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

December 2023 Groundwater Sampling Data Transmittal

Rye Municipal Landfill
Breakfast Hill Road
Rye, NH 03870
NHDES Site #: 198705029
Project Type: LAND/UNLN
Project Number: 0000225

Prepared For:
Town of Rye
10 Central Road
Rye, NH 03870
Phone Number (603) 964-5523
RP Contact Name: Matt Scruton
RP Contact Email: mscruton@town.rye.nh.us

Prepared By:
CMA Engineers, Inc.
35 Bow Street
Portsmouth, NH 03801
Phone Number: (603) 817-4716
Contact Name: Jodie Bray Strickland, P.E.
Contact Email: jstrickland@cmaengineers.com

Date of Report: January 24, 2024

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

Groundwater Monitoring Report Cover Sheet

Site Name: Rye Municipal Landfill, Breakfast Hill Road

Town: Rye

Permit #: GWP-198705029-R-006

Type of Submittal (*Check all that apply*)

- ☐ Periodic Summary Report (*year*):
- ☒ Data Submittal (*month and year per Condition #7 of Permit*): December 2023

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:
- ☐ Are there any detections of contamination in drinking water that is untreated prior to use?
  Well/Compound:
  - ☐ Do compounds detected exceed AGQS?
- ☐ Was free product detected for the ***first time*** in any monitoring point?
  - ☐ 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?
  Well/Compound:
- ☐ Do sampling results indicate an AGQS violation in any of the GMZ boundary wells?
  Well/Compound:

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.*)

This form is to be completed for groundwater monitoring data submittals and periodic summary reports submitted to the New Hampshire Department of Environmental Services Waste Management Division.

nicole.gianunzio@des.nh.gov or phone (603) 271-7379
PO Box 95, Concord, NH 03302-0095

CMA ENGINEERS, INC.
CIVIL | ENVIRONMENTAL | STRUCTURAL

35 Bow Street
Portsmouth, New Hampshire
03801-3819

P: 603|431|6196
www.cmaengineers.com

January 24, 2024

Groundwater Permits Coordinator
New Hampshire Department of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

RE: November 2023 Groundwater Results - GWP-198705029-R-006
Rye Municipal Landfill, Breakfast Hill Road
CMA #527

Dear Coordinator:

Please find enclosed the groundwater monitoring results from the November 2023 water quality sampling event at the Rye Municipal Landfill on Breakfast Hill Road in Rye, NH. The sampling was conducted on December 1, 2023, in accordance with the above referenced Groundwater Management Permit for the landfill. We note that the groundwater management permit has expired, and the permit renewal application was submitted to NHDES in October 2023.

Sampling and analyses were conducted by Eastern Analytical Inc. (EAI) of Concord, NH. Analyses of per- and polyfluoroalkyl substances (PFAS) were conducted by Enthalpy Analytical of El Dorado, CA.

Inorganic indicators (including pH, specific conductance, chloride, nitrate, TKN, iron and manganese) and static water level were measured at wells MW-1A, MW-4A, MW-6A, MW-7B and MW-10. Groundwater results from all wells are generally consistent with previous sampling events.

Manganese concentrations detected exceeded the ambient groundwater quality standard (AGQS) of 0.3 mg/L at wells MW-4A (10 mg/L), MW-6A (2.3 mg/L), MW-7B (2.3 mg/L) and MW-10 (1.8 mg/L). These concentrations remain within historically detected ranges.

Chloride decreased at MW-1 (150 mg/L) from a high (550 mg/L) in 2022. The concentration in 2023 was consistent with previous sampling events. Specific conductance also decreased at MW-1 from a high in 2002 to a level more consistent with historical data. Iron was detected at all wells except MW-1A. Concentrations fluctuate without evidence of trends. TKN is detected consistently at MW-4A, MW-6A and MW-10 but was below detection at MW-10 in 2023. Nitrate is detected at MW-1A regularly and intermittently at MW-4a, MW-6A and MW-10. Concentrations fluctuate at all locations. The concentration detected at MW-10 (4.5 mg/L) was significantly higher than previously detected. The AGQS for nitrate is 10 mg/L. We would note that a multi-unit residential septic system was recently constructed near and

potentially up- or side- gradient of MW-10. Whether that septic system affects water quality in MW-10 is not clear but remains to be observed in future monitoring results.

Annual sampling of per- and polyfluoroalkyl substances (PFAS) was conducted at MW-1A, MW-4A, MW-6A, MW-10 and the two private water supply wells. The November 2023 results for the four PFAS compounds with AGQS are summarized below:

Well Location	Perfluorohexane sulfonate (PFHxS)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorooctane-sulfonic acid (PFOS)
AGQS	*18*	*12*	*11*	*15*
MW-1A	<1.96	<1.96	<1.96	<1.96
MW-4A	<2.01	**23.9**	<2.01	**23.0**
MW-6A	**8.48**	**65.0**	<2.00	**10.8**
MW-10	**5.46**	**20.0**	<1.96	**6.42**
296 Lafayette Rd	<1.98	**5.80**	<1.98	<1.98
6 Random Road	<1.97	<1.97	<1.97	<1.97

***Bold** numbers indicate detections. Shaded values are AGQS exceedances.*

PFAS AGQS exceedances include PFOA at MW-4A, MW-6A and MW-, and PFOS at MW-4A as shown in the preceding table. There were other unregulated PFAS detected at all locations except 6 Random Road.
We note that PFOA was detected at a low concentration of 5.80 ng/L at the water supply well at 296 Lafayette Road, below the AGQS of 12 ng/L. There were other unregulated PFAS detected at 296 Lafayette Road. All PFAS were below detection at 6 Random Road. Transmittal of the results to the water supply well owners was under separate cover and is attached.

We have attached the laboratory data and groundwater summary data tables for the past five years of sampling.

