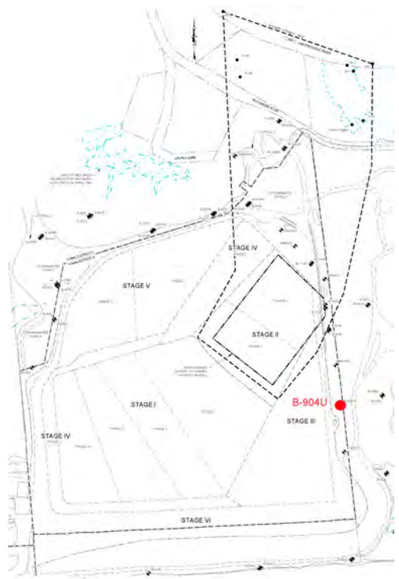


Total Kjeldahl Nitrogen (TKN) (mg/L) :

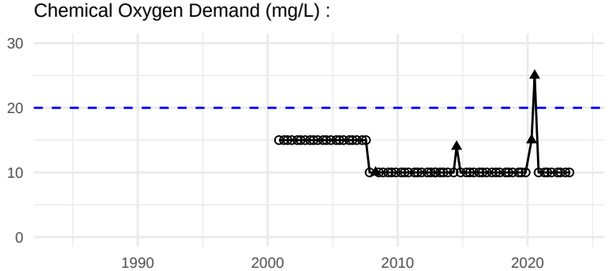


Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

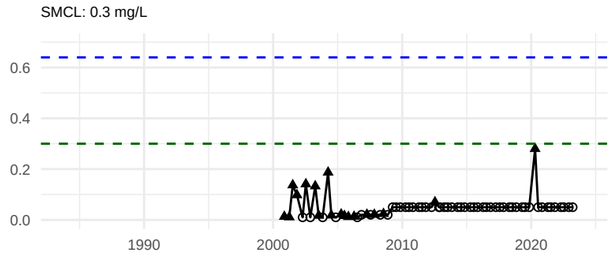




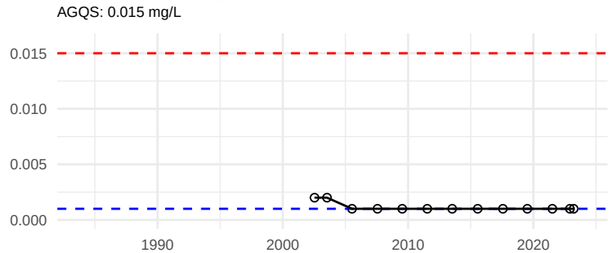
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L



Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



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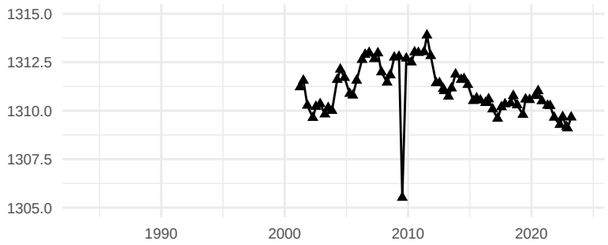
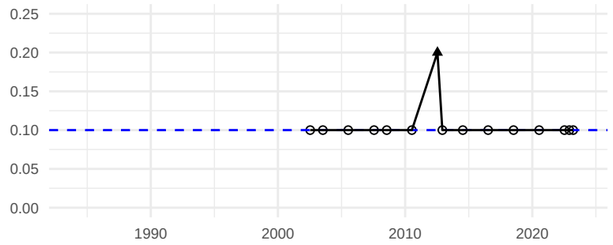
B−904L

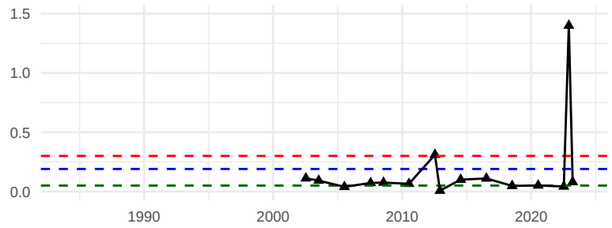
Groundwater Elevation (ft) :



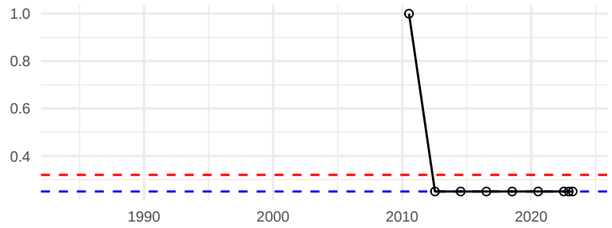
Bromide (mg/L) :



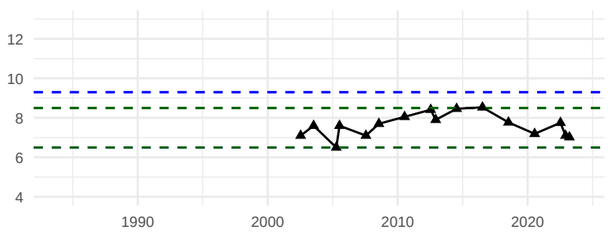
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



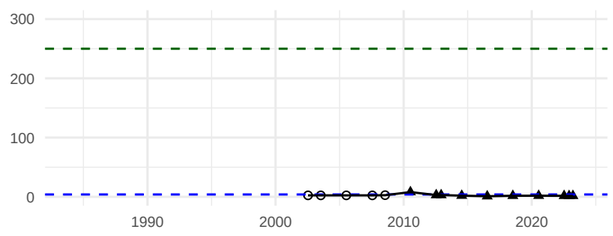
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



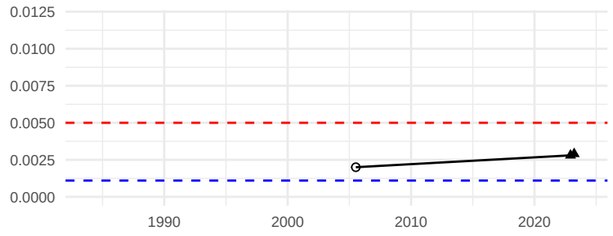
pH (SU) :
SMCL: 6.5 − 8.5 SU



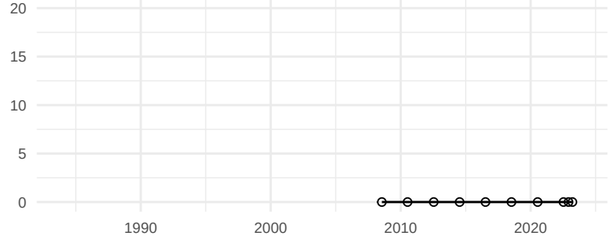
Chloride (mg/L) :
SMCL: 250 mg/L



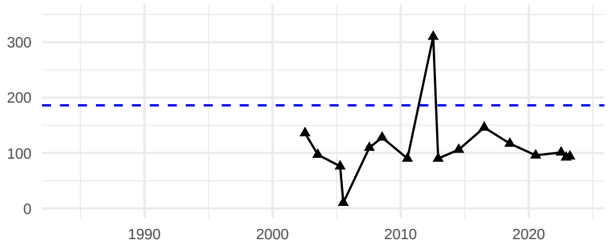
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



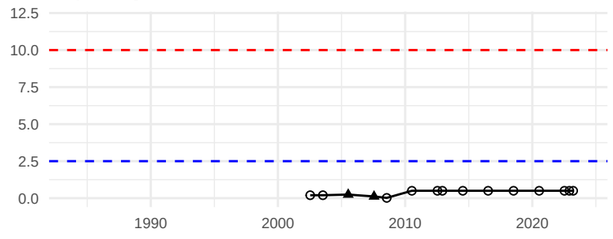
Total VOCs (ug/L) :



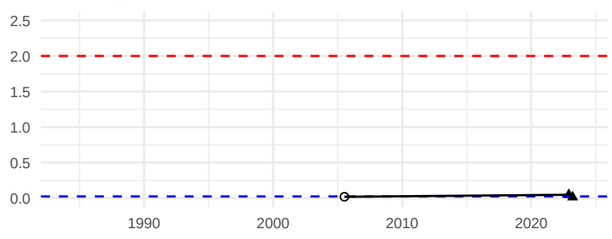
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



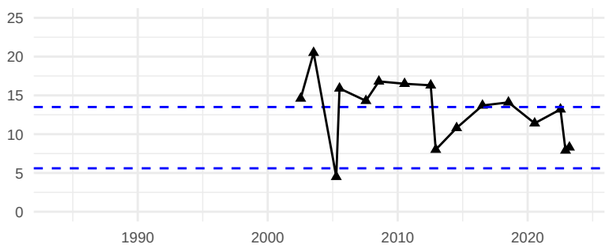
Result

- Detect
- Non−Detect

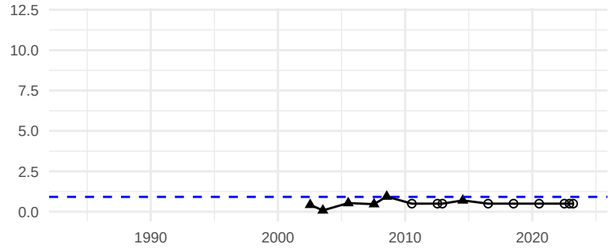
Standard

- AGQS
- SMCL
- Background

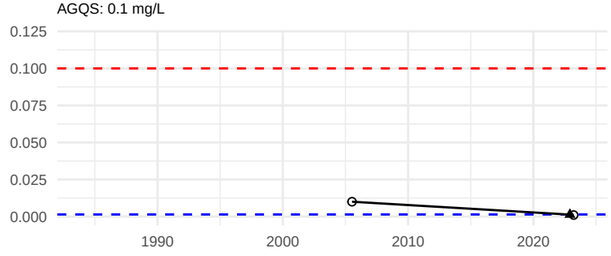
Temperature (C) :

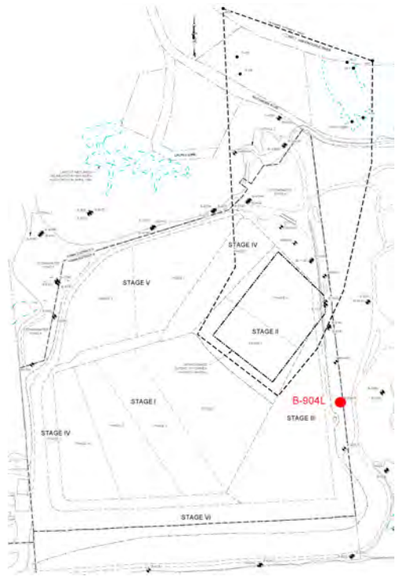


Total Kjeldahl Nitrogen (TKN) (mg/L) :

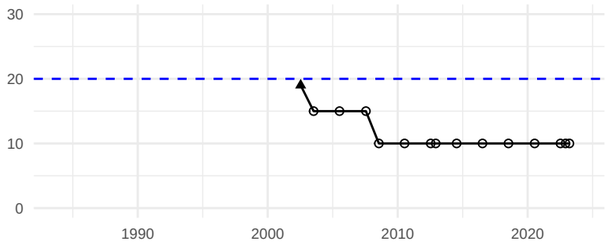


Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

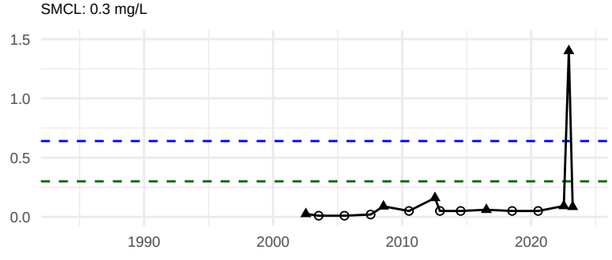




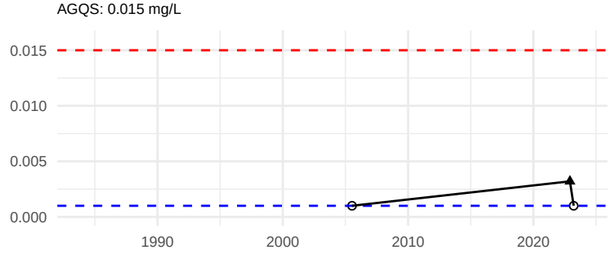
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L

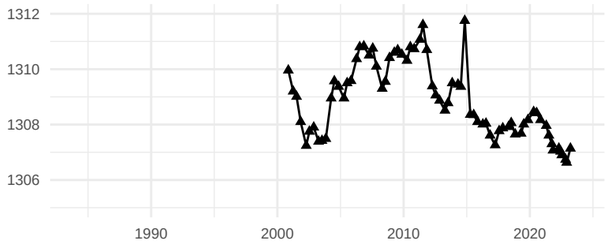


Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L

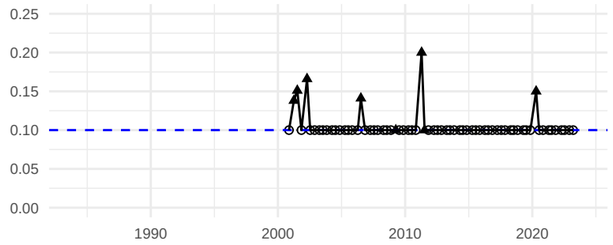


B−914U

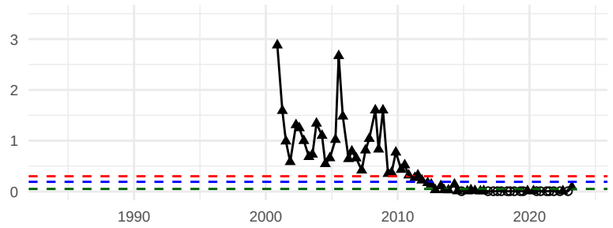
Groundwater Elevation (ft) :



