

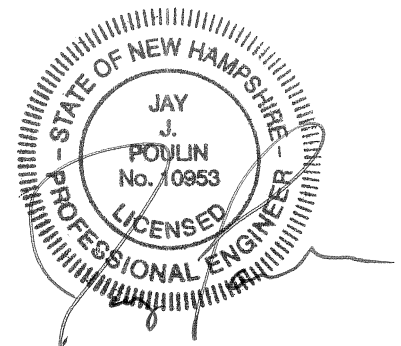
**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

SPRING 2019 PFAS RECEPTOR SAMPLING REPORT

**Effingham Landfill
53 Snow Road
Effingham, NH
NHDES Site #: 198805021
Project Type: GWP
Project Number: 555**

Prepared For:
Town of Effingham
68 School Street
Effingham, NH 03882
Phone Number (603) 539-7770
RP Contact Name: Board of Selectmen
RP Contact Email: effingham@roadrunner.com

Prepared By:
HEB Engineers, Inc.
PO Box 440
North Conway, NH 03860
Phone Number: (603) 356-6936
Contact Name: Jay J. Poulin, PE
Contact Email: jpoulin@hebengineers.com



Date of Report: May 16, 2019

SPRING 2019 PFAS RECEPTOR SAMPLING REPORT

**EFFINGHAM LANDFILL,
EFFINGHAM, NEW HAMPSHIRE**

NHDES GWP #198805021-E-006

TABLE OF CONTENTS

I. BACKGROUND INFORMATION.....	2
II. RESULTS DISCUSSION.....	2
III. RECOMMENDATIONS	2

APPENDIX A: Groundwater Contour Site Plan

APPENDIX B: Receptor Survey

APPENDIX C: List of Sampling Locations

APPENDIX D: Eastern Analytical, Inc. Lab Reports

I. BACKGROUND INFORMATION

The Town of Effingham ceased operation of its solid waste landfill in 1994. The closure was completed in accordance with a plan approved by the New Hampshire Department of Environmental Services (NHDES) in 1995. Since that time, groundwater monitoring has been performed at the site to evaluate levels of several potentially hazardous byproducts and substances. Five sampling sites have been established: one up-gradient monitoring well (MW-4S), three down-gradient monitoring wells (MW-1, MW-2S, MW-3), and a well at the new transfer station (TSW). The proposed Groundwater Management Zone (GMZ) and the location of sampling points are depicted on the site plan prepared by Pine Tree Engineering included in Appendix A.

In May 2017, the New Hampshire Department of Environmental Services (NHDES) notified the Town of Effingham that all landfills subject to groundwater monitoring requirements would be required to complete an initial screening for the presence of per- and/or polyfluoroalkyl substances (PFAS). This initial screening was completed at the Effingham Landfill in September 2018, and results were submitted to NHDES on October 12, 2018. Exceedances of Ambient Groundwater Quality Standards (AGQS) found within the initial screening results necessitated the creation of a receptor survey (Appendix B) for the area surrounding the landfill. Subsequently, investigatory sampling was coordinated at 12 drinking water wells within 1,000 feet of the landfill to evaluate the potential for off-site PFAS contamination. A list of the 12 sampling locations is included as Appendix C. Note that not all locations in this list were sampled, but that all locations sampled are included in this list. The locations sampled are also detailed within the lab reports.

RESULTS DISCUSSION

HEB Engineers, Inc. (HEB) received results on April 12, 2019 for samples collected at sites in the vicinity of the closed Effingham Landfill on March 21, 2019 by Eastern Analytical, Inc. In most cases, analyses returned a non-detect value for the nine compounds analyzed at each site. At the Center Effingham Baptist Church, a low level of Perfluorooctane Sulfonic Acid was detected. The concentration was reported as 4.79 nanograms per liter, slightly above the detection limit of 4.22 nanograms per liter. A similarly low level of Perfluorobutane Sulfonic Acid was detected at 1019 Province Lake Road. This concentration was reported as 6.44 nanograms per liter. While there are no current standards for these compounds, both results fall well below typical concentration limits for other PFAS substances. While future NHDES comment on these results should be accounted for, HEB does not believe they warrant further action at this time.

Analyses were performed by Vista Analytical Laboratory and reports were compiled by Eastern Analytical, Inc. Lab reports are included in Appendix D.