Very sincerely yours,

CMA ENGINEERS, INC.

Jodie Bray Strickland, P.E.
Project Manager

ATTACHMENTS

- Water Quality Summary Tables – 2019-2023
- Laboratory Data – December 1, 2023
- Water supply well results notifications

Breakfast Hill Landfill
Town of Rye, New Hampshire
Table 1 - Groundwater Table Elevations
Groundwater Management Permit # GWP-198705029-R-006

Well Number	Date	Elevation	Depth to Water	Water Table
MW-1A		97.00		
	11/08/19		15.37	81.63
	11/04/20		16.89	80.11
	11/29/21		14.58	82.42
	11/18/22		14.90	82.10
	12/01/23		14.54	82.46
MW-4A		88.50		
	11/08/19		17.90	70.60
	11/04/20		18.94	69.56
	11/29/21		17.76	70.74
	11/18/22		17.67	70.83
	12/01/23		17.96	70.54
MW-6A		101.30		
	11/08/19		37.64	63.66
	11/04/20		38.70	62.60
	11/29/21		34.36	66.94
	11/18/22		37.84	63.46
	12/01/23		35.60	65.70
MW-7B		111.58		
	11/08/19		45.08	66.50
	11/04/20		45.55	66.03
	11/29/21		43.03	68.55
	11/18/22		45.30	66.28
	12/01/23		43.85	67.73
MW-10		87.87		
	11/08/19		28.43	59.44
	11/04/20		28.91	58.96
	11/29/21		26.25	61.62
	11/18/22		28.42	59.45

Breakfast Hill Landfill
Town of Rye, New Hampshire
Table 2 - Inorganic Parameter and Metal Sampling
Groundwater Management Permit #GWP-198705029-R-006

Well Number	Date	pH	Specific Conductance	Iron	Manganese	Chloride	Nitrate	TKN
	NH AGQS	NS	NS	NS	0.3 mg/L	NS	10 mg/L	NS
	SMCL/RCMP	NS	NS	0.3 mg/L	0.05 mg/L	250 mg/L	NS	NS
MW-1A								
	11/08/19	5.87	900	<0.05	<0.005	**200**	**1.1**	<0.5
	11/04/20	6.06	870	<0.05	<0.005	**180**	**0.85**	<0.5
	11/29/21	5.95	550	<0.05	**0.076**	**120**	<0.5	<0.5
	11/18/22	5.95	2200	<0.05	<0.005	**550**	**0.8**	**1.1**
	12/01/23	5.97	670	<0.05	<0.005	**150**	**0.53**	<0.5
MW-4A								
	11/08/19	5.91	410	**6.8**	**12**	**51**	<0.5	**1.5**
	11/04/20	5.83	520	**2.9**	**9.9**	**110**	**0.81**	**0.50**
	11/29/21	6.02	320	**5.0**	**12**	**15**	<0.5	**0.88**
	11/18/22	5.89	520	**4.6**	**8.4**	**79**	**0.66**	**0.64**
	12/01/23	6.06	330	**6.4**	**10**	**15**	<0.5	**1.1**
MW-6A								
	11/08/19	6.31	1000	**6.3**	**3.1**	**110**	<0.5	**3.1**
	11/04/20	6.36	1100	**1.4**	**2.1**	**110**	<0.5	**2.3**
	11/29/21	6.33	320	<0.05	**0.19**	**16**	**3.5**	<0.5
	11/18/22	6.08	1100	**5.9**	**2.7**	**120**	<0.5	**3.9**
	12/01/23	6.40	1100	**1.2**	**2.3**	**80**	**0.60**	**5.4**
MW-7B								
	11/08/19	6.39	530	**3.6**	**2.9**	**20**	<0.5	<0.5
	11/04/20	6.31	580	**5.1**	**2.9**	**26**	<0.5	<0.5
	11/29/21	6.39	530	**4.3**	**3.1**	**21**	<0.5	<0.5
	11/18/22	6.04	550	**0.82**	**1.9**	**17**	<0.5	<0.5
	12/01/23	6.21	590	**2.0**	**2.3**	**25**	<0.5	<0.5
MW-10								
	11/08/19	6.35	1100	**3.6**	**2.8**	**180**	<0.5	**0.68**
	11/04/20	6.28	960	**4.0**	**2.4**	**200**	<0.5	**0.57**
	11/29/21	6.26	880	**5.8**	**3.1**	**120**	**0.56**	**0.71**
	11/18/22	6.07	904	**4.1**	**2.5**	**160**	<0.5	**0.70**
	12/01/23	6.31	1100	**0.65**	**1.8**	**160**	**4.5**	<0.5

Notes:

AGQS - Ambient Groundwater Quality Standards

RCMP - Risk Characterization Management Policy, effective 4/01.

SMCL - Secondary Maximum Contaminant Level

"<" indicates that the parameter was not detected above the analytical limit.

Bold figures are detected concentrations and shaded figures are exceedances of applicable limits.