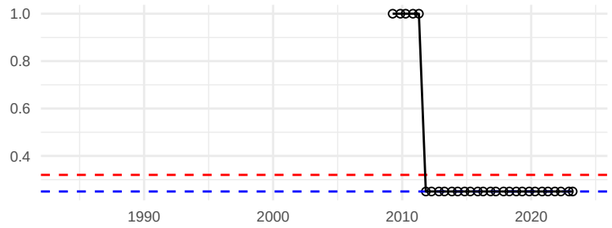
Bromide (mg/L) :



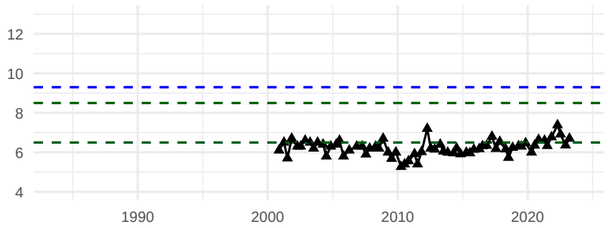
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



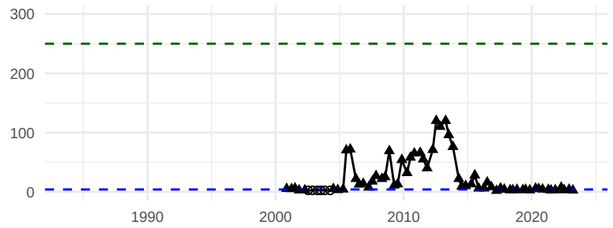
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



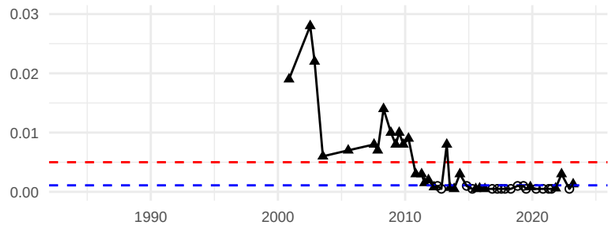
pH (SU) :
SMCL: 6.5 − 8.5 SU



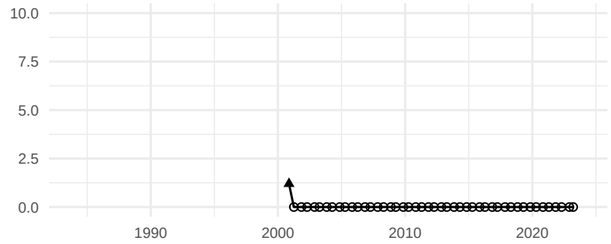
Chloride (mg/L) :
SMCL: 250 mg/L



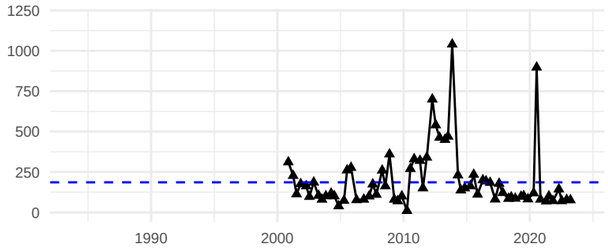
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



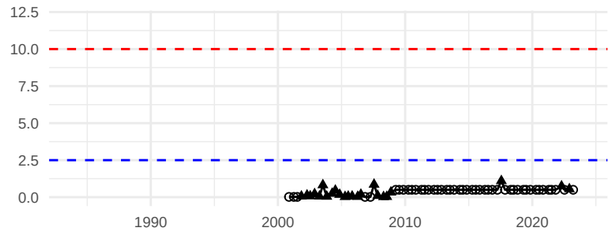
Total VOCs (ug/L) :



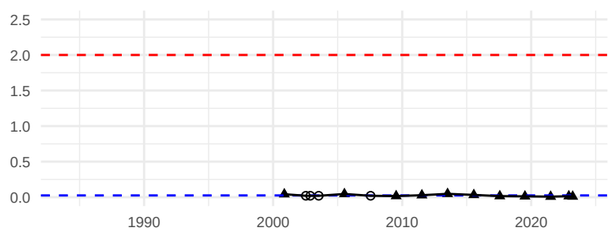
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



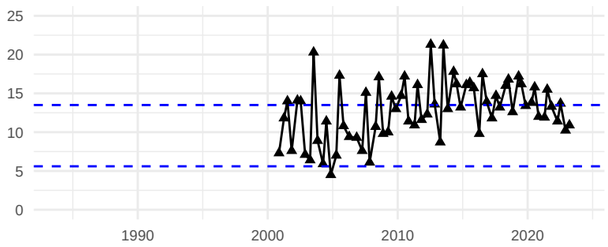
Result

- Detect
- Non−Detect

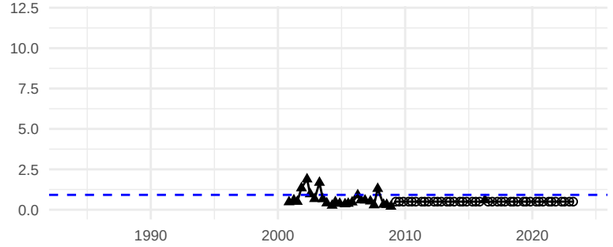
Standard

- AGQS
- SMCL
- Background

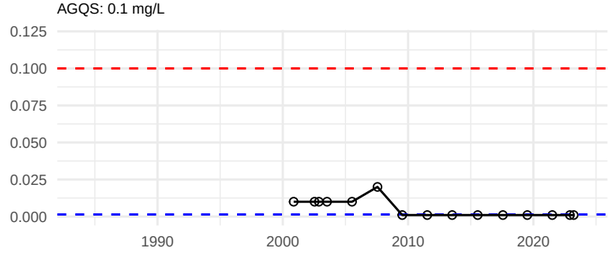
Temperature (C) :



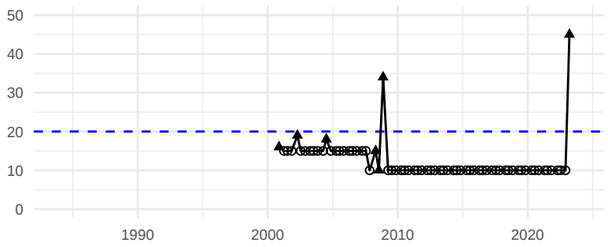
Total Kjeldahl Nitrogen (TKN) (mg/L) :



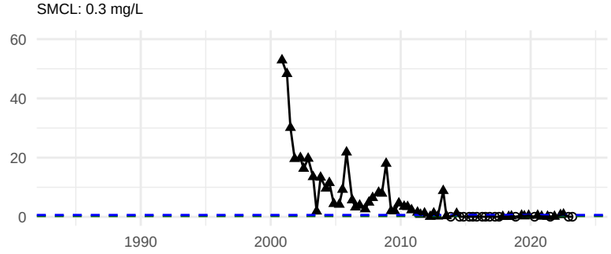
Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L



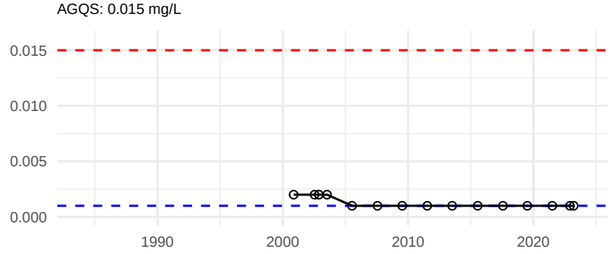
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L



Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



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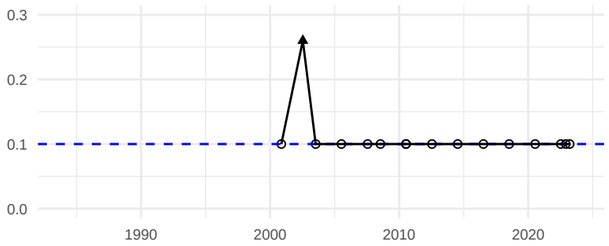
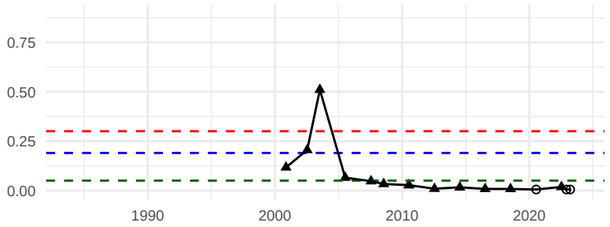
B−914L

Groundwater Elevation (ft) :

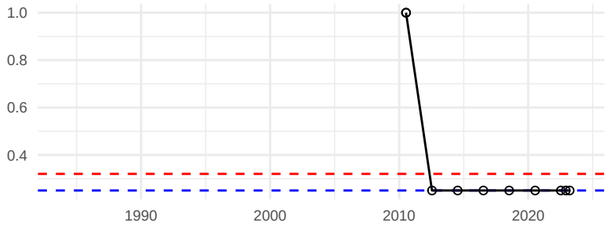
Bromide (mg/L) :



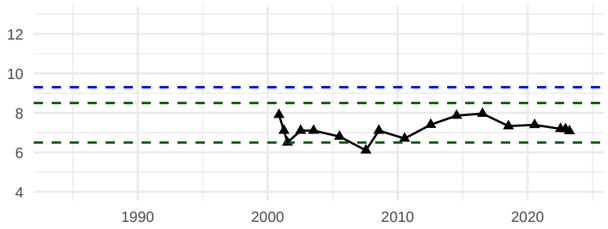
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



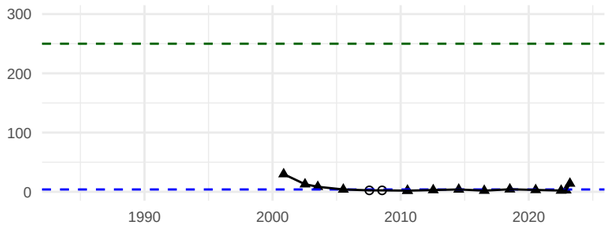
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



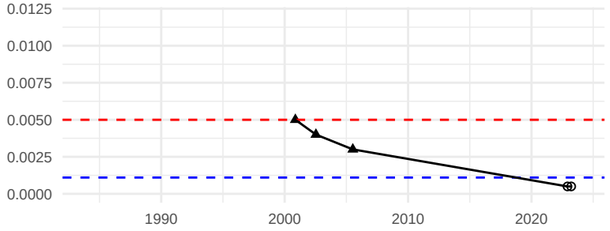
pH (SU) :
SMCL: 6.5 − 8.5 SU



Chloride (mg/L) :
SMCL: 250 mg/L

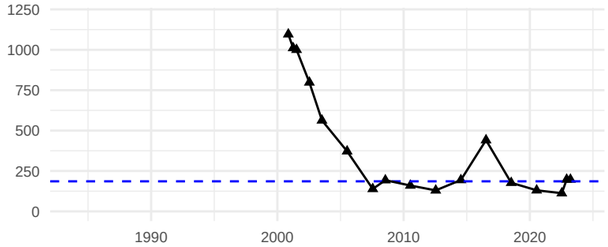


Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L

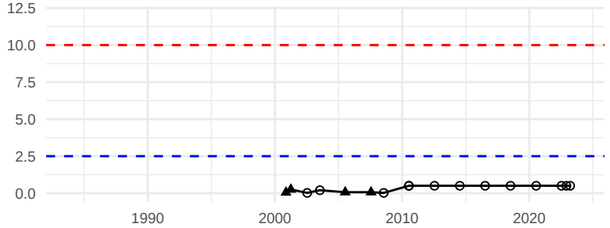


Total VOCs (ug/L) :

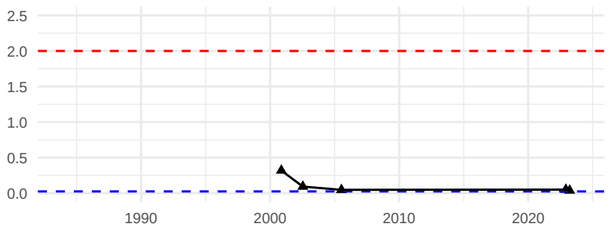
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



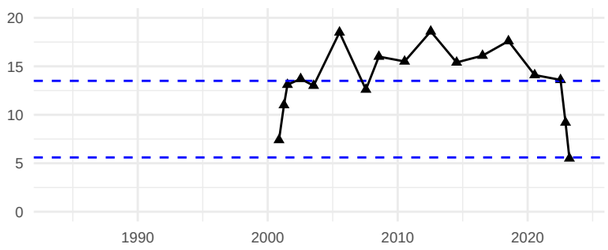
Result

- Detect
- Non−Detect

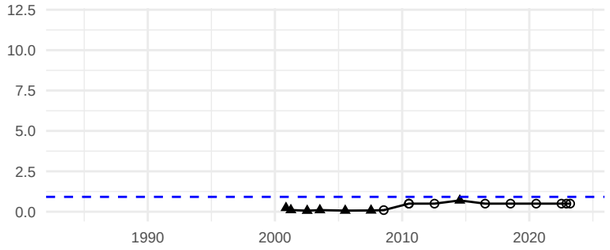
Standard

- AGQS
- SMCL
- Background

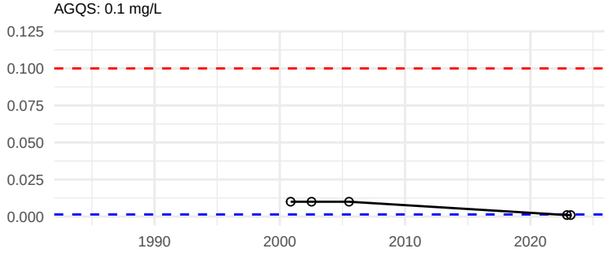
Temperature (C) :



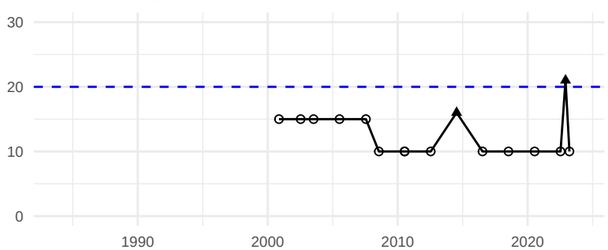
Total Kjeldahl Nitrogen (TKN) (mg/L) :