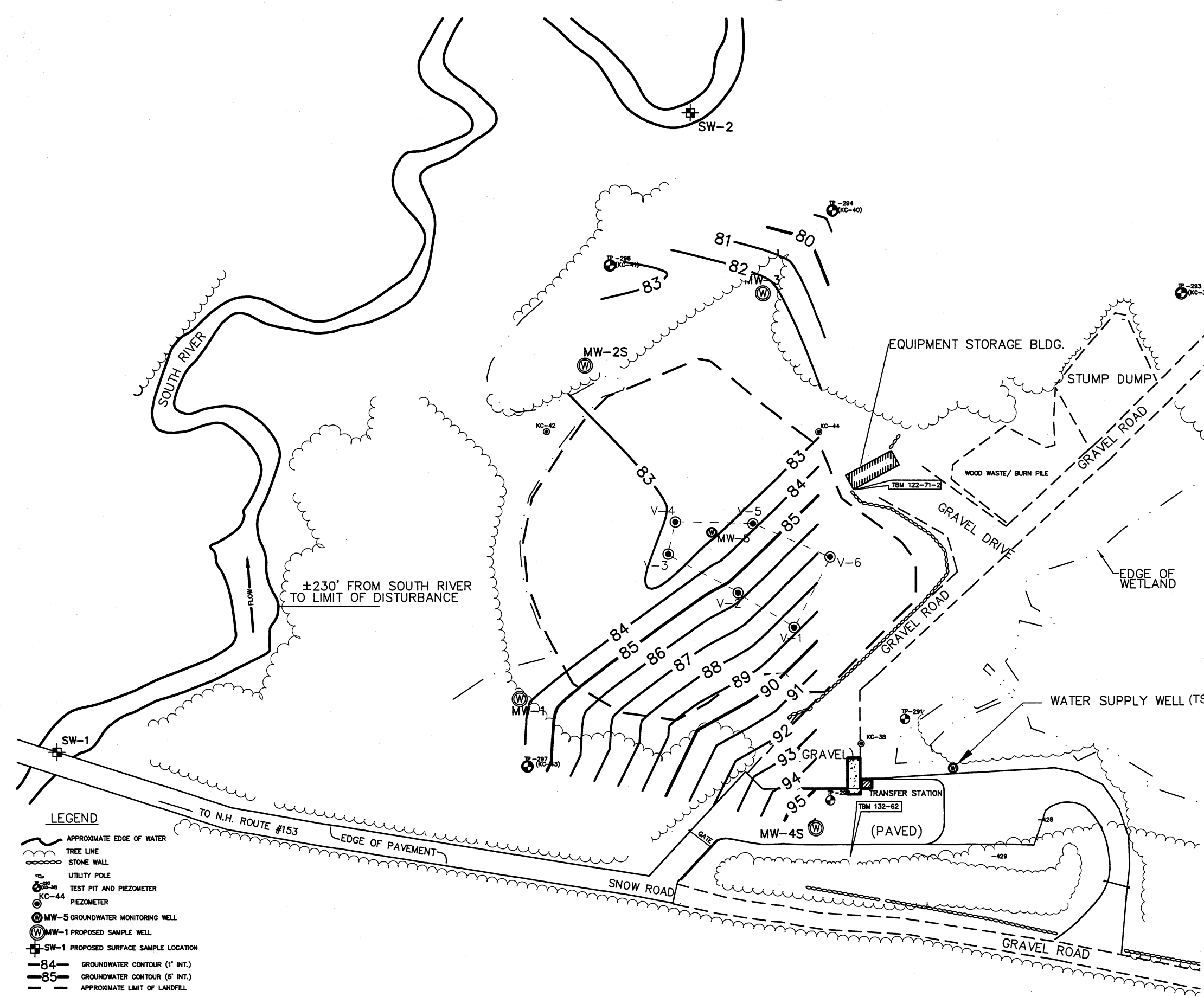
II. RECOMMENDATIONS

Based on the results described above, HEB has no further recommendations with regard to PFAS sampling at this time. At a minimum, routine groundwater monitoring within the landfill should be continued in accordance with NHDES GWP#198805021-E-005, and the required confirmatory PFAS sampling should be completed during the fall of 2019. Additional sampling will be considered as required by NHDES. Should routine monitoring results display concerning concentrations or exceedances of AGQS, HEB will revise recommendations accordingly.

P:\Jobs\2019\2019-015 Effingham - Effingham Town Landfill, Effingham, NH\Groundwater Monitoring\PFAS\Data to Upload to NHDES 05-16-19\PFAS Receptor Survey Sampling Report 05-16-19.doc

APPENDIX A

Groundwater Contour Site Plan



LOCATION	GROUNDWATER ELEVATION
MW-1	83.46
MW-2S	82.22
MW-3	82.37
MW-4S	95.51

TEMPORARY BENCHMARK

TBM 132-62 TWO HEADED NAIL SET ONE FOOT ABOVE GRADE IN POLE PSNH 322-A/8-1, LOCATED SOUTH OF THE TRANSFER STATION. ELEVATION 108.09' (ASSUMED DATUM)

TBM 122-71-2 PK NAIL SET IN THE SOUTHEAST CORNER OF THE RECYCLING SHED. PK NAIL IS 3.9' ABOVE GRADE, AND DRIVEN THROUGH THE ALUMINUM SIDING JUST ABOVE THE CONCRETE WALL. ELEVATION 95.79' (ASSUMED DATUM)

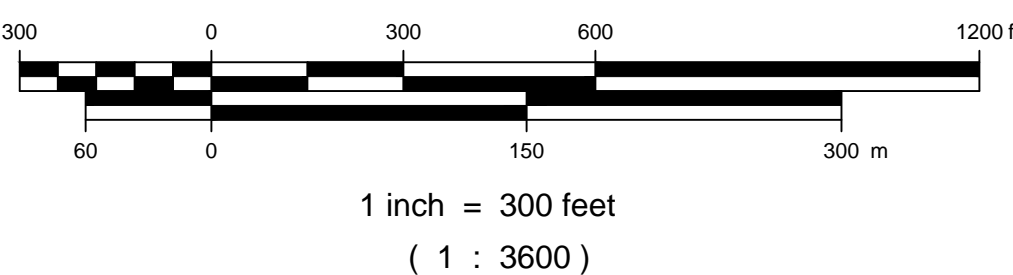
- LEGEND**
- APPROXIMATE EDGE OF WATER
 - TREE LINE
 - STONE WALL
 - UTILITY POLE
 - TEST PIT AND PIEZOMETER
 - PIEZOMETER
 - MW-5 GROUNDWATER MONITORING WELL
 - MW-1 PROPOSED SAMPLE WELL
 - SW-1 PROPOSED SURFACE SAMPLE LOCATION
 - GROUNDWATER CONTOUR (1' INT.)
 - GROUNDWATER CONTOUR (5' INT.)
 - APPROXIMATE LIMIT OF LANDFILL