Rye Municipal Landfill
Table 3-Summary of PFAs Detected in Water Samples
Groundwater Management Permit #GWP-198705029-R-006

All concentrations given in nanograms per liter (ng/L)

DATE	Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorobutane sulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexane sulfonate (PFHxS)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorooctane sulfonic acid (PFOS)	TOTAL (PFOA & PFOS)	6:2 Fluorotelomer sulfonate
CAS #	**375-22-4**	**2706-90-3**	**375-73-5**	**307-24-4**	**375-85-9**	**355-46-4**	**335-67-1**	**375-95-1**	**1763-23-1**	**-**	
Current NH AGQS	NS	NS	NS	NS	NS	18 [1]	12 [1]	11 [1]	15 [1]	*	NS
MW-1A											
05/24/17	<7.1	<3.6	<3.6	<3.6	<3.6	<3.6	**3.3**	<3.6	**5.8**	**9.1**	-
11/20/17	**6.16**	**5.43**	<4.40	<4.40	<4.40	<4.40	**7.02**	<4.40	**6.00**	**13.02**	-
11/21/18	<4.59	<4.59	<4.59	<4.59	<4.59	<4.59	<4.59	<4.59	<4.59	ND	-
11/08/19	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	**6.75**	*	-
11/04/20	<4.56	<4.56	<4.56	<4.56	<4.56	<4.56	<4.56	<4.56	**4.73**	*	-
11/29/21	<1.91	<1.91	<1.91	<1.91	<1.91	<1.91	**2.26**	<1.91	**3.24**	*	-
11/18/22	**2.41**	<2.03	<2.03	<2.03	<2.03	<2.03	**2.95**	<2.03	**2.74**	*	-
12/01/23	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	<1.96	*	-
MW-4A											
05/24/17	<6.9	**6.1**	<3.4	**12**	**6.4**	**4.9**	**46**	<3.4	**36**	**82**	-
11/20/17	<4.61	<4.61	<4.61	<4.61	<4.61	<4.61	**19.6**	<4.61	**26.8**	**46.4**	-
11/21/18	**4.86**	**5.56**	<4.38	**6.68**	<4.38	<4.38	**25.4**	<4.38	**25.9**	**51.3**	-
11/08/19	<4.49	<4.49	<4.49	<4.49	<4.49	<4.49	**21.8**	<4.49	**22.7**	*	-
11/04/20	<4.51	<4.51	<4.51	<4.51	<4.51	<4.51	**6.05**	<4.51	**10.2**	*	-
11/29/21	**4.57**	**6.50**	<1.99	**7.39**	**4.39**	**2.12**	**28.0**	<1.99	**19.0**	*	-
11/18/22	**2.83**	<2.06	<2.06	<2.06	<2.06	<2.06	**7.93**	<2.06	**13.1**	*	-
12/01/23	**4.01**	**4.36**	<2.01	**5.06**	**3.22**	<2.01	**23.9**	<2.01	**23.0**	*	-
MW-6A											
05/24/17	<7.1	<3.6	<3.6	**8.5**	**13**	**5.2**	**67**	<3.6	**7.0**	**74.0**	-
11/20/17	**9.16**	**12.9**	<4.24	**20.3**	**14.0**	**8.3**	**66.1**	<4.24	**6.86**	**72.96**	-
11/21/18	**9.44**	**9.16**	<4.33	**14.7**	**9.71**	**5.76**	**46.0**	<4.33	**34.2**	**80.2**	-
11/08/19	**10.2**	**15.5**	<4.38	**19.7**	**11.6**	**6.21**	**47.1**	<4.38	<4.38	*	-
11/04/20	**8.4**	**12.9**	<4.54	**17.3**	**10.0**	**6.92**	**45.0**	<4.54	**9.1**	*	-
11/29/21	**5.8**	**9.1**	**2.16**	**8.9**	**9.3**	**4.47**	**90.1**	<1.90	<1.90	*	-
11/18/22	**12.0**	**15.5**	**2.18**	**20.1**	**10.8**	**6.12**	**43.6**	<1.98	**8.75**	*	-
12/01/23	**9.1**	**12.9**	<2.00	**17.0**	**11.4**	**8.48**	**65.0**	<2.00	**10.8**	*	-
MW-7B											
05/24/17	**8.4**	**9.0**	<3.6	**14**	**7.3**	**14**	**22**	<3.6	<3.6	**22**	-
11/20/17	**5.22**	**9.81**	<4.39	**11.5**	**7.1**	**8.7**	**17.1**	<4.39	<4.39	**17.1**	-
MW-10											
05/24/17	**9.9**	**8.8**	<3.6	**14**	**9.3**	**7.7**	**45**	<3.6	**23**	**68**	-
11/20/17	<4.62	<4.62	<4.62	<4.62	<4.62	<4.62	**13.6**	<4.62	**4.66**	**18.26**	-
11/21/18	**7.08**	**11.6**	<4.43	**12.9**	**7.55**	**7.90**	**36.8**	<4.43	**13.3**	**50.1**	-
11/08/19	<4.39	**4.55**	<4.39	**5.73**	**4.99**	**6.04**	**21.2**	<4.39	<4.39	*	-
11/04/20	<4.48	<4.48	<4.48	<4.48	<4.48	<4.48	**9.3**	<4.48	<4.48	*	-
11/29/21	**6.24**	**9.99**	**1.97**	**12.5**	**7.89**	**7.35**	**39.9**	<1.94	**10.3**	*	-
11/18/22	**4.04**	**4.44**	**2.51**	**4.23**	**3.25**	**4.84**	**15.8**	<2.08	**5.76**	*	-
12/01/23	**3.59**	**4.02**	**3.34**	**5.34**	**3.90**	**5.46**	**20.0**	<1.96	**6.42**	*	-
296 Lafayette Road											
09/19/17	<4.34	<4.34	<4.34	<4.34	<4.34	<4.34	<4.34	<4.34	<4.34	ND	-
11/21/18	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	**5.10**	<4.32	<4.32	**5.10**	-
11/08/19	<4.09	<4.09	<4.09	<4.09	<4.09	<4.09	**4.48**	<4.09	<4.09	*	-
11/04/20	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	<4.37	*	-
11/29/21	**1.98**	**2.66**	**3.04**	**2.41**	**2.04**	<1.97	**6.54**	<1.97	<1.97	*	-
11/18/22	**2.04**	**2.81**	**3.29**	**2.16**	<2.04	<2.04	**6.09**	<2.04	<2.04	*	-
12/01/23	<1.98	**2.66**	**3.57**	**2.41**	<1.98	<1.98	**5.80**	<1.98	<1.98	*	-
6 Random Road											
10/25/16	<9.3	<4.6	<4.6	<4.6	<4.6	**18**	**7.7**	<4.6	**26**	**33.7**	**21**
09/19/17	<4.35	<4.35	<4.35	<4.35	<4.35	<4.35	<4.35	<4.35	<4.35	ND	-
11/21/18	<4.18	<4.18	<4.18	<4.18	<4.18	<4.18	<4.18	<4.18	<4.18	ND	-
12/01/24	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	*	-
11/04/20	<4.50	<4.50	<4.50	<4.50	<4.50	<4.50	<4.50	<4.50	**8.91**	*	-
04/09/21	<4.05	<4.05	<4.05	<4.05	<4.05	<4.05	<4.05	<4.05	<4.05	*	-
11/29/21	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	*	-
11/18/22	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	<2.05	*	-
12/01/23	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	*	-
8 Random Road											
06/02/23	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	**2.35**	<1.98	<1.98	**-**	**-**