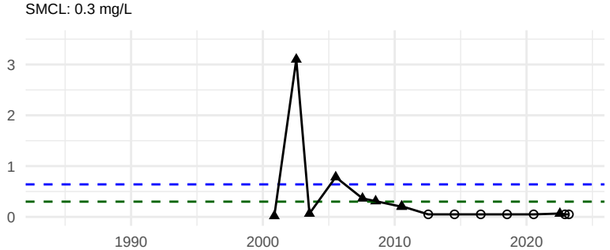
Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L



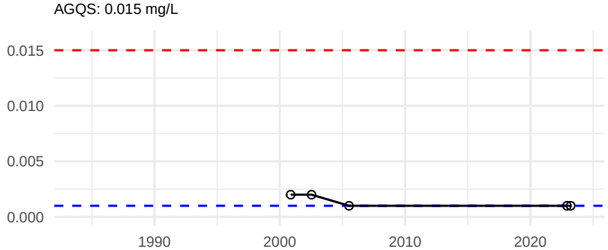
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L

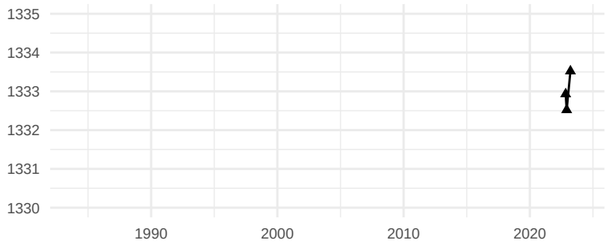


Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L

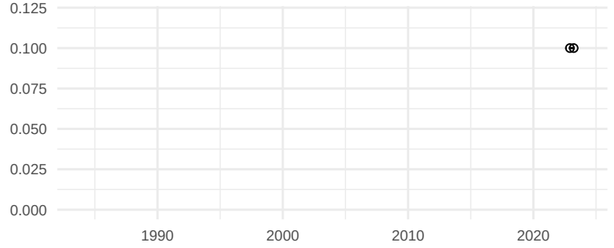


B−929U

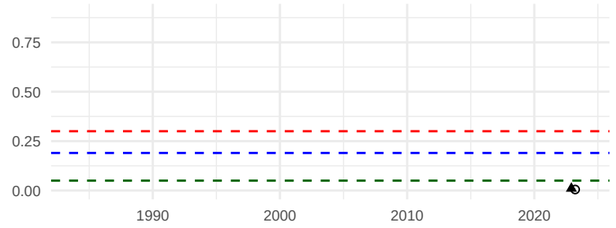
Groundwater Elevation (ft) :



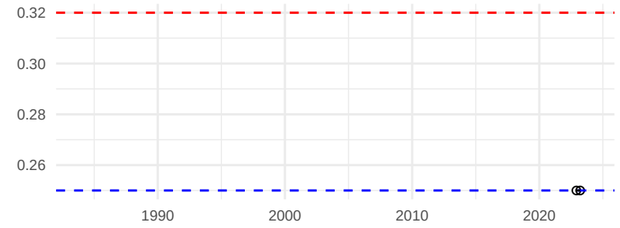
Bromide (mg/L) :



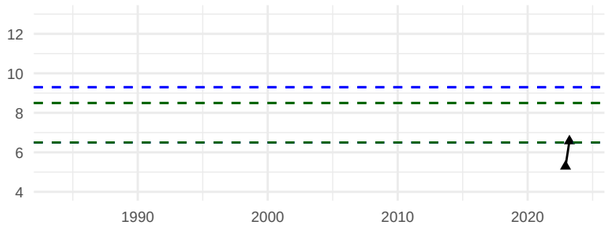
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



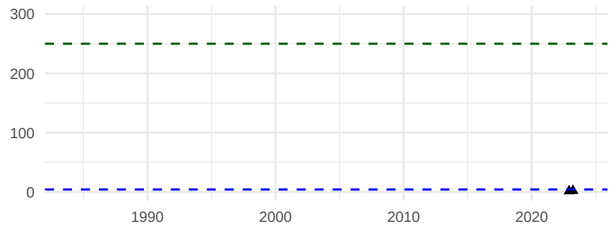
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



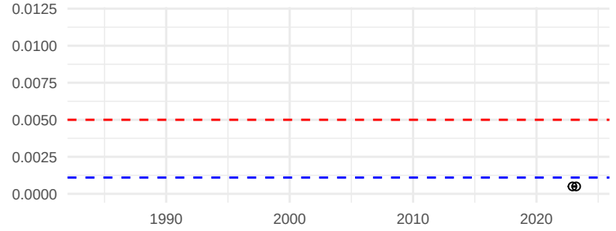
pH (SU) :
SMCL: 6.5 − 8.5 SU



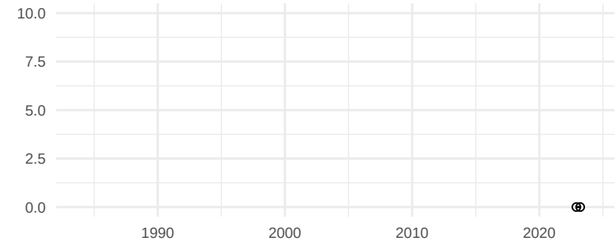
Chloride (mg/L) :
SMCL: 250 mg/L



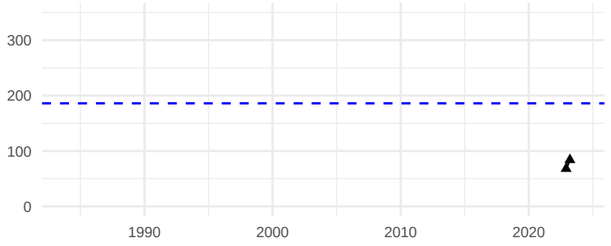
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



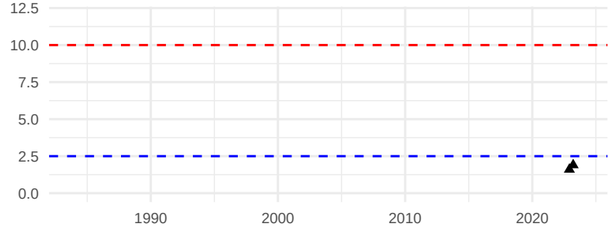
Total VOCs (ug/L) :



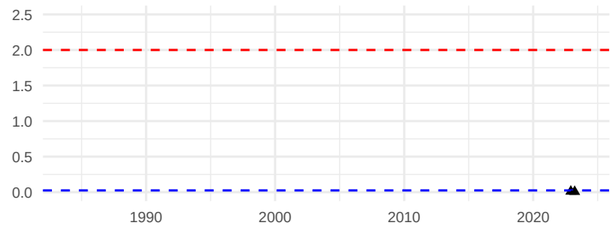
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



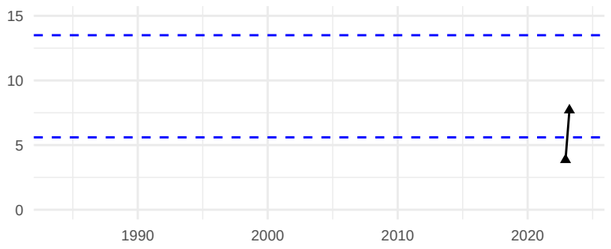
Result

- Detect
- Non−Detect

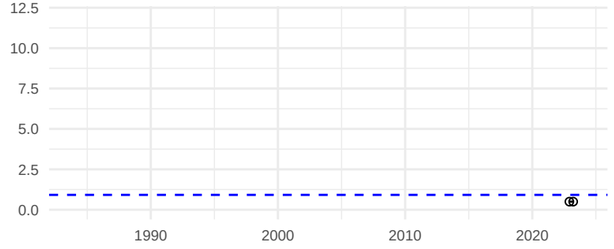
Standard

- AGQS
- SMCL
- Background

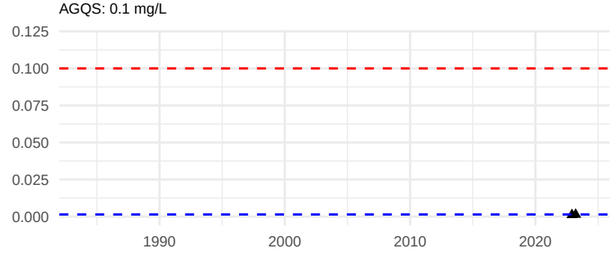
Temperature (C) :

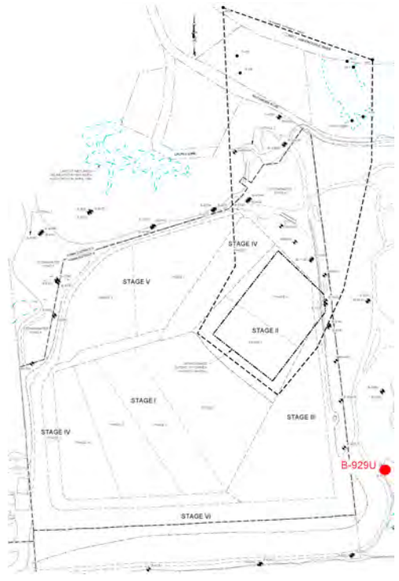


Total Kjeldahl Nitrogen (TKN) (mg/L) :

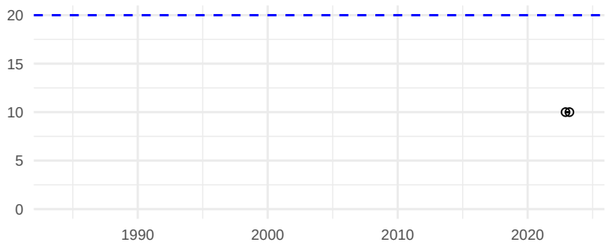


Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

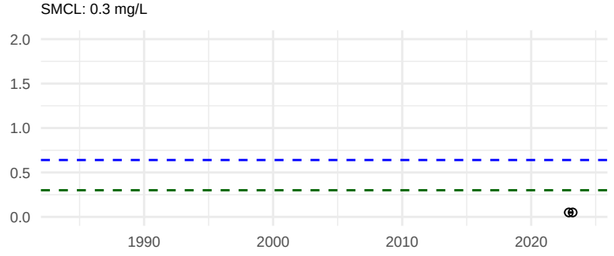




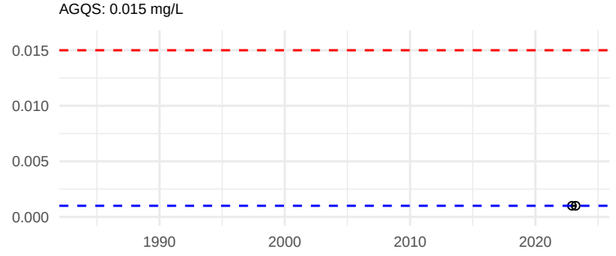
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L



Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



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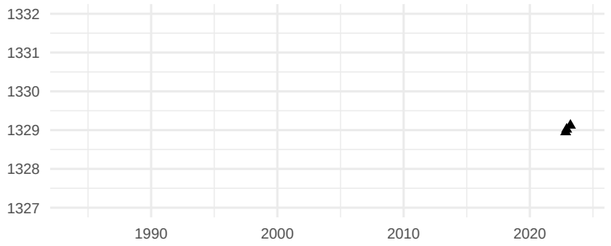
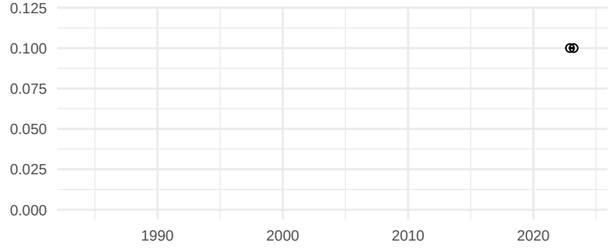
B−929L

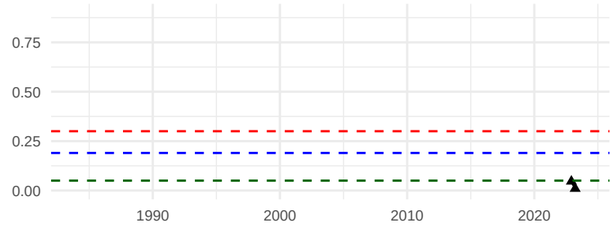
Groundwater Elevation (ft) :



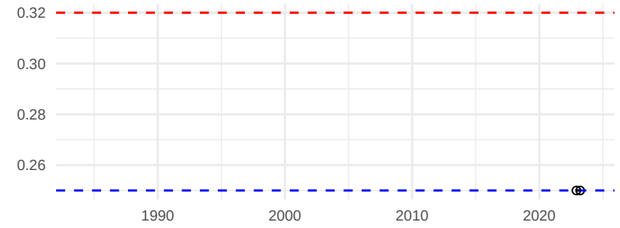
Bromide (mg/L) :



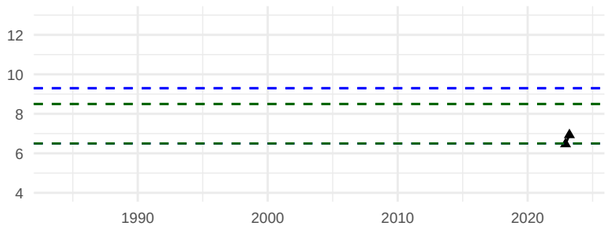
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



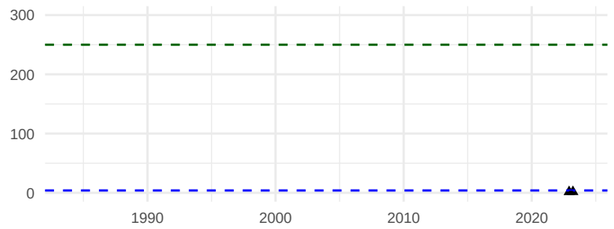
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