**2018 EFFINGHAM LANDFILL
GROUNDWATER CONTOUR SITE PLAN**

Pine Tree
Engineering ATTACHMENT 3

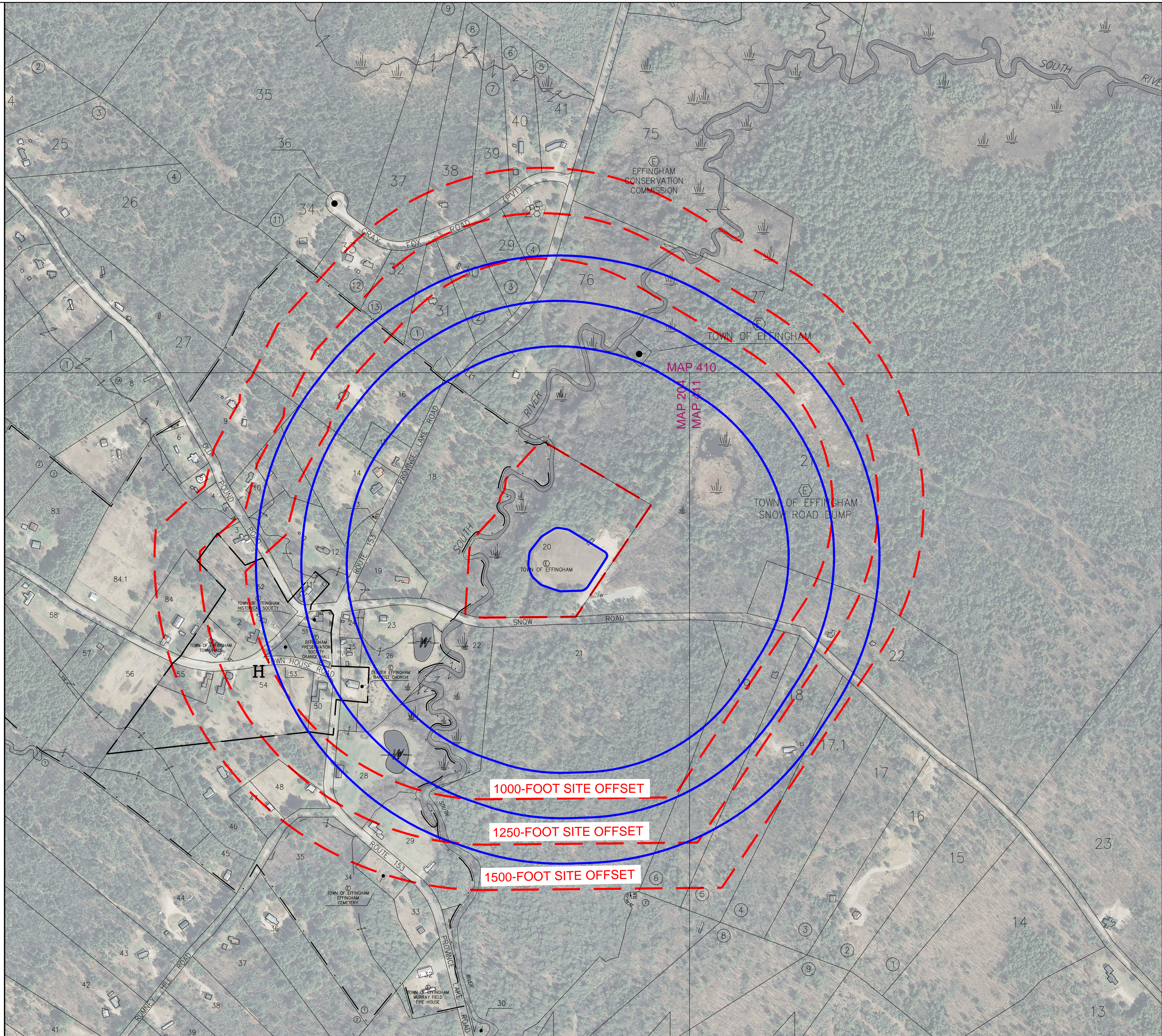
APPENDIX B

Receptor Survey

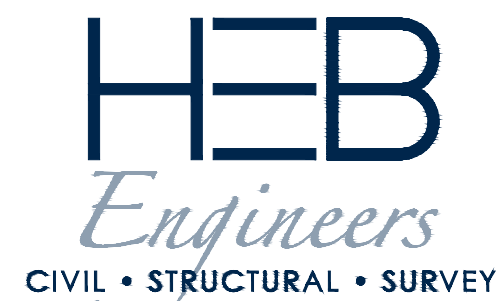


PROPERTIES BETWEEN 1,000 AND 1,250-FOOT SITE OFFSET								
MAP	LOT	OWNER 1	BOOK 1	PAGE 1	BOOK 2	PAGE 2	AREA	LOC1
204	1	EFFINGHAM, TOWN OF					1.08	TOWN HOUSE ROAD
204	3	SWETT, MICHAEL D. & JANE A.	1109	442			0.65	OLD POUND ROAD
204	10	MERCIER, CHARLES E. & CAROL M.	1001	16			2.66	OLD POUND ROAD
204	29	ESPIE, LEONARD J. & CYNTHIA M.	1339	489			4.2	PROVINCE LAKE ROAD
204	54	WILLIAMS, LINDA	1423	345			7.9	TOWN HOUSE ROAD
410	28	THORPE, PATRICIA A.	3013	935			2.348	GRAY FOX ROAD
410	32	ELWELL, JEREMY	3156	683			2.378	GRAY FOX ROAD
411	18	HENDERSON, DOROTHY					9.97	SNOW ROAD
411	22	DEARBORN, CHRISTOPHER	1501	816			12.1	SNOW ROAD

PROPERTIES BETWEEN 1,250 AND 1,500-FOOT SITE OFFSET								
MAP	LOT	OWNER 1	BOOK 1	PAGE 1	BOOK 2	PAGE 2	AREA	LOC1
204	4	STOCKTON, WILLIAM & BETHANNE	1932	214			0.47	OLD POUND ROAD
204	5	STEWART, JAMES C. IV	3013	921			0.48	OLD POUND ROAD
204	9	RITCHEY, MARK A.	2016	101			5	OLD POUND ROAD
204	34	EFFINGHAM, TOWN OF					0.86	PROVINCE LAKE ROAD
204	35	BROWN, ANDREW P.	2031	1			11.8	PROVINCE LAKE ROAD
204	46	HARRINGTON, JAMES & REBECCA	2586	714			10.3	RUMNEY HILL ROAD
204	47	PELLETIER, DAVID A. & TACIANA	3311	869			0.9	RUMNEY HILL ROAD
204	48	DAVIS, JOHN F. JR.	3060	3			1.83	RUMNEY HILL ROAD
204	55	KEVILLE, FRANK J. & DEBORA A.	2566	47			0.86	TOWN HOUSE ROAD
204	84	SEAMANS, RICHARD E. & DAVID A.	3187	893			13.6	TOWN HOUSE ROAD
	84.1	SEAMANS, ERIC J.					10	TOWN HOUSE ROAD
410	33	KANTOLA, DANA T.	2566	764			2.288	GRAY FOX ROAD
410	37	FANTASIA, KENNETH C.	1364	281			7.197	GRAY FOX ROAD
410	38	ELWELL, JEREMY M.	2867	340			5.38	GRAY FOX ROAD
410	39	DINSMORE, BRIAN J.	1403	335			3.394	GRAY FOX ROAD
410	40	KAJA HOLDINGS 2 LLC.	3161	974			3.122	GRAY FOX ROAD
410	41	CARTER, GLORIA J.	2295	873			3.266	GRAY FOX ROAD
410	75	EFFINGHAM CONSERVATION COMM	1963	52			14.5	PROVINCE LAKE ROAD
411	17.1	BOSWORTH, DOROTHY J.	1475	986			9.32	SNOW ROAD