NOTE: AGQS - Ambient Groundwater Quality Standa NS - No standard * no longer regulated - = not analyzND = not detected

Eastern Analytical, Inc.

professional laboratory and drilling services

Craig Musselman
CMA Engineers, Inc. (Portsmouth)
35 Bow Street
Portsmouth , NH 03801-3819

Laboratory Report for:

Eastern Analytical, Inc. ID: 270849
Client Identification: Rye - Breakfast Hill LF
Date Received: 12/1/2023

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 — 12.22.23 Date

SAMPLE CONDITIONS PAGE

EAI ID#: **270849**

Client: **CMA Engineers, Inc. (Portsmouth)**

Client Designation: **Rye - Breakfast Hill LF**

Temperature upon receipt (°C): 3.8 **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)
270849.01	MW-1A	12/1/23	12/1/23 13:13	aqueous		Adheres to Sample Acceptance Policy
270849.02	MW-4A	12/1/23	12/1/23 13:06	aqueous		Adheres to Sample Acceptance Policy
270849.03	MW-6A	12/1/23	12/1/23 11:43	aqueous		Adheres to Sample Acceptance Policy
270849.04	MW-7B	12/1/23	12/1/23 11:55	aqueous		Adheres to Sample Acceptance Policy
270849.05	MW-10	12/1/23	12/1/23 12:22	aqueous		Adheres to Sample Acceptance Policy
270849.06	6 Random Rd	12/1/23	12/1/23 12:42	aqueous		Adheres to Sample Acceptance Policy
270849.07	296 Lafayette Rd	12/1/23	12/1/23 13:37	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#: **270849**

Client: **CMA Engineers, Inc. (Portsmouth)**

Client Designation: **Rye - Breakfast Hill LF**

Sample ID:	MW-1A	MW-4A	MW-6A	MW-7B					
Lab Sample ID:	270849.01	270849.02	270849.03	270849.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/1/23	12/1/23	12/1/23	12/1/23					
Date Received:	12/1/23	12/1/23	12/1/23	12/1/23					
						Analysis			
					Units	**Date**	**Time**	**Method**	**Analyst**
Chloride	**150**	**15**	**80**	**25**	mg/L	12/01/23	17:03	4500ClE-11	ALS
Nitrate-N	**0.53**	< 0.5	**0.60**	< 0.5	mg/L	12/01/23	16:56	353.2	ALS
TKN	< 0.5	**1.1**	**5.4**	< 0.5	mg/L	12/08/23	12:51	$4500N_{org}C/NH3D$	GRS

Sample ID:	MW-10						
Lab Sample ID:	270849.05						
Matrix:	aqueous						
Date Sampled:	12/1/23						
Date Received:	12/1/23						
		Analysis					
	Units	**Date**	**Time**	**Method**	**Analyst**		
Chloride	**160**	mg/L	12/01/23	17:03	4500ClE-11	ALS	
Nitrate-N	**4.5**	mg/L	12/01/23	17:01	353.2	ALS	
TKN	< 0.5	mg/L	12/08/23	13:02	$4500N_{org}C/NH3D$	GRS	

LABORATORY REPORT

EAI ID#: **270849**

Client: **CMA Engineers, Inc. (Portsmouth)**

Client Designation: **Rye - Breakfast Hill LF**

Sample ID:	MW-1A	MW-4A	MW-6A	MW-7B					
Lab Sample ID:	270849.01	270849.02	270849.03	270849.04					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	12/1/23	12/1/23	12/1/23	12/1/23	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	12/1/23	12/1/23	12/1/23	12/1/23					
Iron	< 0.05	**6.4**	**1.2**	**2.0**	AqDis	mg/L	12/5/23	200.8	DS
Manganese	< 0.005	**10**	**2.3**	**2.3**	AqDis	mg/L	12/5/23	200.8	DS

Sample ID:	MW-10								
Lab Sample ID:	270849.05								
Matrix:	aqueous								
Date Sampled:	12/1/23				**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	12/1/23								
Iron	**0.65**				AqDis	mg/L	12/5/23	200.8	DS
Manganese	**1.8**				AqDis	mg/L	12/5/23	200.8	DS

LABORATORY REPORT

EAI ID#: **270849**

Client: **CMA Engineers, Inc. (Portsmouth)**

Client Designation: **Rye - Breakfast Hill LF**

Sample ID:	MW-1A	MW-4A	MW-6A	MW-7B				
Lab Sample ID:	270849.01	270849.02	270849.03	270849.04				
Matrix:	aqueous	aqueous	aqueous	aqueous				
Date Sampled:	12/1/23	12/1/23	12/1/23	12/1/23				
					Units	**Date of Analysis**	**Method**	**Analyst**
Static Water Level	**14.54**	**17.96**	**35.60**	**43.85**	ft	12/1/23	FieldStatic	TNC
Field pH	**5.97**	**6.06**	**6.40**	**6.21**	SU	12/1/23	SM4500H	TNC
Field Specific Conductance	**670**	**330**	**1100**	**590**	uS/cm	12/1/23	SM2510B	TNC

Sample ID:	MW-10						
Lab Sample ID:	270849.05						
Matrix:	aqueous						
Date Sampled:	12/1/23						
		Units	**Date of Analysis**	**Method**	**Analyst**		
Static Water Level	**26.91**	ft	12/1/23	FieldStatic	TNC		
Field pH	**6.31**	SU	12/1/23	SM4500H	TNC		
Field Specific Conductance	**1100**	uS/cm	12/1/23	SM2510B	TNC		

December 19, 2023

Enthalpy Analytical - El Dorado Hills
Work Order No. 2312023

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 December 05, 2023 under your Project Name '270849 NH 104'.