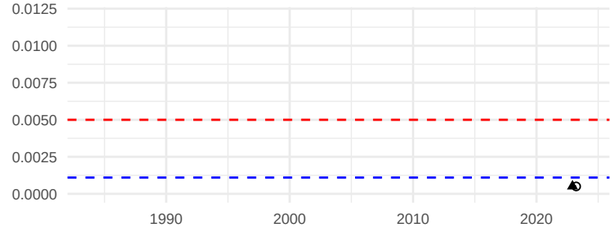
pH (SU) :
SMCL: 6.5 − 8.5 SU



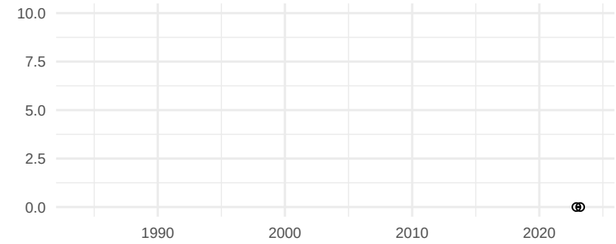
Chloride (mg/L) :
SMCL: 250 mg/L



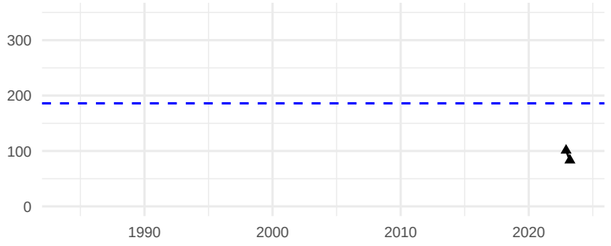
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



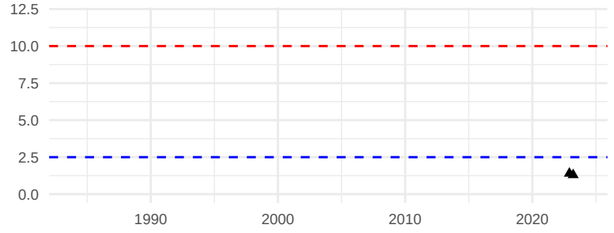
Total VOCs (ug/L) :



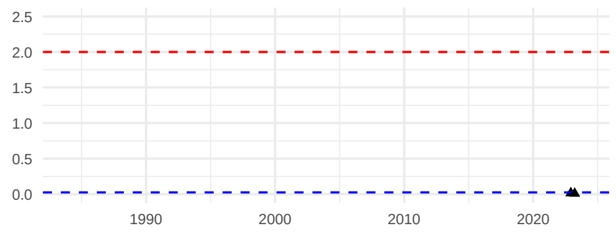
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



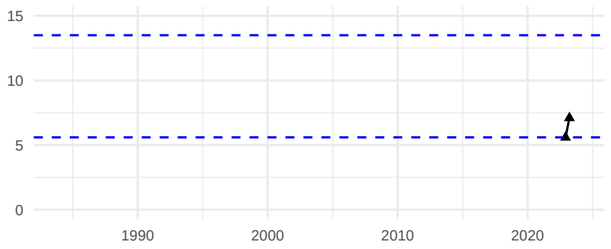
Result

- Detect
- Non−Detect

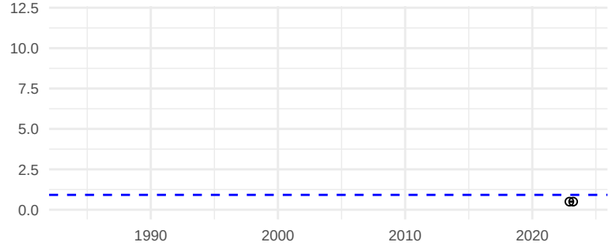
Standard

- AGQS
- SMCL
- Background

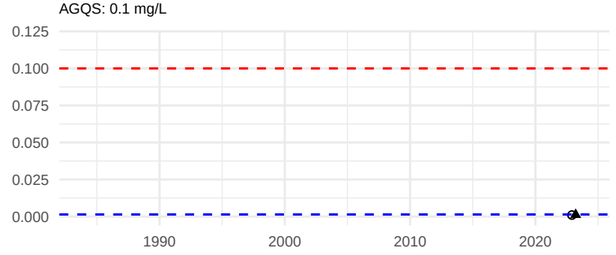
Temperature (C) :

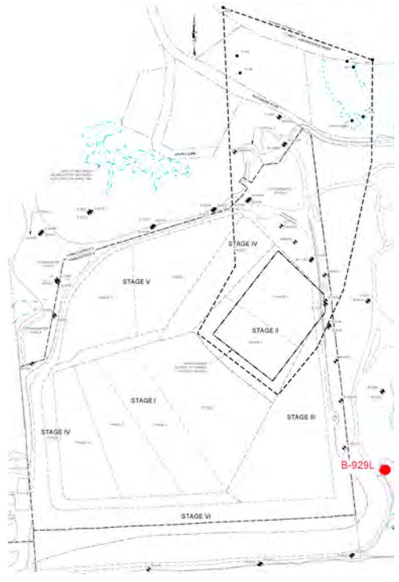


Total Kjeldahl Nitrogen (TKN) (mg/L) :

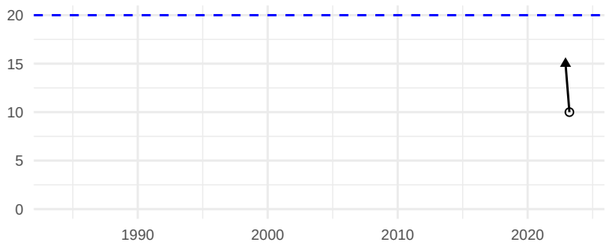


Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

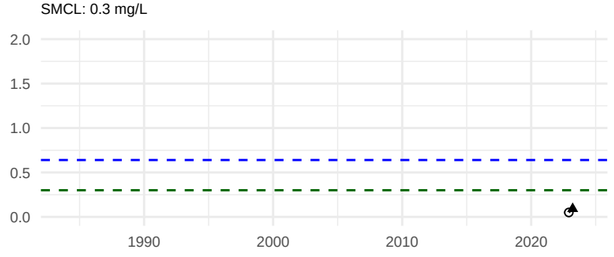




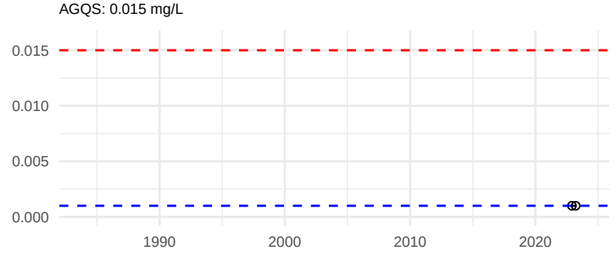
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L



Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



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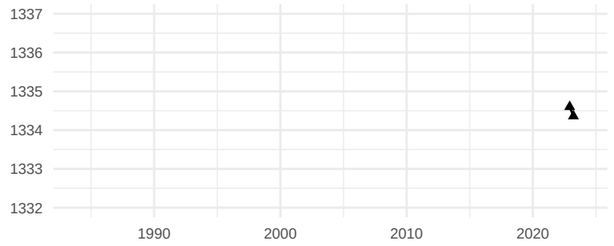
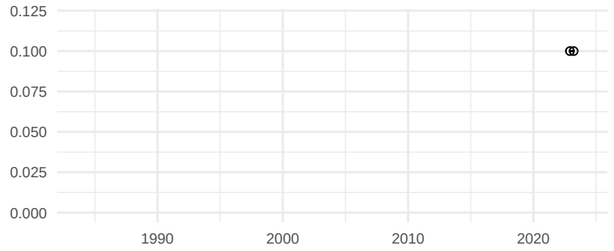
B−930U

Groundwater Elevation (ft) :

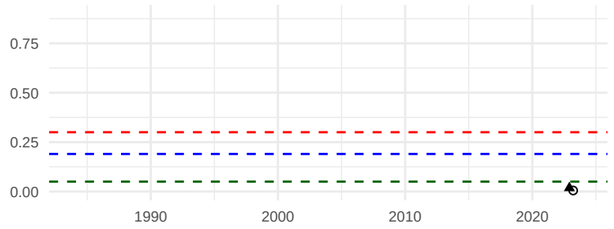


Bromide (mg/L) :



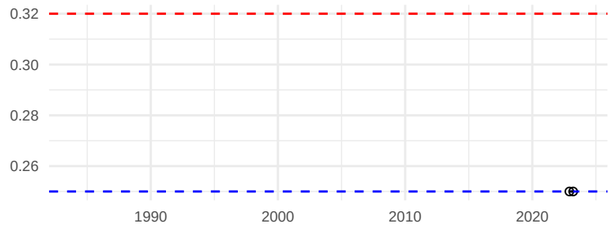
Dissolved Manganese (mg/L) :

AGQS: 0.3 mg/L SMCL: 0.05 mg/L



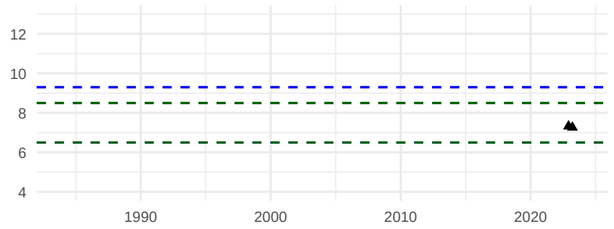
Dioxane (1,4−) (ug/L) :

AGQS: 0.32 ug/L



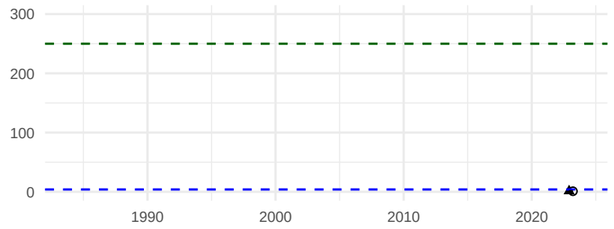
pH (SU) :

SMCL: 6.5 − 8.5 SU



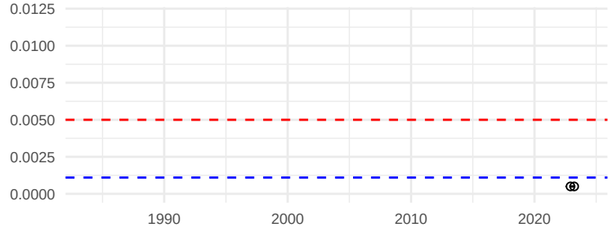
Chloride (mg/L) :

SMCL: 250 mg/L

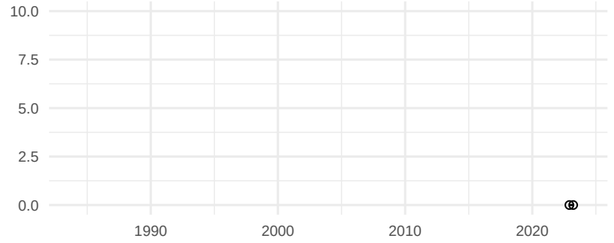


Dissolved Arsenic (mg/L) :

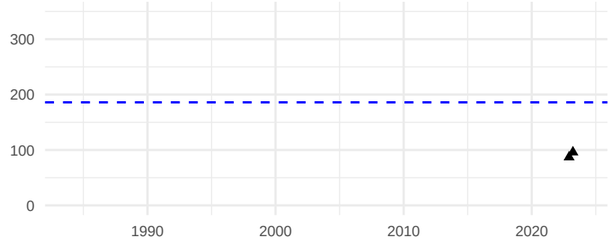
AGQS: 0.005 mg/L



Total VOCs (ug/L) :

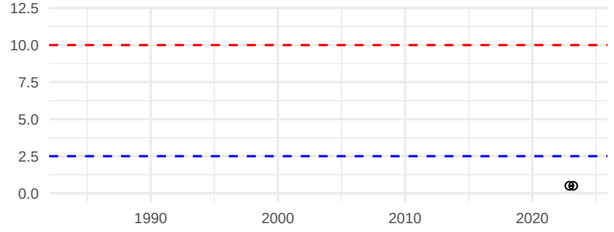


Specific Conductance (uS/cm) :



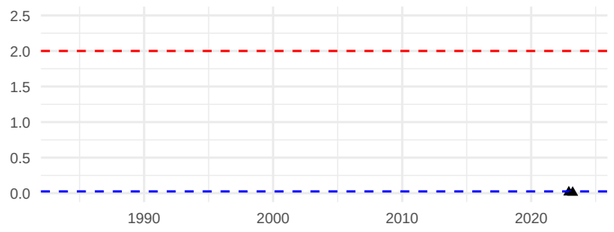
Nitrate (mg/L) :

AGQS: 10 mg/L



Dissolved Barium (mg/L) :

AGQS: 2 mg/L



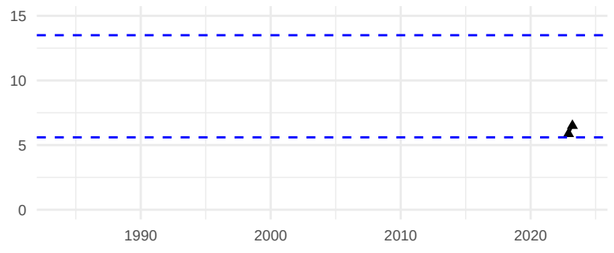
Result

- Detect
- Non−Detect

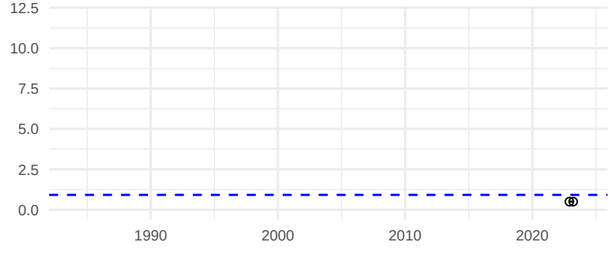
Standard

- AGQS
- SMCL
- Background

Temperature (C) :