Copyright		2019	HEB Engineers, Inc.	
No.	Revision		DATE	BY



HEB Engineers, Inc.
www.hebengineers.com
NH Office (603) 356-6936
Post Office Box 440
North Conway, NH 03860

ME Office (207) 803-8265
Post Office Box 343
Bridgton, ME 04009

SURVEYED BY	—
DESIGNED BY	JJP
DRAWN BY	DRL
CHECKED BY	—
FIELD BOOK	—
SCALE	1"=300'
DATE	02/28/2019

Receptor Survey
for the
Effingham Town Landfill
located in and prepared for the
Town of Effingham, New Hampshire

APPENDIX C

List of Sampling Locations



Town of Effingham Selectmen's Office

68 School Street
Effingham, New Hampshire 03882
(603) 539-7770 (603) 539-7799 fax

Roderick and Joan Lanum
7 Corner Road
Effingham NH 03882

Eric and Gayle Hollister
8 Old Pound Road
Effingham NH 03882

Blair Folts 2 houses
984 Province Lake Road
Effingham NH 03882

Patricia Parker
Janet Normandeau
PO Box 197
Effingham NH 03882

Anthony Lavrich III
Kristin Smalley
11 Snow Road
Effingham NH 03882

Kristopher White
10 Snow Road
Effingham NH 03882

Joseph and Elaine Silvia
1019 Province Lake Road
Effingham NH 03882

Center Effingham Baptist Church
PO Box 146
Effingham NH 03882

Diana Libby
David Goulet
PO Box 150
Effingham NH 03882

Effingham Preservation Society
PO Box 151 property address 6 Town House Road
Effingham NH 03882

Effingham Historical Society
PO Box 33
Effingham NH 03882

Wallace Van Auken
31 Gray Fox Road
Effingham NH 03882

Goran Romanovic
301 South Walnut Street
Hammond LA 70403

property address 1004 Province Lake Road

Denise Brewart
Frances Wheeler
20364 110th Avenue
Sun City AZ 85373

property address 1013 Province Lake Road

Jeffrey Scott Faia
1047 Province Lake Road
Effingham NH 03882

Melani-Rae and Kevin Taillon
16 Folsom Drive
Newmarket NH 03857

property address 29 Gray Fox Road

APPENDIX D

Eastern Analytical, Inc. Lab Reports



Eastern Analytical, Inc.

professional laboratory and drilling services

Jeff Sires

HEB Engineers, Inc.

2605 White Mountain Highway, PO Box 440

North Conway , NH 03860



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 193248

Client Identification: Effingham LF Residential Testing

Date Received: 3/22/2019

Dear Mr. Sires :

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

Analysis: Subcontract - Perfluorinated Compounds EPA 537 (9
Compounds) Vista

Subcontractor Lab: Vista Analytical Laboratory

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

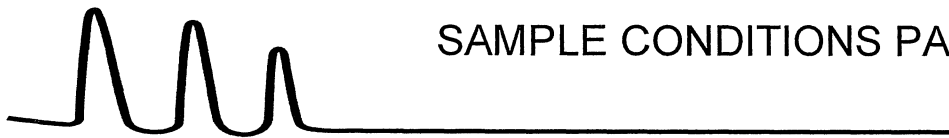
We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

Date

of pages (excluding cover letter)



SAMPLE CONDITIONS PAGE

EAI ID#: 193248

Client: HEB Engineers, Inc.

Client Designation: Effingham LF Residential Testing

Temperature upon receipt (°C): 1.1

Received on ice or cold packs (Yes/No): Y

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
193248.01	Hollister 8 Old Pound Rd	3/21/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.02	Folts 984 Province Lake Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.03	Folts 978 Province Lake Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.04	Parker 968 Province Lake Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.05	Lavrich 11 Snow Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.06	White 10 Snow Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.07	Silvia 1019 Province Lake Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.08	Center Effingham Baptist Church	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.09	Libby 1030 Province Lake Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.1	Effingham Historical Society	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.11	Van Auken 31 Gray Fox Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy
193248.12	Romanovic 1004 Province Lake Rd	3/22/19	3/21/19	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

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

References include:

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



April 11, 2019

Vista Work Order No. 1900536

Ms. Jennifer Laramie
Eastern Analytical, Inc.
25 Chennell Drive
Concord, NH 03301

Dear Ms. Laramie,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on March 28, 2019 under your Project Name '193248 NH 5192'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

A handwritten signature in cursive script that reads "Martha Maier".

Martha Maier
Laboratory Director



Vista Analytical Laboratory 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 Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

Vista Work Order No. 1900536**Case Narrative****Sample Condition on Receipt:**

Twelve aqueous samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

Analytical Notes:**PFAS Isotope Dilution Method**

The samples were extracted and analyzed for a selected list of PFAS using the PFAS Isotope Dilution Method (Modified EPA Method 537). The results for PFHxS, PFOA, and 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 method 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. 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.....	20
Certifications.....	21
Sample Receipt.....	24

Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1900536-01	Hollister 8 Old Pound Rd	21-Mar-19 09:06	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-02	Folts 984 Province Lake Rd	21-Mar-19 13:23	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-03	Folts 978 Province Lake Rd	21-Mar-19 13:30	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-04	Parker 968 Province Lake Rd	21-Mar-19 16:30	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-05	Lavrich 11 Snow Rd	21-Mar-19 09:29	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-06	White 10 Snow Rd	21-Mar-19 11:11	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-07	Silvia 1019 Province Lake Rd	21-Mar-19 11:49	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-08	Center Effingham Baptist Church	21-Mar-19 10:01	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-09	Libby 1030 Province Lake Rd	21-Mar-19 14:08	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-10	Effingham Historical Society	21-Mar-19 10:32	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-11	Van Auken 31 Gray Fox Rd	21-Mar-19 14:31	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1900536-12	Romanovic 1004 Province Lake Rd	21-Mar-19 11:00	28-Mar-19 09:38	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank
PFAS Isotope Dilution Method

Client Data			Laboratory Data						
Name:	Eastern Analytical, Inc.	Matrix:	Lab Sample:	B9D0005-BLK1	Column:				
Project:	193248 NH 5192	Aqueous			BEH C18				
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Sample Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFPeA	2706-90-3	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFBS	375-73-5	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFHxA	307-24-4	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFHpA	375-85-9	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFHxS	355-46-4	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFOA	335-67-1	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFNA	375-95-1	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
PFOS	1763-23-1	ND	4.00		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Sample Size	Analyzed	Dilution
13C3-PFBA	IS	94.8	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C3-PFPeA	IS	89.3	60 - 150		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C3-PFBS	IS	91.9	60 - 150		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C2-PFHxA	IS	92.1	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C4-PFHpA	IS	96.8	60 - 150		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
18O2-PFHxS	IS	95.0	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C2-PFOA	IS	83.8	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C5-PFNA	IS	80.6	50 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	1
13C8-PFOS	IS	88.7	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:45	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.

Sample ID: OPR
PFAS Isotope Dilution Method

Client Data			Laboratory Data								
Name: Eastern Analytical, Inc. Project: 193248 NH 5192		Matrix: Aqueous	Lab Sample: B9D0005-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	88.3	80.0	110	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFPeA	2706-90-3	88.1	80.0	110	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFBS	375-73-5	86.8	80.0	108	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFHxA	307-24-4	88.9	80.0	111	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFHpA	375-85-9	87.7	80.0	110	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFHxS	355-46-4	81.4	80.0	102	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFOA	335-67-1	86.7	80.0	108	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFNA	375-95-1	85.3	80.0	107	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
PFOS	1763-23-1	74.8	80.0	93.5	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
Labeled Standards											
		Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA		IS		93.1	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C3-PFPeA		IS		93.2	60 - 150		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C3-PFBS		IS		95.5	60 - 150		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C2-PFHxA		IS		95.9	70 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C4-PFHpA		IS		94.9	60 - 150		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
18O2-PFHxS		IS		95.2	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C2-PFOA		IS		88.5	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C5-PFNA		IS		86.2	50 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1
13C8-PFOS		IS		101	60 - 130		B9D0005	01-Apr-19	0.125 L	02-Apr-19 19:34	1

Sample ID: Hollister 8 Old Pound Rd

PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name: Eastern Analytical, Inc.		Matrix: Aqueous		Lab Sample: 1900536-01		Column: BEH C18			
Project: 193248 NH 5192		Date Collected: 21-Mar-19 09:06		Date Received: 28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFPeA	2706-90-3	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFBS	375-73-5	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFHxA	307-24-4	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFHpA	375-85-9	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFHxS	355-46-4	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFOA	335-67-1	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFNA	375-95-1	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
PFOs	1763-23-1	ND	4.41		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
Labeled Standards				Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
	Type	% Recovery	Limits						
13C3-PFBA	IS	96.0	60 - 130		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C3-PFPeA	IS	94.4	60 - 150		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C3-PFBS	IS	102	60 - 150		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C2-PFHxA	IS	95.8	70 - 130		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C4-PFHpA	IS	98.1	60 - 150		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
18O2-PFHxS	IS	97.3	60 - 130		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C2-PFOA	IS	93.3	60 - 130		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C5-PFNA	IS	86.8	50 - 130		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	1
13C8-PFOs	IS	88.5	60 - 130		B9D0005	01-Apr-19	0.113 L	02-Apr-19 19:55	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.

Sample ID: Folts 984 Province Lake Rd
PFAS Isotope Dilution Method

Client Data				Laboratory Data						
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	1900536-02	Column:	BEH C18			
Project:	193248 NH 5192	Date Collected:	21-Mar-19 13:23	Date Received:	28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
PFBA	375-22-4	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFPeA	2706-90-3	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFBS	375-73-5	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFHxA	307-24-4	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFHpA	375-85-9	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFHxS	355-46-4	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFOA	335-67-1	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFNA	375-95-1	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
PFOS	1763-23-1	ND	4.15		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1	
Labeled Standards		Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	94.9		60 - 130		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C3-PFPeA	IS	93.9		60 - 150		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C3-PFBS	IS	97.1		60 - 150		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C2-PFHxA	IS	92.5		70 - 130		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C4-PFHpA	IS	91.9		60 - 150		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
18O2-PFHxS	IS	94.5		60 - 130		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C2-PFOA	IS	87.6		60 - 130		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C5-PFNA	IS	80.5		50 - 130		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	1
13C8-PFOS	IS	90.7		60 - 130		B9D0005	01-Apr-19	0.120 L	02-Apr-19 20:06	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.

Sample ID: Folts 978 Province Lake Rd
PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name: Eastern Analytical, Inc.		Matrix: Aqueous		Lab Sample: 1900536-03		Column: BEH C18			
Project: 193248 NH 5192		Date Collected: 21-Mar-19 13:30		Date Received: 28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBa	375-22-4	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFPeA	2706-90-3	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFBS	375-73-5	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFHxA	307-24-4	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFHpA	375-85-9	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFHxS	355-46-4	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFOA	335-67-1	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFNA	375-95-1	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
PFOS	1763-23-1	ND	4.25		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
Labeled Standards				Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
	Type	% Recovery	Limits						
13C3-PFBa	IS	94.6	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C3-PFPeA	IS	88.7	60 - 150		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C3-PFBS	IS	105	60 - 150		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C2-PFHxA	IS	91.9	70 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C4-PFHpA	IS	96.5	60 - 150		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
18O2-PFHxS	IS	90.8	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C2-PFOA	IS	88.9	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C5-PFNA	IS	87.3	50 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	1
13C8-PFOS	IS	94.0	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 20:16	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.