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 certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Enthalpy Analytical -EDH.

Enthalpy Analytical - EDH Work Order No. 2312023
Case Narrative

Sample Condition on Receipt:

Six 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.

Analytical Notes:

PFAS Isotope Dilution/LC-MSMS Method Compliant with Table B-15 of DoD QSM 5.4 (Aqueous)

Sample "MW-10" contained particulate and was centrifuged prior to extraction.

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 5.4. The results for PFHxS, PFOA, PFOS 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 for all QC and field samples were within the acceptance criteria.

TABLE OF CONTENTS

Case Narrative..... 1

Table of Contents..... 3

Sample Inventory..... 4

Analytical Results..... 5

Qualifiers..... 14

Certifications..... 15

Sample Receipt..... 16

ENTHALPY ANALYTICAL

Sample Inventory Report

Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2312023-01	MW-1A	01-Dec-23 13:13	05-Dec-23 10:58	Polypropylene, 250mL
				Polypropylene, 250mL
2312023-02	MW-4A	01-Dec-23 13:06	05-Dec-23 10:58	Polypropylene, 250mL
				Polypropylene, 250mL
2312023-03	MW-6A	01-Dec-23 11:43	05-Dec-23 10:58	Polypropylene, 250mL
				Polypropylene, 250mL
2312023-04	MW-10	01-Dec-23 12:22	05-Dec-23 10:58	Polypropylene, 250mL
				Polypropylene, 250mL
2312023-05	6 Random Rd	01-Dec-23 12:42	05-Dec-23 10:58	Polypropylene, 250mL
				Polypropylene, 250mL
2312023-06	296 Lafayette Rd	01-Dec-23 13:37	05-Dec-23 10:58	Polypropylene, 250mL
				Polypropylene, 250mL

ANALYTICAL RESULTS

ENTHALPY ANALYTICAL

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

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	B23L050-BLK1	Column:	BEH C18
Project:	270849 NH 104						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFPeA	2706-90-3	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFBS	375-73-5	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFHxA	307-24-4	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFHpA	375-85-9	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFHxS	355-46-4	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFOA	335-67-1	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFNA	375-95-1	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
PFOS	1763-23-1	ND	2.00		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	81.0	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C3-PFPeA	IS	81.2	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C3-PFBS	IS	84.4	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C2-PFHxA	IS	83.6	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C4-PFHpA	IS	80.8	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C3-PFHxS	IS	86.9	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C2-PFOA	IS	88.0	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C5-PFNA	IS	82.3	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	1
13C8-PFOS	IS	79.2	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:39	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: OPR — **PFAS Isotope Dilution Table B-15**

Client Data

Name: Eastern Analytical, Inc.
Project: 270849 NH 104
Matrix: Aqueous

Laboratory Data

Lab Sample: B23L050-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	42.8	40.0	107	73 - 129		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFPeA	2706-90-3	43.2	40.0	108	72 - 129		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFBS	375-73-5	40.7	40.0	102	72 - 130		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFHxA	307-24-4	42.7	40.0	107	72 - 129		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFHpA	375-85-9	43.5	40.0	109	72 - 130		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFHxS	355-46-4	42.3	40.0	106	68 - 131		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFOA	335-67-1	43.4	40.0	108	71 - 133		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFNA	375-95-1	43.2	40.0	108	69 - 130		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
PFOS	1763-23-1	41.4	40.0	104	65 - 140		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
Labeled Standards		**Type**		**% Rec**	**Limits**	**Qualifiers**	**Batch**	**Extracted**	**Samp Size**	**Analyzed**	**Dilution**
13C3-PFBA		IS		85.3	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C3-PFPeA		IS		86.2	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C3-PFBS		IS		85.7	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C2-PFHxA		IS		88.2	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C4-PFHpA		IS		87.0	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C3-PFHxS		IS		83.5	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C2-PFOA		IS		84.3	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C5-PFNA		IS		85.4	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1
13C8-PFOS		IS		82.3	50 - 150		B23L050	12-Dec-23	0.250 L	14-Dec-23 04:49	1