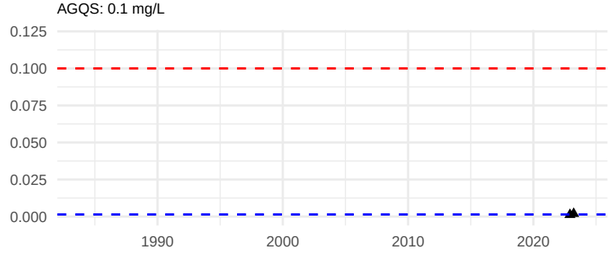


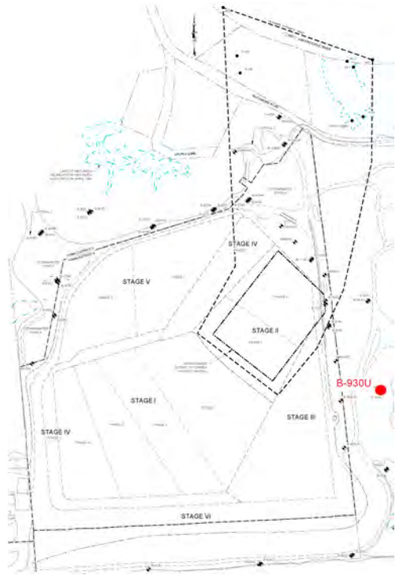
Total Kjeldahl Nitrogen (TKN) (mg/L) :



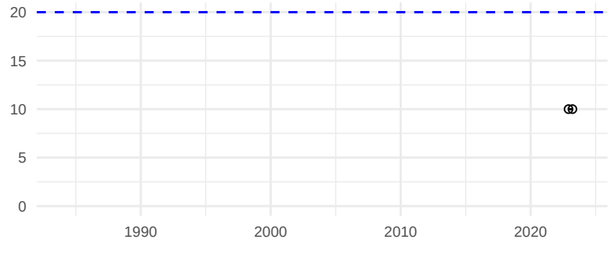
Dissolved Chromium (mg/L) :

AGQS: 0.1 mg/L



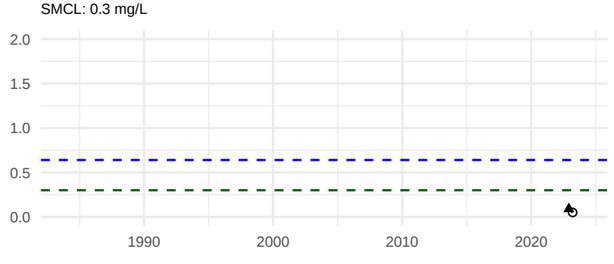


Chemical Oxygen Demand (mg/L) :



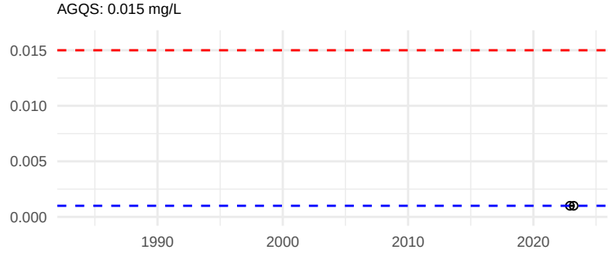
Dissolved Iron (mg/L) :

SMCL: 0.3 mg/L



Dissolved Lead (mg/L) :

AGQS: 0.015 mg/L



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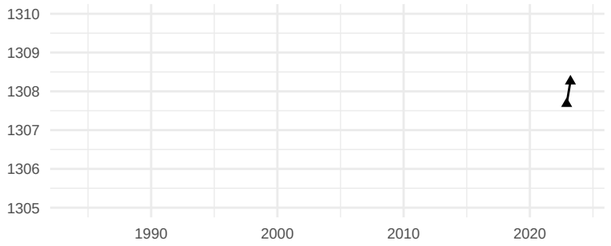
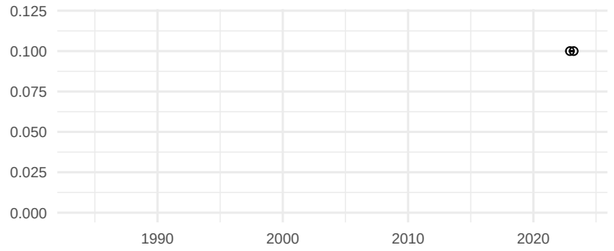
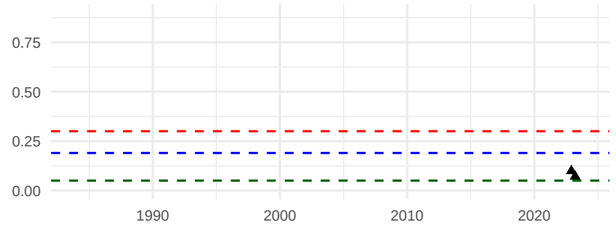
Groundwater Elevation (ft) :



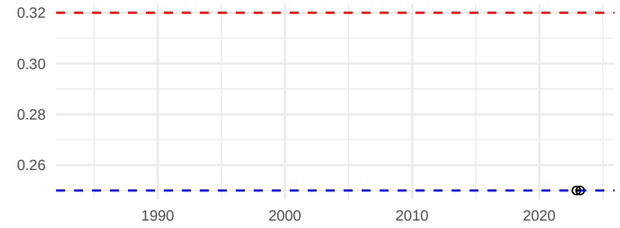
Bromide (mg/L) :



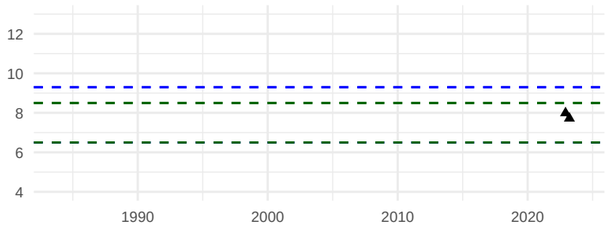
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



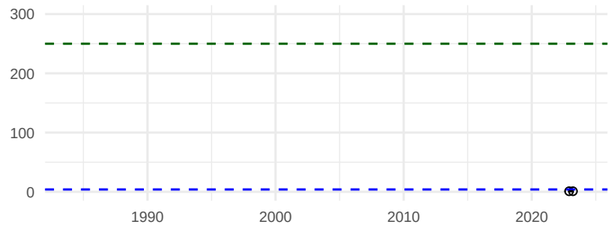
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



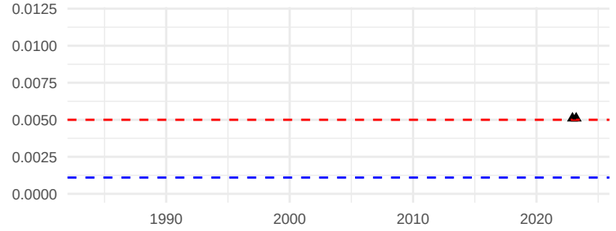
pH (SU) :
SMCL: 6.5 − 8.5 SU



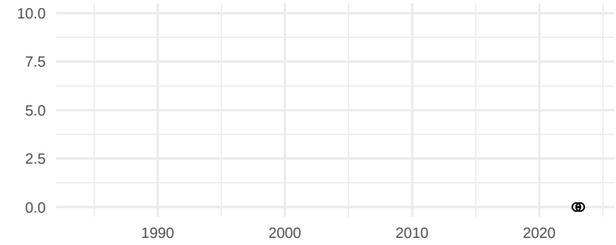
Chloride (mg/L) :
SMCL: 250 mg/L



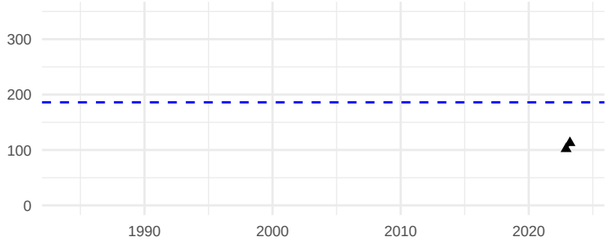
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



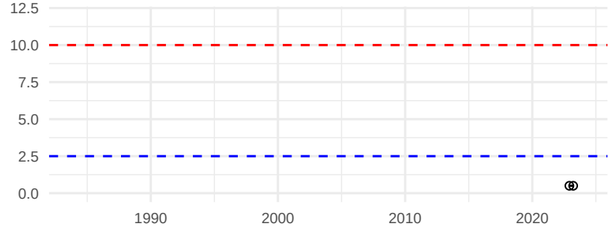
Total VOCs (ug/L) :



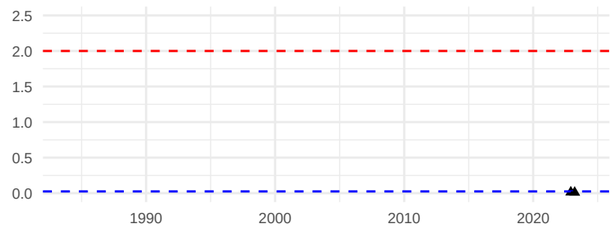
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



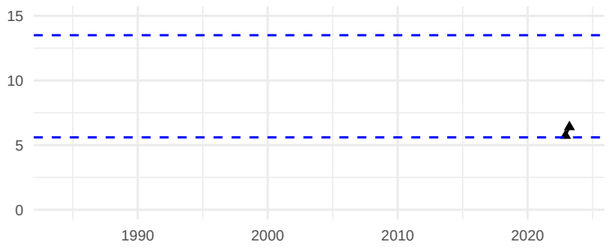
Result

- Detect
- Non−Detect

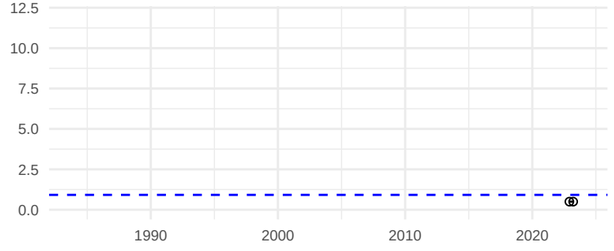
Standard

- AGQS
- SMCL
- Background

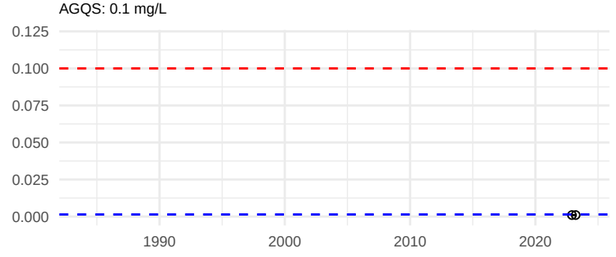
Temperature (C) :



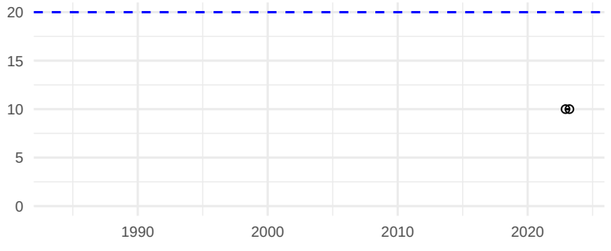
Total Kjeldahl Nitrogen (TKN) (mg/L) :



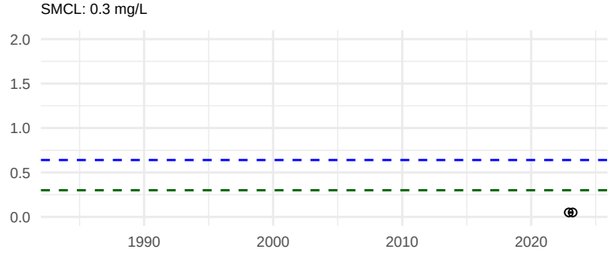
Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L



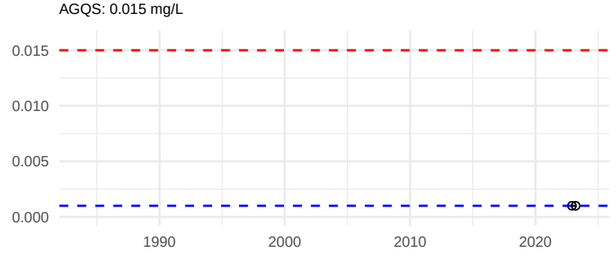
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L

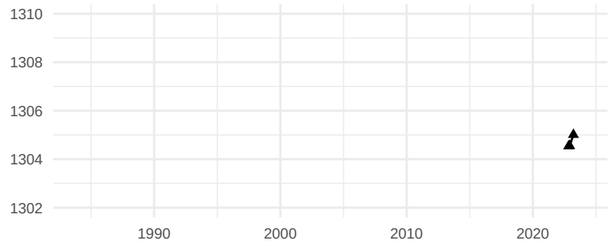


Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L

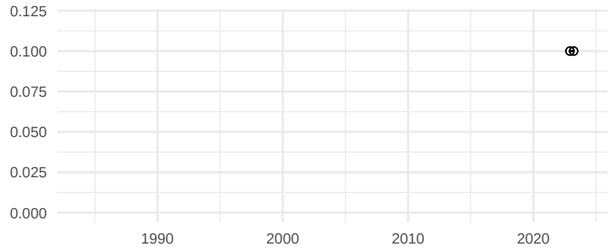


B−931U

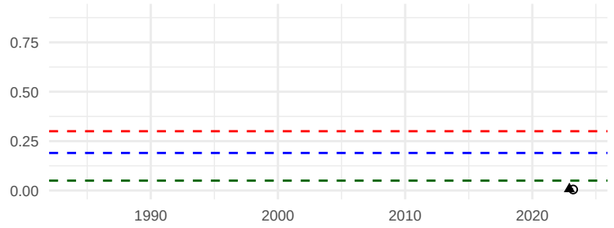
Groundwater Elevation (ft) :