Sample ID: Parker 968 Province Lake Rd

PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name: Eastern Analytical, Inc.		Matrix: Aqueous		Lab Sample: 1900536-04		Column: BEH C18			
Project: 193248 NH 5192		Date Collected: 21-Mar-19 16:30		Date Received: 28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFPeA	2706-90-3	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFBS	375-73-5	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFHxA	307-24-4	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFHpA	375-85-9	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFHxS	355-46-4	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFOA	335-67-1	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFNA	375-95-1	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
PFOS	1763-23-1	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	96.1	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C3-PPeA	IS	91.3	60 - 150		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C3-PFBS	IS	99.0	60 - 150		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C2-PFHxA	IS	97.2	70 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C4-PFHxA	IS	97.1	60 - 150		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
18O2-PFHxS	IS	91.8	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C2-PFOA	IS	88.1	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C5-PFNA	IS	89.1	50 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	1
13C8-PFOS	IS	99.7	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 20:27	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.

Sample ID: Lavrich 11 Snow Rd

PFAS Isotope Dilution Method

Client Data

Name: Eastern Analytical, Inc.
Project: 193248 NH 5192

Matrix: Aqueous
Date Collected: 21-Mar-19 09:29

Laboratory Data

Lab Sample: 1900536-05
Date Received: 28-Mar-19 09:38

Column: BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Sampl Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFPeA	2706-90-3	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFBS	375-73-5	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFHxA	307-24-4	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFHpA	375-85-9	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFHxS	355-46-4	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFOA	335-67-1	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFNA	375-95-1	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
PFOS	1763-23-1	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
Labeled Standards									
	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Sampl Size	Analyzed	Dilution
13C3-PFBA	IS	96.0	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C3-PFPeA	IS	93.6	60 - 150		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C3-PFBS	IS	98.9	60 - 150		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C2-PFHxA	IS	98.1	70 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C4-PFHpA	IS	101	60 - 150		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
18O2-PFHxS	IS	92.5	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C2-PFOA	IS	88.7	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C5-PFNA	IS	87.0	50 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	1
13C8-PFOS	IS	98.9	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 20:38	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.

Sample ID: White 10 Snow Rd
PFAS Isotope Dilution Method

Client Data				Laboratory Data									
Name:		Eastern Analytical, Inc.		Matrix:		Aqueous							
Project:		193248 NH 5192		Date Collected:		21-Mar-19 11:11							
				Lab Sample:		1900536-06							
				Date Received:		28-Mar-19 09:38							
				Column:		BEH C18							
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution				
PFBA	375-22-4	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFPeA	2706-90-3	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFBS	375-73-5	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFHxA	307-24-4	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFHpA	375-85-9	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFHxS	355-46-4	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFOA	335-67-1	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFNA	375-95-1	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
PFOS	1763-23-1	ND	4.27	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
Labeled Standards				Type	% Recovery		Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	95.3	60 - 130	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C3-PFPeA	IS	90.0	60 - 150	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C3-PFBS	IS	103	60 - 150	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C2-PFHxA	IS	94.0	70 - 130	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C4-PFHpA	IS	96.4	60 - 150	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
18O2-PFHxS	IS	89.4	60 - 130	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C2-PFOA	IS	88.5	60 - 130	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C5-PFNA	IS	86.2	50 - 130	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					
13C8-PFOS	IS	104	60 - 130	B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:09	1					

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

RL - Reporting limit
 Results reported to RL.

Sample ID: Silvia 1019 Province Lake Rd
PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	1900536-07	Column:	BEH C18		
Project:	193248 NH 5192	Date Collected:	21-Mar-19 11:49	Date Received:	28-Mar-19 09:38				
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFPeA	2706-90-3	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFBS	375-73-5	6.44	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFHxA	307-24-4	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFHpA	375-85-9	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFHxS	355-46-4	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFOA	335-67-1	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFNA	375-95-1	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
PFOS	1763-23-1	ND	4.30		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	95.5	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C3-PFPeA	IS	90.2	60 - 150		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C3-PFBS	IS	92.7	60 - 150		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C2-PFHxA	IS	94.7	70 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C4-PFHpA	IS	101	60 - 150		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
18O2-PFHxS	IS	93.1	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C2-PFOA	IS	87.0	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C5-PFNA	IS	83.9	50 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	1
13C8-PFOS	IS	101	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 21:20	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.

Sample ID: Center Effingham Baptist Church
PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name:	Eastern Analytical, Inc.			Matrix:	Aqueous		Lab Sample:		
Project:	193248 NH 5192			Date Collected:	21-Mar-19 10:01		Date Received:		
					1900536-08		Column:		
					28-Mar-19 09:38		BEH C18		
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFPeA	2706-90-3	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFBS	375-73-5	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFHxA	307-24-4	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFHpA	375-85-9	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFHxS	355-46-4	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFOA	335-67-1	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFNA	375-95-1	ND	4.22		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
PFOS	1763-23-1	4.79	4.22	Q	B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
Labeled Standards									
	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	92.9	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13C3-PFPeA	IS	91.6	60 - 150		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13C3-PFBS	IS	96.1	60 - 150		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13C2-PFHxA	IS	95.0	70 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13C4-PFHpA	IS	98.3	60 - 150		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
18O2-PFHxS	IS	92.6	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13C2-PFOA	IS	85.8	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13G5-PFNA	IS	85.6	50 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	1
13C8-PFOS	IS	83.3	60 - 130		B9D0005	01-Apr-19	0.118 L	02-Apr-19 21:31	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.