ENTHALPY ANALYTICAL

Sample ID: MW-1A — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-01	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 13:13	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFPeA	2706-90-3	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFBS	375-73-5	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFHxA	307-24-4	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFHpA	375-85-9	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFHxS	355-46-4	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFOA	335-67-1	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFNA	375-95-1	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
PFOS	1763-23-1	ND	1.96		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	80.1	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C3-PFPeA	IS	83.3	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C3-PFBS	IS	80.6	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C2-PFHxA	IS	84.1	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C4-PFHpA	IS	83.0	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C3-PFHxS	IS	84.3	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C2-PFOA	IS	84.0	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C5-PFNA	IS	83.5	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	1
13C8-PFOS	IS	77.4	50 - 150		B23L050	12-Dec-23	0.256 L	14-Dec-23 04:59	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: MW-4A — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-02	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 13:06	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	4.01	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFPeA	2706-90-3	4.36	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFBS	375-73-5	ND	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFHxA	307-24-4	5.06	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFHpA	375-85-9	3.22	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFHxS	355-46-4	ND	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFOA	335-67-1	23.9	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFNA	375-95-1	ND	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
PFOS	1763-23-1	23.0	2.01		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	88.5	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C3-PFPeA	IS	94.0	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C3-PFBS	IS	92.8	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C2-PFHxA	IS	91.9	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C4-PFHpA	IS	92.4	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C3-PFHxS	IS	93.7	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C2-PFOA	IS	92.8	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C5-PFNA	IS	93.4	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	1
13C8-PFOS	IS	90.1	50 - 150		B23L050	12-Dec-23	0.249 L	14-Dec-23 05:10	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: MW-6A — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-03	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 11:43	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	9.05	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFPeA	2706-90-3	12.9	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFBS	375-73-5	ND	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFHxA	307-24-4	17.0	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFHpA	375-85-9	11.4	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFHxS	355-46-4	8.48	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFOA	335-67-1	65.0	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFNA	375-95-1	ND	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
PFOS	1763-23-1	10.8	2.00		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	79.6	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C3-PFPeA	IS	88.4	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C3-PFBS	IS	89.4	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C2-PFHxA	IS	90.3	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C4-PFHpA	IS	88.2	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C3-PFHxS	IS	89.0	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C2-PFOA	IS	89.8	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C5-PFNA	IS	90.4	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	1
13C8-PFOS	IS	86.6	50 - 150		B23L050	12-Dec-23	0.251 L	14-Dec-23 05:20	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: MW-10 — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-04	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 12:22	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	3.59	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFPeA	2706-90-3	4.02	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFBS	375-73-5	3.34	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFHxA	307-24-4	5.34	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFHpA	375-85-9	3.90	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFHxS	355-46-4	5.46	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFOA	335-67-1	20.0	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFNA	375-95-1	ND	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
PFOS	1763-23-1	6.42	1.96		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	86.2	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C3-PFPeA	IS	91.3	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C3-PFBS	IS	90.4	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C2-PFHxA	IS	94.1	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C4-PFHpA	IS	93.6	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C3-PFHxS	IS	89.5	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C2-PFOA	IS	95.3	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C5-PFNA	IS	90.4	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	1
13C8-PFOS	IS	86.6	50 - 150		B23L050	12-Dec-23	0.255 L	14-Dec-23 05:30	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: 6 Random Rd — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-05	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 12:42	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFPeA	2706-90-3	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFBS	375-73-5	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFHxA	307-24-4	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFHpA	375-85-9	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFHxS	355-46-4	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFOA	335-67-1	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFNA	375-95-1	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFOS	1763-23-1	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	89.2	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C3-PFPeA	IS	93.2	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C3-PFBS	IS	90.6	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C2-PFHxA	IS	95.1	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C4-PFHpA	IS	95.1	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C3-PFHxS	IS	89.9	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C2-PFOA	IS	93.2	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C5-PFNA	IS	92.1	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C8-PFOS	IS	90.0	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	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: 296 Lafayette Rd — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-06	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 13:37	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFPeA	2706-90-3	2.66	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFBS	375-73-5	3.57	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFHxA	307-24-4	2.41	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFHpA	375-85-9	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFHxS	355-46-4	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFOA	335-67-1	5.80	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFNA	375-95-1	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFOS	1763-23-1	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	89.1	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C3-PFPeA	IS	94.3	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C3-PFBS	IS	88.9	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C2-PFHxA	IS	96.7	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C4-PFHpA	IS	91.6	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C3-PFHxS	IS	89.4	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C2-PFOA	IS	92.8	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C5-PFNA	IS	93.6	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C8-PFOS	IS	87.1	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	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 - EDH 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
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	2211390
Nevada Division of Environmental Protection	CA00413
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 can be found at Enthalpy.com/Resources/Accreditations.

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 270849 Page 1

2312023

Sample ID	Date Sampled	Matrix	aParameters	Sample Notes
MW-1A	12/1/2023 13:13	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537mod (9 Compounds)	
MW-4A	12/1/2023 13:06	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537mod (9 Compounds)	
MW-6A	12/1/2023 11:43	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537mod (9 Compounds)	
MW-10	12/1/2023 12:22	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537mod (9 Compounds)	

EAI ID# 270849 **Project State: NH**
Project ID: 104

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.
PFAS 537 NHDES 9 compound list.

PO #:61329 **EAI ID# 270849**

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]	12/4/23 1600	UPS
UPS	12/05/23 1058	[signature]
Relinquished by	**Date/Time**	**Received by**

Eastern Analytical, Inc. 51 Antrim Ave Concord, NH 03301 Phone: (603)228-0525 1-800-287-0525 customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 270849 Page 2

2312023

Sample ID	Date Sampled	Matrix	aParameters	Sample Notes
6 Random Rd	12/1/2023 12:42	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537mod (9 Compounds)	
296 Lafayette Rd	12/1/2023 13:37	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537mod (9 Compounds)	

EAI ID# 270849 **Project State: NH**

Project ID: 104

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.

PFAS 537 NHDES 9 compound list.