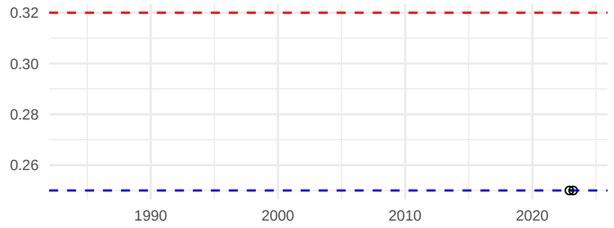
Bromide (mg/L) :



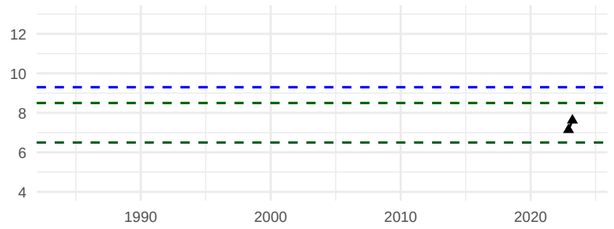
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



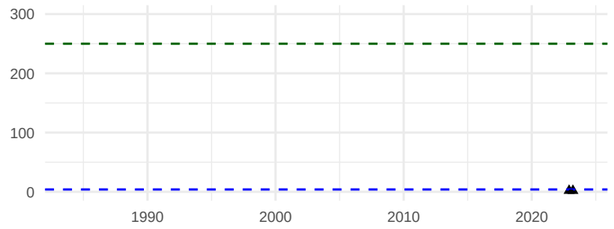
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



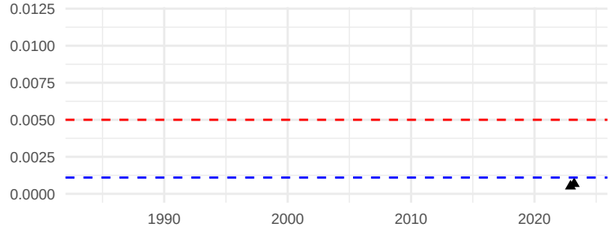
pH (SU) :
SMCL: 6.5 − 8.5 SU



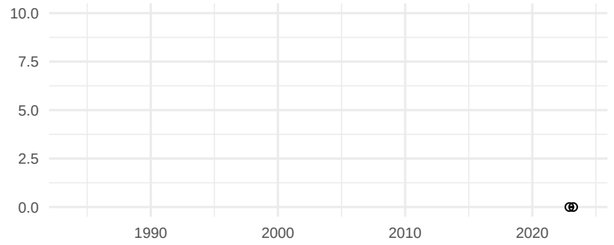
Chloride (mg/L) :
SMCL: 250 mg/L



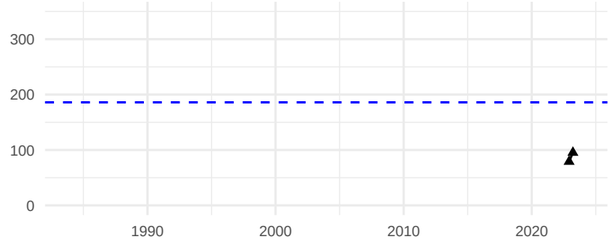
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



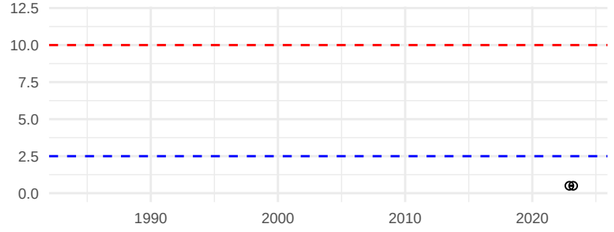
Total VOCs (ug/L) :



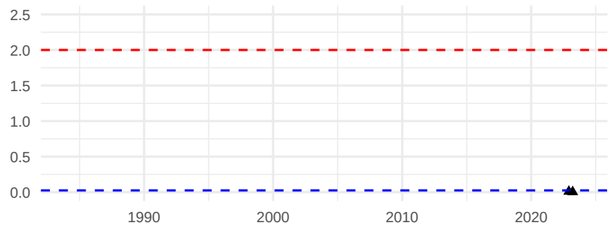
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



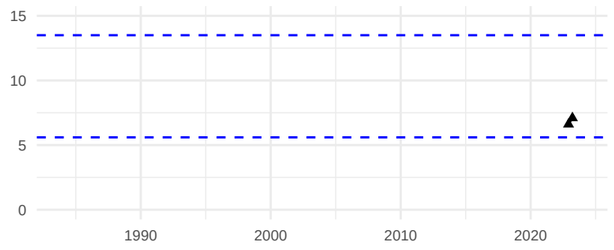
Result

- Detect
- Non−Detect

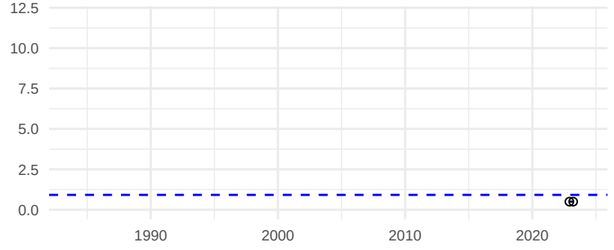
Standard

- AGQS
- SMCL
- Background

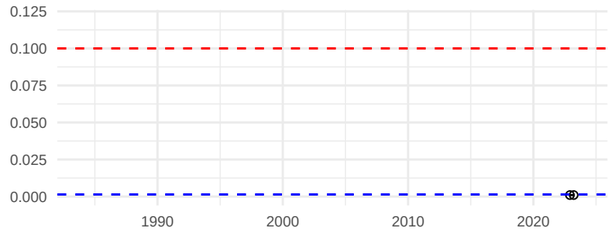
Temperature (C) :



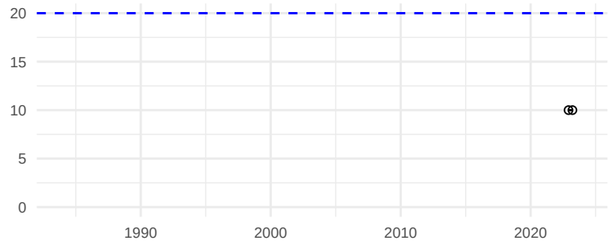
Total Kjeldahl Nitrogen (TKN) (mg/L) :



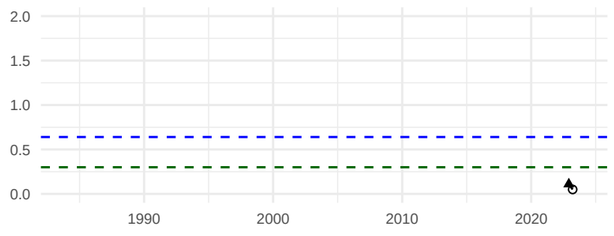
Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L



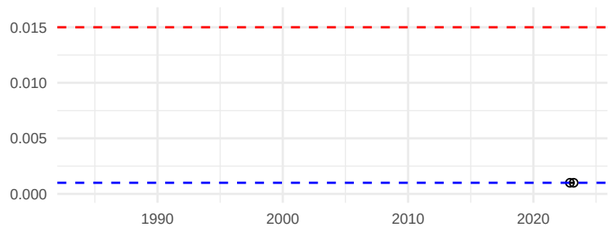
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L

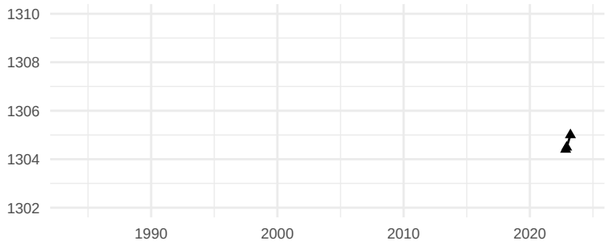


Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L

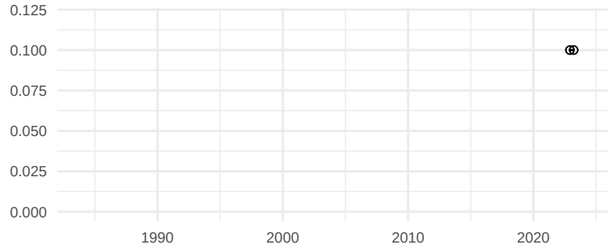


B−931L

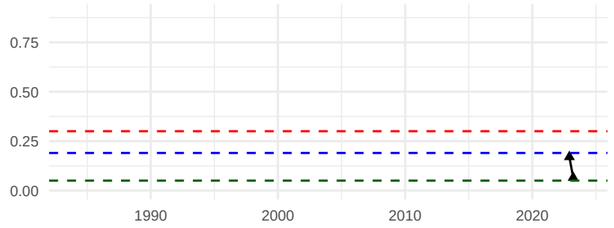
Groundwater Elevation (ft) :



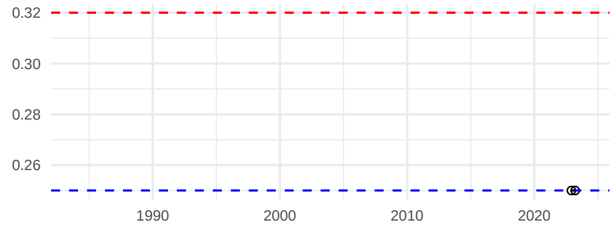
Bromide (mg/L) :



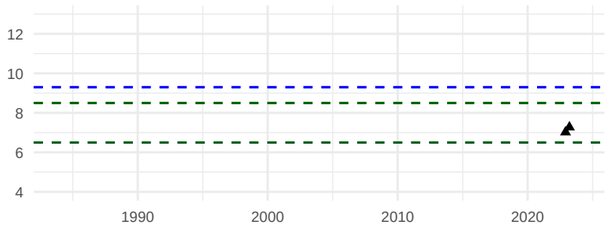
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



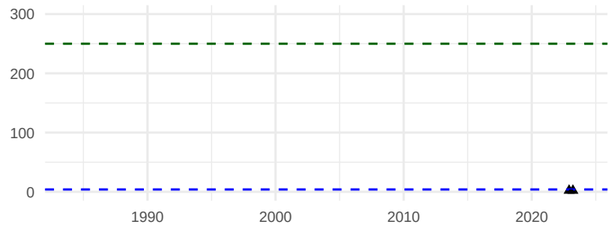
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



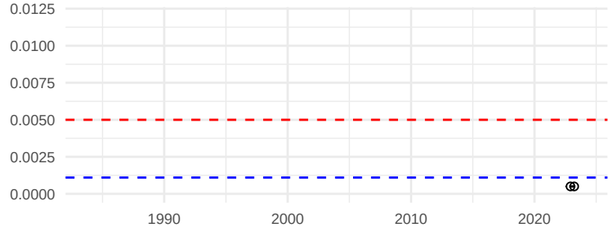
pH (SU) :
SMCL: 6.5 − 8.5 SU



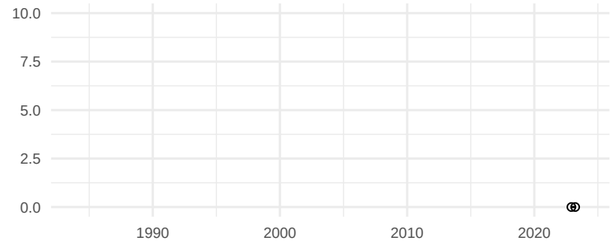
Chloride (mg/L) :
SMCL: 250 mg/L



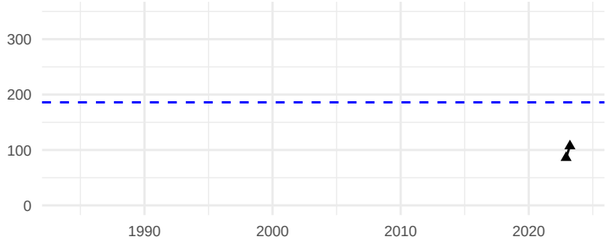
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



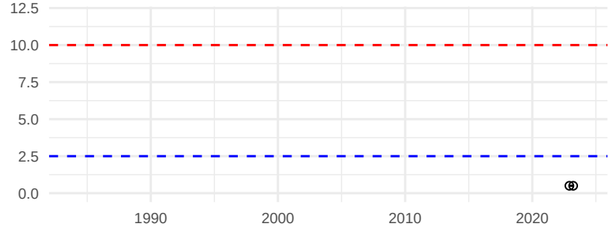
Total VOCs (ug/L) :



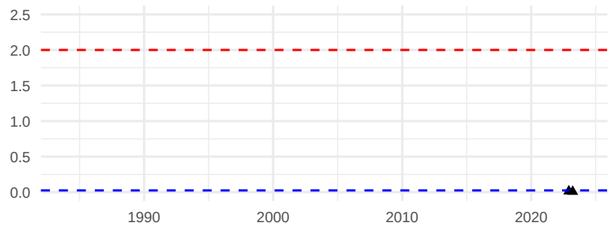
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



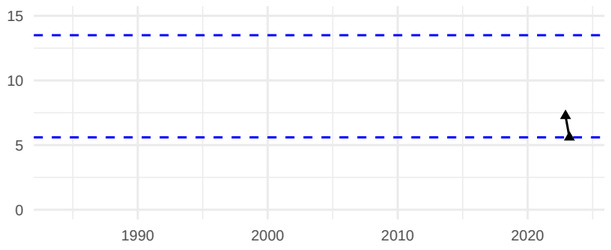
Result

- Detect
- Non−Detect

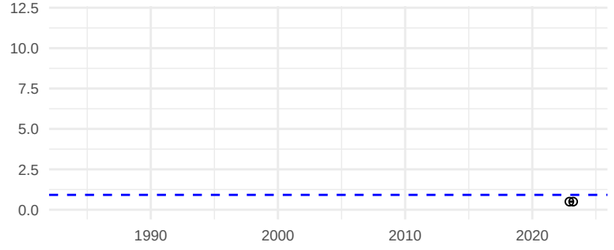
Standard

- AGQS
- SMCL
- Background

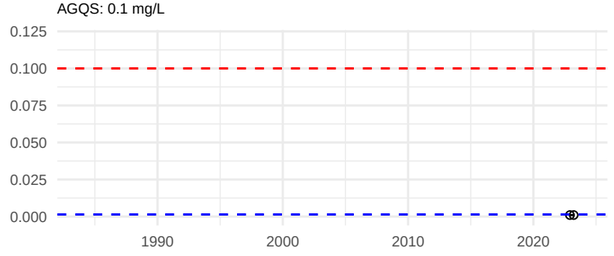
Temperature (C) :