Sample ID: Libby 1030 Province Lake Rd
PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name: Eastern Analytical, Inc.		Matrix: Aqueous		Lab Sample: 1900536-09		Column: BEH C18			
Project: 193248 NH 5192		Date Collected: 21-Mar-19 14:08		Date Received: 28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Sample Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFPeA	2706-90-3	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFBS	375-73-5	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFHxA	307-24-4	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFHpA	375-85-9	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFHxS	355-46-4	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFOA	335-67-1	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFNA	375-95-1	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
PFOS	1763-23-1	ND	4.40		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
Labeled Standards				Qualifiers	Batch	Extracted	Sample Size	Analyzed	Dilution
13C3-PFBA	IS	96.8	60 - 130		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C3-PFPeA	IS	92.1	60 - 150		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C3-PFBS	IS	108	60 - 150		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C2-PFHxA	IS	93.2	70 - 130		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C4-PFHpA	IS	96.8	60 - 150		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
18O2-PFHxS	IS	97.8	60 - 130		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C2-PFOA	IS	84.2	60 - 130		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C5-PFNA	IS	81.6	50 - 130		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	1
13C8-PFOS	IS	97.2	60 - 130		B9D0005	01-Apr-19	0.114 L	02-Apr-19 21:41	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.

Sample ID: Effingham Historical Society

PFAS Isotope Dilution Method

Client Data				Laboratory Data						
Name:	Eastern Analytical, Inc.			Matrix:	Aqueous		Lab Sample:	1900536-10	Column:	BEH C18
Project:	193248 NH 5192			Date Collected:	21-Mar-19 10:32		Date Received:	28-Mar-19 09:38		
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
PFBA	375-22-4	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFPeA	2706-90-3	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFBS	375-73-5	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFHxA	307-24-4	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFHpA	375-83-9	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFHxS	355-46-4	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFOA	335-67-1	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFNA	375-95-1	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
PFOS	1763-23-1	ND	4.27		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBA	IS	98.5	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C3-PFPeA	IS	91.6	60 - 150		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C3-PFBS	IS	104	60 - 150		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C2-PFHxA	IS	93.2	70 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C4-PFHpA	IS	95.9	60 - 150		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
18O2-PFHxS	IS	95.6	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C2-PFOA	IS	87.1	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C5-PFNA	IS	88.7	50 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	1	
13C8-PFOS	IS	90.1	60 - 130		B9D0005	01-Apr-19	0.117 L	02-Apr-19 21:52	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.

Sample ID: Van Auker 31 Gray Fox Rd
PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name: Eastern Analytical, Inc.		Matrix: Aqueous		Lab Sample: 1900536-11		Column: BEH C18			
Project: 193248 NH 5192		Date Collected: 21-Mar-19 14:31		Date Received: 28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFPeA	2706-90-3	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFBS	375-73-5	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFHxA	307-24-4	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFHpA	375-85-9	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFHxS	355-46-4	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFOA	335-67-1	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFNA	375-95-1	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
PFOS	1763-23-1	ND	4.32		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
Labeled Standards				Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	99.8	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C3-PFPeA	IS	95.9	60 - 150		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C3-PFBS	IS	103	60 - 150		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C2-PFHxA	IS	99.8	70 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C4-PFHpA	IS	102	60 - 150		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
18O2-PFHxS	IS	106	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C2-PFOA	IS	93.5	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C5-PFNA	IS	89.3	50 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	1
13C8-PFOS	IS	104	60 - 130		B9D0005	01-Apr-19	0.116 L	02-Apr-19 22:03	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.

Sample ID: Romanovic 1004 Province Lake Rd

PFAS Isotope Dilution Method

Client Data				Laboratory Data					
Name: Eastern Analytical, Inc.		Matrix: Aqueous		Lab Sample: 1900536-12		Column: BEH C18			
Project: 193248 NH 5192		Date Collected: 21-Mar-19 11:00		Date Received: 28-Mar-19 09:38					
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Sampl Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFPeA	2706-90-3	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFBS	375-73-5	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFHxA	307-24-4	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFHpA	375-85-9	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFHxS	355-46-4	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFOA	335-67-1	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFNA	375-95-1	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
PFOS	1763-23-1	ND	4.34		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Sampl Size	Analyzed	Dilution
13C3-PFBA	IS	98.5	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C3-PFPeA	IS	94.3	60 - 150		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C3-PFBS	IS	104	60 - 150		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C2-PFHxA	IS	97.1	70 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C4-PFHpA	IS	97.0	60 - 150		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
18O2-PFHxS	IS	98.9	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C2-PFOA	IS	88.1	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C5-PFNA	IS	86.3	50 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	1
13C8-PFOS	IS	102	60 - 130		B9D0005	01-Apr-19	0.115 L	02-Apr-19 22:13	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
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
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limits of Detection
LOQ	Limits of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
NA	Not applicable
ND	Not Detected
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
TEQ	Toxic Equivalency
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.

Vista Analytical Laboratory Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	19-013-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	015
Texas Commission on Environmental Quality	T104704189-19-10
Virginia Department of General Services	9618
Washington Department of Ecology	C584-19
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.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA TO-9A

MATRIX: Biological Tissue	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	Method
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613/1613B
1,4-Dioxane (1,4-Diethyleneoxide) analysis by GC/HRMS	EPA 522
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	ISO 25101 2009

MATRIX: Non-Potable Water	
Description of Test	Method
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	Method
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

CHAIN-OF-CUSTODY RECORD



EAID# 193248

Page 3

Sample ID Date Sampled Matrix aParameters

1900536

Sample Notes

Libby 1030 Province 3/21/2019 14:08 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

Effingham Historical Society 3/21/2019 10:32 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

Van Auker 31 Gray Fox Rd 3/21/2019 14:31 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

Romanovic 1004 Province Lake Rd 3/21/2019 11:00 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

EAID# 193248

Project State: NH

Project ID: 5192

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.

Report samples on individual pages.

PFAS NHDES 9 compound list.

PO #: 49770

EAID# 193248

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 3/27/2019 09:38 Received by: J. K. K. K.

Relinquished by: Date/Time Received by:

Eastern Analytical, Inc. 25 Chenell Dr. Concord, NH 03301

Phone: (603) 228-0525 1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAL, 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 omission of the subcontract lab, your officers, agents or employees

CHAIN-OF-CUSTODY RECORD



EAID# 193248

Page 2

Sample ID Date Sampled Matrix aParameters

1900536

Sample Notes

Lavrich 11 Snow Rd 3/21/2019 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds) 9:29

White 10 Snow Rd 3/21/2019 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds) 11:11

Silvia 1019 Province Lake Rd 3/21/2019 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds) 11:49

Center Effingham Baptist Church 3/21/2019 aqueous Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds) 10:01

EAID# 193248

Project State: NH

Project ID: 5192

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.