PO #:61329 **EAI ID# 270849**

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
Nikki Hoar	12/4/23 1600	UPS
UPS	12/05/23 1058	
Relinquished by	**Date/Time**	**Received by**

Sample Log-In Checklist

ENTHALPY ANALYTICAL

2312023 Page # 1 of 2

Work Order #: ~~2312032~~ 2312023 TAT STJ

Samples Arrival:	Date/Time 12/05/23 1058		Initials: JT		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: 0.3 (uncorrected) / Temp °C: 0.3 (corrected)			Probe used: Y / (N)		Thermometer ID: IR-4		

	YES	NO	NA
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?			✓
Airbill 1 of 2 / Trk # 1Z X46 599 01 9873 1030	✓		
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 12/05/23 12:24	Initials: JH	Location: R-11 / WR-1 Shelf/Rack: A-2, IC-4
COC Anomaly/Sample Acceptance, Form completed?		✓	✓

Comments:

CoC/Label Reconciliation Report WO# 2312023

LabNumber	CoC Sample ID		SampleAlias	Sample Date/Time		Container	BaseMatrix	Sample Comments
2312023-01	A MW-1A	☑ D	270849	01-Dec-23 13:13	☐ A	Polypropylene, 250mL	Aqueous	
2312023-01	B MW-1A	☑	270849	01-Dec-23 13:13	☐	Polypropylene, 250mL	Aqueous	
2312023-02	A MW-4A	☑	270849	01-Dec-23 13:06	☐	Polypropylene, 250mL	Aqueous	
2312023-02	B MW-4A	☑	270849	01-Dec-23 13:06	☐	Polypropylene, 250mL	Aqueous	
2312023-03	A MW-6A	☑	270849	01-Dec-23 11:43	☐	Polypropylene, 250mL	Aqueous	
2312023-03	B MW-6A	☑	270849	01-Dec-23 11:43	☐	Polypropylene, 250mL	Aqueous	
2312023-04	A MW-10	☑	270849	01-Dec-23 12:22	☐	Polypropylene, 250mL	Aqueous	
2312023-04	B MW-10	☑	270849	01-Dec-23 12:22	☐	Polypropylene, 250mL	Aqueous	
2312023-05	A 6 Random Rd	☑	270849	01-Dec-23 12:42	☐	Polypropylene, 250mL	Aqueous	
2312023-05	B 6 Random Rd	☑	270849	01-Dec-23 12:42	☐	Polypropylene, 250mL	Aqueous	
2312023-06	A 296 Lafayette Rd	☑	270849	01-Dec-23 13:37	☐	Polypropylene, 250mL	Aqueous	
2312023-06	B 296 Lafayette Rd	☑	270849	01-Dec-23 13:37	☐	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)	✓		

Comments: A) Time and date not listed on sample label
D) ~5% particulate

Preservation Documented: Na2S2O3 (Trizma) NH4CH3CO2 None Other

Verifed by/Date: VA 12/06/23 Originally labeled and reconciled by JT

CHAIN-OF-CUSTODY RECORD

eastern analytical
professional laboratory services

270849

aSampleID	Date/Time	aMatrix	Parameters	Sample Notes	# of containers
MW-1A	12/1/23 1313	GW	Field Specific Conductance, Field pH, Chloride, Nitrate, TKN, Dissolved Iron, Manganese, SWL, PFAS 537		5
preservative: HCL ~~HNO_3 H_2SO_4~~ NaOH MEOH $Na_2S_2O_3$ ~~ICE~~					
MW-4A	12/1/23 1306	GW	Field Specific Conductance, Field pH, Chloride, Nitrate, TKN, Dissolved Iron, Manganese, SWL, PFAS 537		5
preservative: HCL ~~HNO_3 H_2SO_4~~ NaOH MEOH $Na_2S_2O_3$ ~~ICE~~					
MW-6A	12/1/23 1143	GW	Field Specific Conductance, Field pH, Chloride, Nitrate, TKN, Dissolved Iron, Manganese, SWL, PFAS 537		5
preservative: HCL ~~HNO_3 H_2SO_4~~ NaOH MEOH $Na_2S_2O_3$ ~~ICE~~					
MW-7B	12/1/23 1155	GW	Field Specific Conductance, Field pH, Chloride, Nitrate, TKN, Dissolved Iron, Manganese, SWL		3
preservative: HCL ~~HNO_3 H_2SO_4~~ NaOH MEOH $Na_2S_2O_3$ ~~ICE~~					
MW-10	12/1/23 1222	GW	Field Specific Conductance, Field pH, Chloride, Nitrate, TKN, Dissolved Iron, Manganese, SWL, PFAS 537 -		5
preservative: HCL ~~HNO_3 H_2SO_4~~ NaOH MEOH $Na_2S_2O_3$ ~~ICE~~					
6 Random Rd	12/1/23 1242	DW	PFAS 537		2
preservative: HCL HNO_3 H_2SO_4 NaOH MEOH $Na_2S_2O_3$ ~~ICE~~					

aClientID Breakfast Hill Landfill Rye
nProjectID 104 **nYearMonth** 2023.11
Client (Pro Mgr) Craig Musselman
Customer CMA Engineers, Inc. (Portsmouth)
Address 35 Bow Street
City Portsmouth **NH** 03801-3819
Phone 431-6196
Fax 431-5376

Results Needed by: Preferred date _____

Notes about project
Dissolved metals field filtered, preserved with nitric acid
PFAS 537 NHDES 9 compound list.

ReportingOptions
☐ HC ☐ NO FAX ☐ EDD Disk
☐ Fax ☐ No partial FAX ☒ EDD emai

PO# _____
Quote# 1020106
Ice: Y☐ N☐
Temperature 3.8 °C
Samples Collected by: EAI FS - TC

12/1/23 1615 NH
Relinquished by **Date/Time** **Received by**

_____
Relinquished by **Date/Time** **Received by**

CHAIN-OF-CUSTODY RECORD

eastern analytical
professional laboratory services

270849

aSampleID	Date/Time	aMatrix	Parameters	Sample Notes	# of containers
296 Lafayette Rd	12/1/23 1337	DW	PFAS 537		2

preservative: HCL HNO_3 H_2SO_4 NaOH MEOH $Na_2S_2O_3$ (ICE)

aClientID Breakfast Hill Landfill Rye
nProjectID 104 **nYearMonth** 2023.11
Client (Pro Mgr) Craig Musselman
Customer CMA Engineers, Inc. (Portsmouth)
Address 35 Bow Street
City Portsmouth **NH** 03801-3819
Phone 431-6196
Fax 431-5376

Results Needed by: Preferred date _____

Notes about project
Dissolved metals field filtered, preserved with nitric acid
PFAS 537 NHDES 9 compound list.