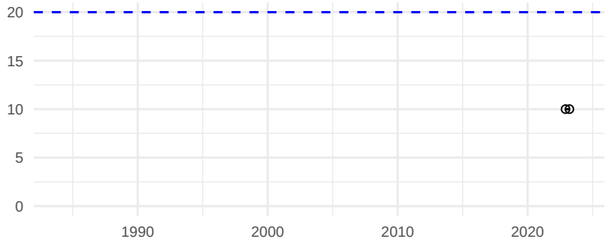
Total Kjeldahl Nitrogen (TKN) (mg/L) :



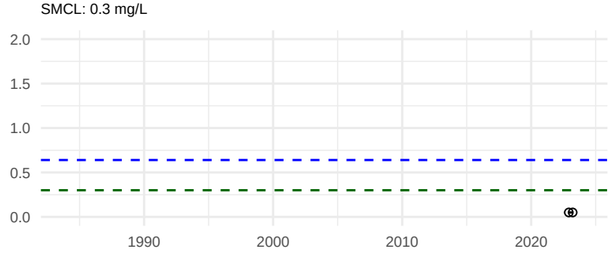
Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L



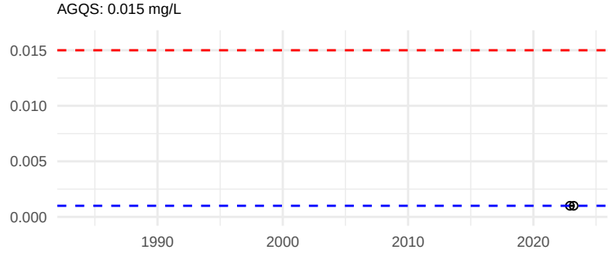
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L



Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



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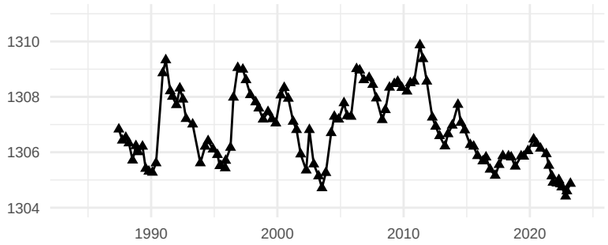
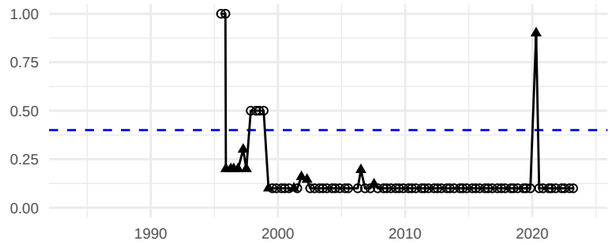
B−102S

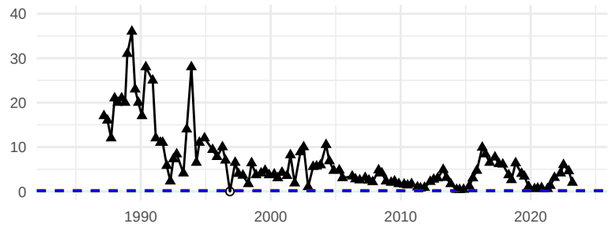
Groundwater Elevation (ft) :



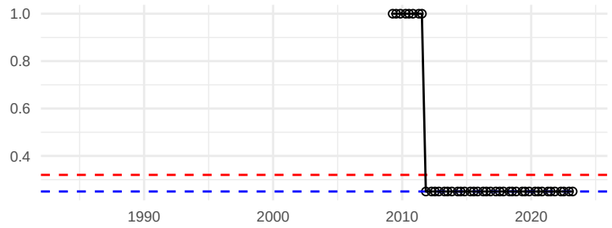
Bromide (mg/L) :



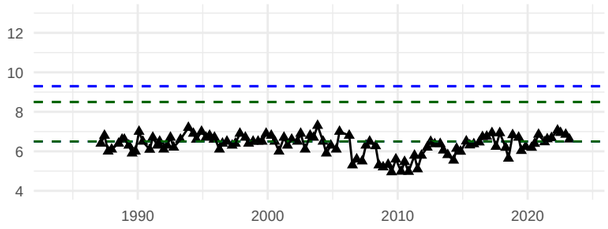
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



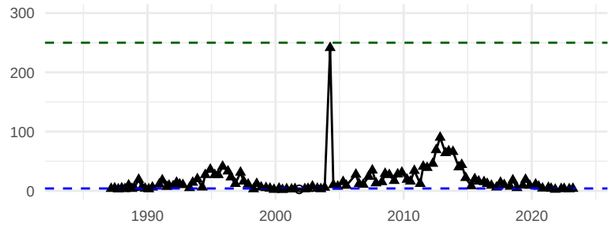
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



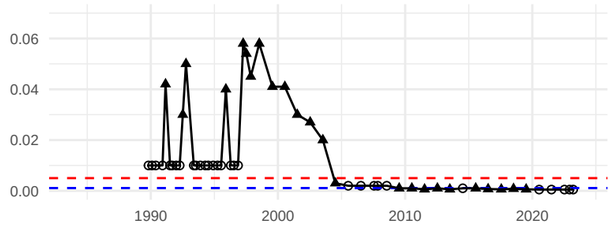
pH (SU) :
SMCL: 6.5 − 8.5 SU



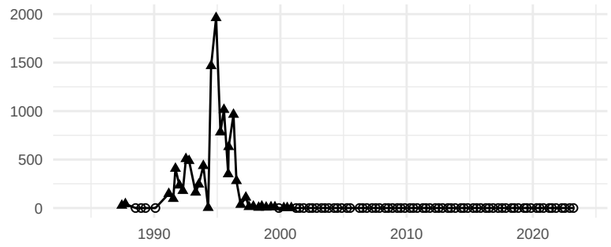
Chloride (mg/L) :
SMCL: 250 mg/L



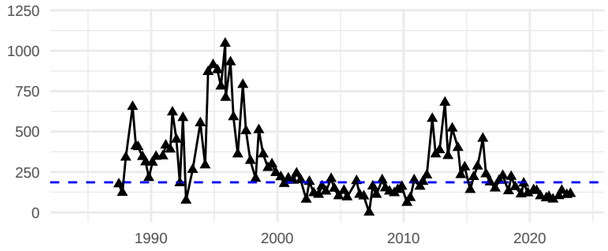
Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L



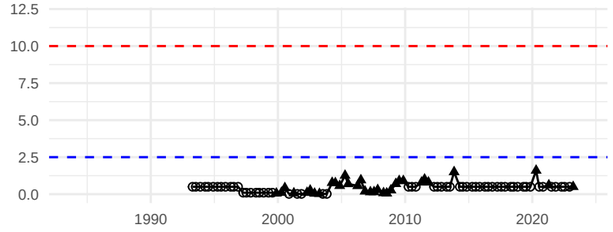
Total VOCs (ug/L) :



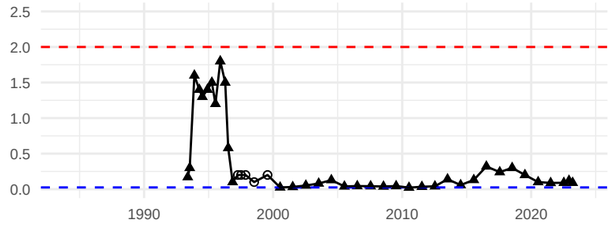
Specific Conductance (uS/cm) :



Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



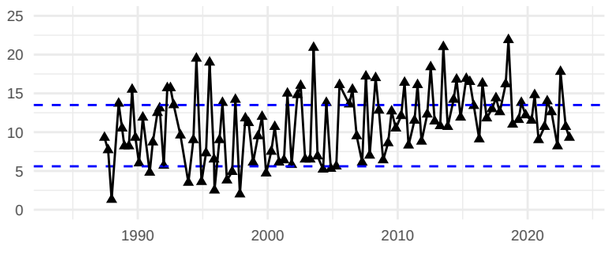
Result

- Detect
- Non−Detect

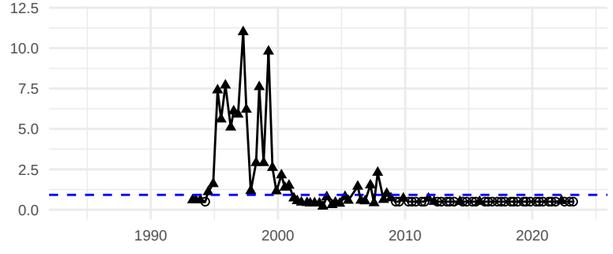
Standard

- AGQS
- SMCL
- Background

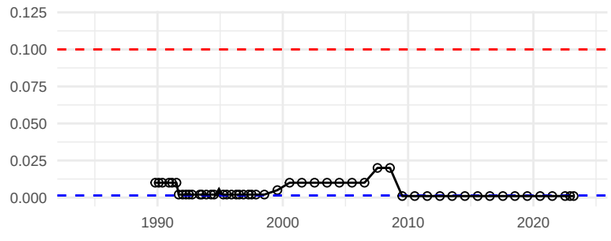
Temperature (C) :

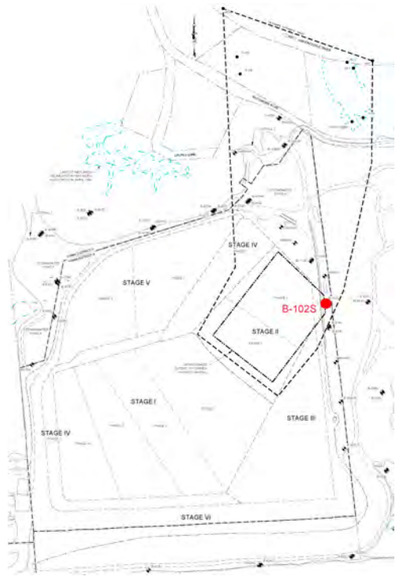


Total Kjeldahl Nitrogen (TKN) (mg/L) :

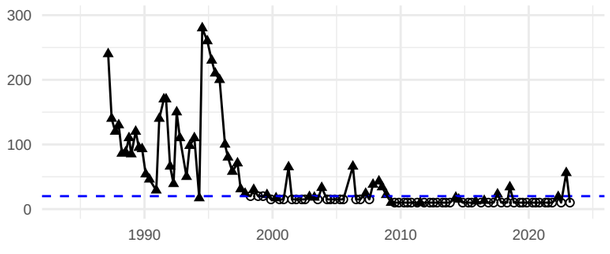


Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

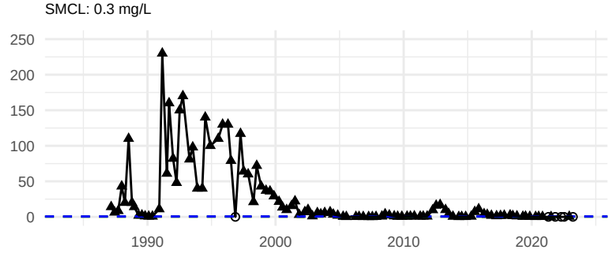




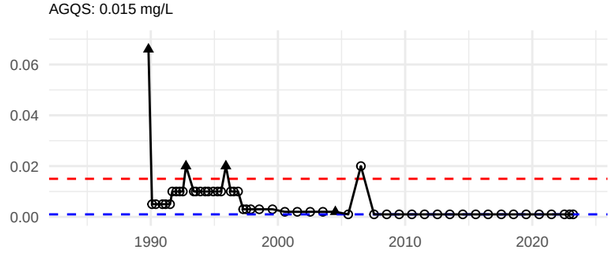
Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L



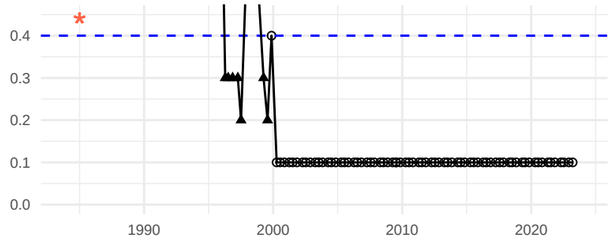
Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



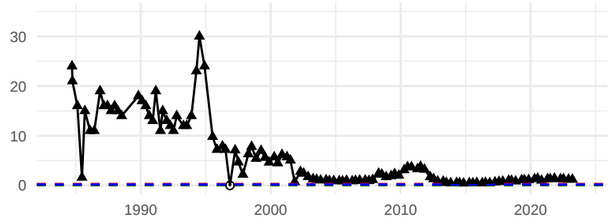
B−102D

Groundwater Elevation (ft) :

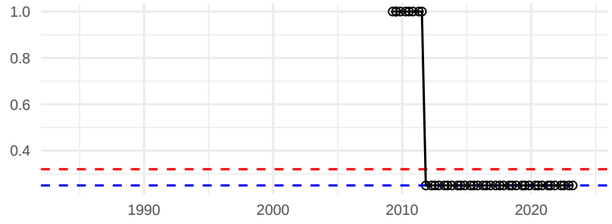
Bromide (mg/L) :



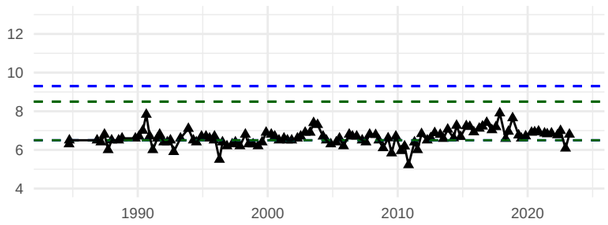
Dissolved Manganese (mg/L) :
AGQS: 0.3 mg/L SMCL: 0.05 mg/L



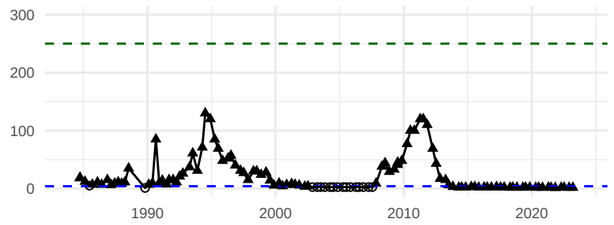
Dioxane (1,4−) (ug/L) :
AGQS: 0.32 ug/L



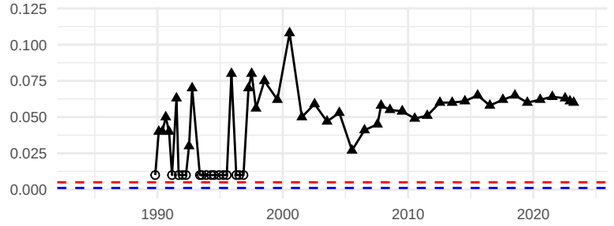
pH (SU) :
SMCL: 6.5 − 8.5 SU



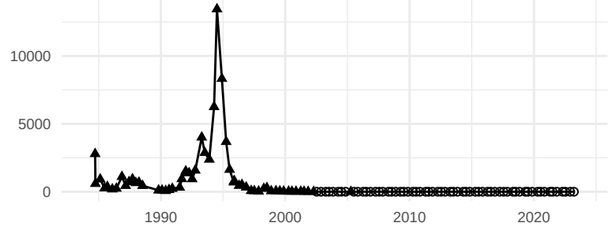
Chloride (mg/L) :
SMCL: 250 mg/L



Dissolved Arsenic (mg/L) :
AGQS: 0.005 mg/L

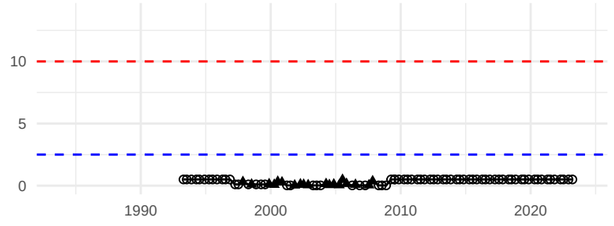


Total VOCs (ug/L) :

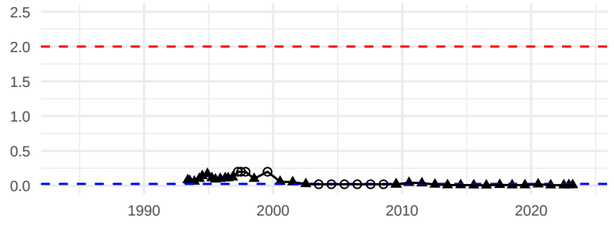


Specific Conductance (uS/cm) :

Nitrate (mg/L) :
AGQS: 10 mg/L



Dissolved Barium (mg/L) :
AGQS: 2 mg/L



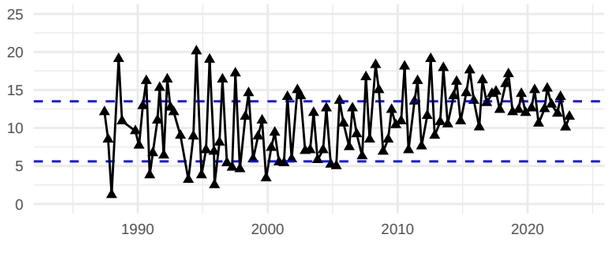
Result

- Detect
- Non−Detect

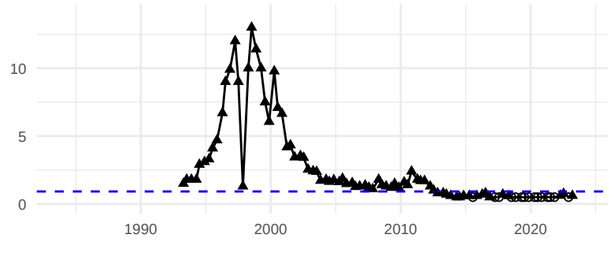
Standard

- AGQS
- SMCL
- Background

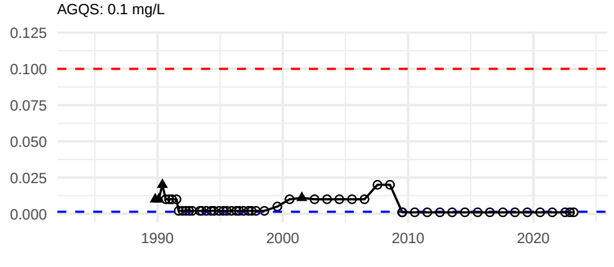
Temperature (C) :



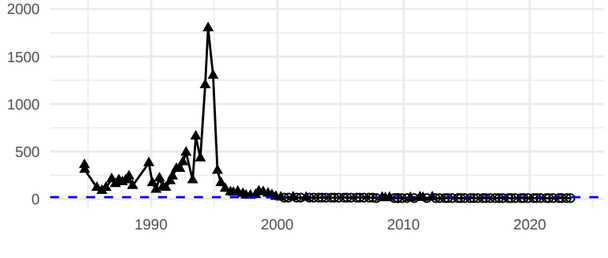
Total Kjeldahl Nitrogen (TKN) (mg/L) :



Dissolved Chromium (mg/L) :
AGQS: 0.1 mg/L

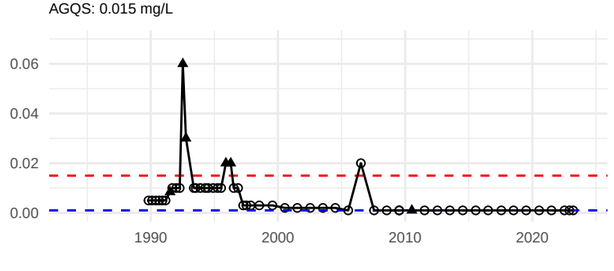


Chemical Oxygen Demand (mg/L) :



Dissolved Iron (mg/L) :
SMCL: 0.3 mg/L

Dissolved Lead (mg/L) :
AGQS: 0.015 mg/L



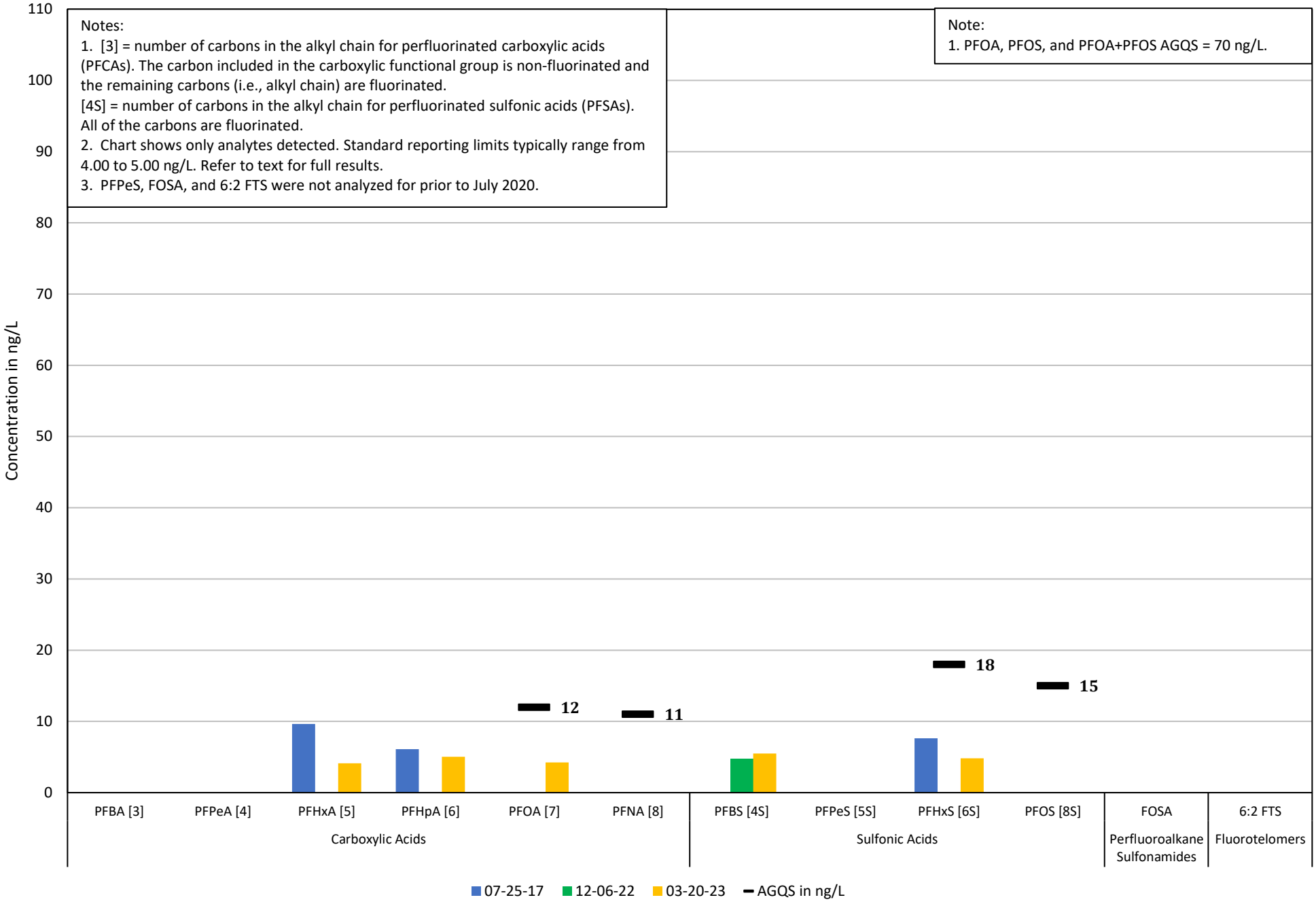
* indicates one or more data points plot outside concentration range shown

Sanborn, Head & Associates, Inc.

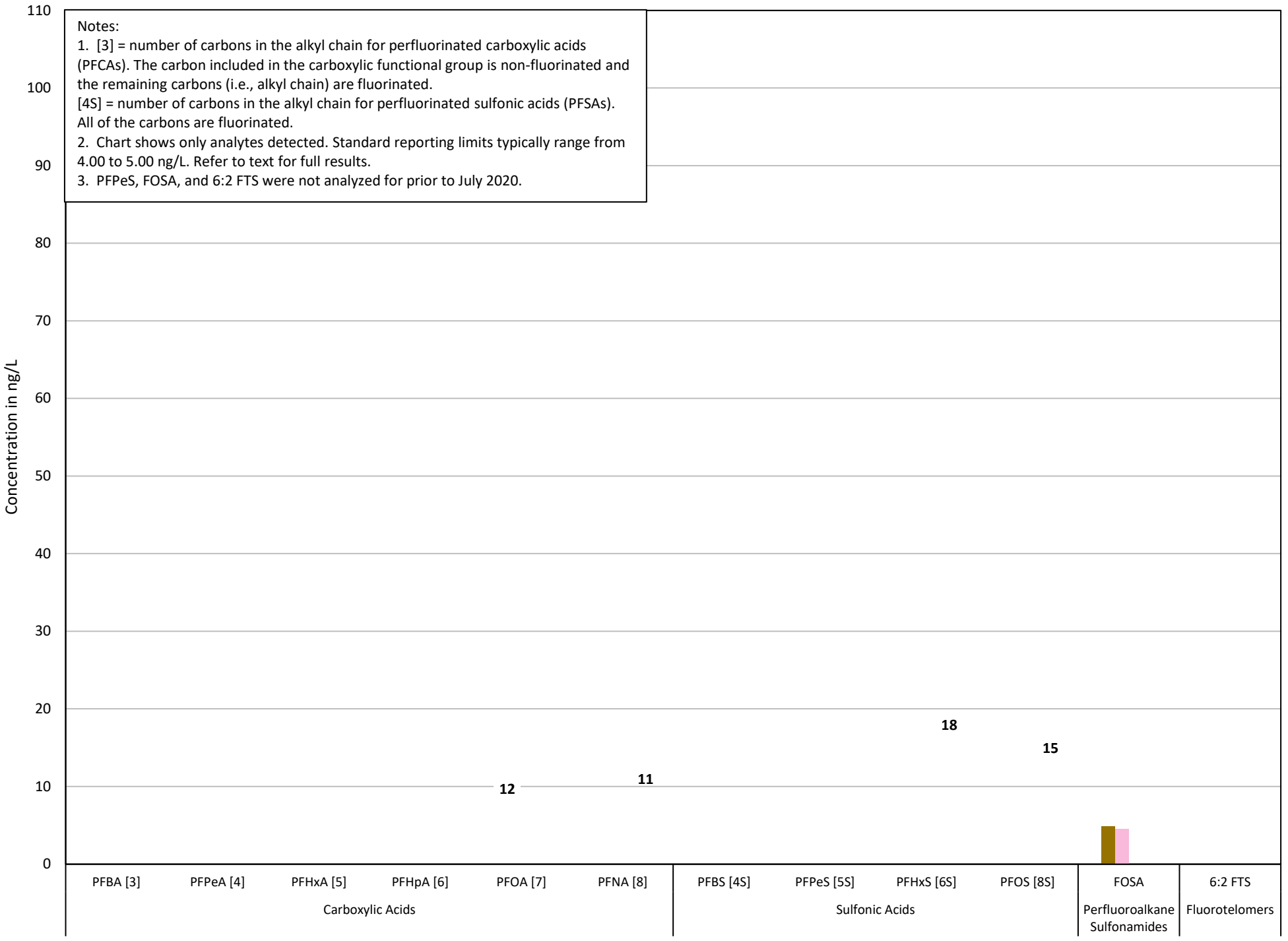
APPENDIX E

PFAS PLOTS

PFAS in B-102S



PFAS in B-914U



PFAS in B-914L