ReportingOptions
☐ HC ☐ NO FAX ☐ EDD Disk
☐ Fax ☐ No partial FAX ☒ EDD emai

PO# _____
Quote# 102 0106

Ice: Y☐ N☐
Temperature 3.8°C

Samples Collected by: EAI FS-TC

12/1/23 1515 — NH
Relinquished by **Date/Time** **Received by**

Relinquished by **Date/Time** **Received by**

TOWN OF RYE • OFFICE OF SELECTMEN
10 Central Road
Rye, NH 03870-2522
(603) 964-5523 • Fax (603) 964-1516

January 23, 2024

Mr. Donald Cavallaro
6 Random Road
Rye, NH 03870

RE: Water Supply Well Laboratory Results
CMA #527

Dear Mr. Cavallaro:

On December 1, 2023, your private water supply was sampled and analyzed for the presence of per- and polyfluoroalkyl substances (PFAS) under the groundwater monitoring permit for the closed Rye Municipal Landfill on Breakfast Hill Road. The NH Department of Environmental Services (NHDES) has established ambient groundwater quality standards (AGQS) for four PFAS compounds.

Sampling results indicate that all four regulated PFAS compounds were below detection limits in your water supply well.

If you are interested, the NHDES files on the project, including the annual water quality reports are a matter of public record and are readily available electronically through the Department's OneStop program Remediation Project (state.nh.us). Older hardcopy files may be accessed by requesting a file review through the Public Information and Permitting Office (PIP) at (603) 271-8876.

NHDES has required annual sampling at your residence in November.

If you have any questions, please do not hesitate to call NHDES at (603) 271- 3503.

Sincerely,

Matt Scruton
Town Administrator

Enclosures
cc: NHDES OneStop

ENTHALPY ANALYTICAL

Sample ID: 6 Random Rd — **PFAS Isotope Dilution Table B-15**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2312023-05	Column:	BEH C18
Project:	270849 NH 104	Date Collected:	01-Dec-23 12:42	Date Received:	05-Dec-23 10:58		
Location:	270849						

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFPeA	2706-90-3	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFBS	375-73-5	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFHxA	307-24-4	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFHpA	375-85-9	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFHxS	355-46-4	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFOA	335-67-1	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFNA	375-95-1	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
PFOS	1763-23-1	ND	1.97		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	89.2	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C3-PFPeA	IS	93.2	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C3-PFBS	IS	90.6	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C2-PFHxA	IS	95.1	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C4-PFHpA	IS	95.1	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C3-PFHxS	IS	89.9	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C2-PFOA	IS	93.2	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C5-PFNA	IS	92.1	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	1
13C8-PFOS	IS	90.0	50 - 150		B23L050	12-Dec-23	0.254 L	14-Dec-23 05:41	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.

TOWN OF RYE • OFFICE OF SELECTMEN
10 Central Road
Rye, NH 03870-2522
(603) 964-5523 • Fax (603) 964-1516

January 23, 2024

AF Real Estate Holding LLC
P.O. Box 839
Epping, NH 03042

RE: 296 Lafayette Road Rye, NH Water Supply Well Laboratory Results
CMA #527

To Whom It May Concern:

On December 1, 2023, your private water supply was sampled and analyzed for the presence of per- and polyfluoroalkyl substances (PFAS) under the groundwater monitoring permit for the closed Rye Municipal Landfill on Breakfast Hill Road. The NH Department of Environmental Services (NHDES) has established ambient groundwater quality standards (AGQS) for four PFAS compounds.

Sampling results indicate that three of the four regulated PFAS compounds were not detected in your water supply. One compound, perfluorooctanoic acid (PFOA) was detected at a low concentration in your water supply well at a concentration of 5.80 ng/L (parts per trillion). This is below the AGQS for PFOA of 12 ng/L. PFOA has many potential sources.

If you are interested, the NHDES files on the project, including the annual water quality reports are a matter of public record and are readily available electronically through the Department's OneStop program Remediation Project (state.nh.us). Older hardcopy files may be accessed by requesting a file review through the Public Information and Permitting Office (PIP) at (603) 271-8876.

NHDES has required annual sampling at your property in November.

If you have any questions, please do not hesitate to call NHDES at (603) 271- 3503.

Sincerely,

Matt Scruton
Town Administrator

Enclosures
cc: NHDES OneStop

ENTHALPY ANALYTICAL

Sample ID: 296 Lafayette Rd — **PFAS Isotope Dilution Table B-15**

Client Data

Name: Eastern Analytical, Inc.
Project: 270849 NH 104
Location: 270849
Matrix: Aqueous
Date Collected: 01-Dec-23 13:37

Laboratory Data

Lab Sample: 2312023-06
Date Received: 05-Dec-23 10:58
Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFPeA	2706-90-3	2.66	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFBS	375-73-5	3.57	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFHxA	307-24-4	2.41	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFHpA	375-85-9	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFHxS	355-46-4	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFOA	335-67-1	5.80	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFNA	375-95-1	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
PFOS	1763-23-1	ND	1.98		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	89.1	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C3-PFPeA	IS	94.3	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C3-PFBS	IS	88.9	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C2-PFHxA	IS	96.7	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C4-PFHpA	IS	91.6	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C3-PFHxS	IS	89.4	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C2-PFOA	IS	92.8	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C5-PFNA	IS	93.6	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	1
13C8-PFOS	IS	87.1	50 - 150		B23L050	12-Dec-23	0.253 L	14-Dec-23 05:51	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.