Report samples on individual pages.

PFAS NHDES 9 compound list.

PO #: 49770

EAID# 193248

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

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

Samples Collected by:

James Palmer 3/21/19 1500 US

Relinquished by

US 03/28/19 0938

Received by

Handwritten signature

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 25 Chenell Dr. 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 EAI or its subcontract lab, your officers, agents or employees

CHAIN-OF-CUSTODY RECORD



Sample ID _____ Date Sampled _____ Matrix _____ aParameters _____

100536 2.2%

EAID# 193248

Page 1

Sample Notes _____

Hollister 8 Old Pound Rd | 3/21/2019 9:06 | aqueous | Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

Folts 984 Province Lake Rd | 3/21/2019 13:23 | aqueous | Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

Folts 978 Province Lake Rd | 3/21/2019 13:30 | aqueous | Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

Parker 968 Province Lake Rd | 3/21/2019 16:30 | aqueous | Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)

EAID# 193248

Project State: NH

Project ID: 5192

Company Vista Analytical Laboratory
Address 1104 Windfield Way
Address EI 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.

Report samples on individual pages.
PFAS NHDES 9 compound list.

PO #: 49770

EAID# 193248

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

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

Samples Collected by:

Relinquished by: Chris Johnson 3/27/2019

Relinquished by

Date/Time

Received by

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 25 Chenell Dr. 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 or your subcontract lab, your officers, agents or employees.

Sample Log-In Checklist

Vista Work Order #: 1900536
 Page # 1 of 2
 WWS 03/28/19
 TAT std 14 days

Samples Arrival:	Date/Time <u>03/28/19 0938</u>	Initials: <u>MP</u>	Location: <u>WR-2</u>
Logged In:	Date/Time <u>03/28/19 1032</u>	Initials: <u>WWS</u>	Location: <u>WR-2</u>
Delivered By:	FedEx	<u>UPS</u>	On Trac
	GSO	DHL	Hand Delivered
Other			
Preservation:	<u>Ice</u>	Blue Ice	Dry Ice
	None		
Temp °C: <u>2.3</u> (uncorrected)	Probe used: Y <u>(N)</u>		Thermometer ID: <u>IR-4</u>
Temp °C: <u>2.2</u> (corrected)			

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?		✓	✓
Shipping Documentation Present?	✓		
Airbill	Trk # <u>12 X46 599 01 9864 6338</u>	✓	
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Preservation Documented:	Na ₂ S ₂ O ₃	Trizma	None
Other	Yes	No	<u>NA</u>
Shipping Container	Vista	<u>Client</u>	Retain
	<u>Return</u>	Dispose	

Comments: See page 2

Page # 2 of 2
 WO#: 1900536
 Cooler # 1 of 1

Sample Label ID (cap label)	Sample Label (white label)	Notes	COC ID
Hollister 8 01 →	Hollister →	Hollister 8 Old Pound Rd	
Folts 984 →	Folts 984 →	Folts 984 Province Lake Rd	
Folts 978 →	Folts 978 →	Folts 978 Province Lake Rd	
Parker 968 →	Parker →	Parker 968 Province Lake Rd	
Laurich 11 →	Laurich →	Laurich 11 Snow Rd	
White 10 Sno →	White →	White 10 Snow Rd	
Silvia 1019 →	Silvia →	Silvia 1019 Province Lake Rd	
Center →	Baptist Church →	Center Effingham Baptist Church	
Libby ^{was 03/28/19} 1030 →	Libby →	Libby 1030 Province Lake Rd	
Effingham →	Historical Society →	Effingham Historical Society	
Van Zulen 3 →	Van Zulen →	Van Zulen 31 Gray Fox Rd	
Romanovic →	Romanovic →	Romanovic 1004 Province Lake Rd	
Does not affect sample integrity.			
Recorded By/Date: <u>WUS 03/28/19</u>			



Eastern Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

193248

HEBNH P1457

Sample IDs	Date/Time <small>Composites need start and stop dates/times</small>	Matrix	Parameters and Sample Notes	# of containers
Hollister 8 Old Pound Rd	3/21/19	aqueous <u>Grab</u> or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEQH Na ₂ S ₂ O ₈ <u>ICE</u> Dissolved Sample Field Filtered <input type="checkbox"/>				
Fols 984 Province Lake Rd	3/21/19 1323	aqueous <u>Grab</u> or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEQH Na ₂ S ₂ O ₈ <u>ICE</u> Dissolved Sample Field Filtered <input type="checkbox"/>				
Fols 978 Province Lake Rd	3/21/19 1330	aqueous <u>Grab</u> or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEQH Na ₂ S ₂ O ₈ <u>ICE</u> Dissolved Sample Field Filtered <input type="checkbox"/>				
Parker 968 Province Lake Rd	3/21/19 1630	aqueous <u>Grab</u> or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEQH Na ₂ S ₂ O ₈ <u>ICE</u> Dissolved Sample Field Filtered <input type="checkbox"/>				

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 5192

Project Name Effingham LF Residential Testing

State NH

Client (Pro Mgr) Jeff Sires

Customer HEB Engineers, Inc.

Address 2605 White Mountain Highway, PO

City North Conway NH 03860

Phone 356-6936 Fax 356-7715

Email: jsires@HEBEngineers.com

Direct 356-6936

Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com

Results Needed by: Preferred date _____	
Notes:	
Report samples on individual pages. PFAS NHDES 9 compound list.	
Reporting Options	
<input checked="" type="checkbox"/> HC	<input type="checkbox"/> NO FAX
<input type="checkbox"/> EDD PDF	<input type="checkbox"/> Partial FAX
<input checked="" type="checkbox"/> EDD email	<input type="checkbox"/> PDF Invoice
<input checked="" type="checkbox"/> PDF prelin, NO FAX	<input type="checkbox"/> EQUIS
<input type="checkbox"/> e-mail Login Confirmation	
Samples Collected by: <u>JSires</u> <u>3/21/19</u> <u>1323</u>	
Relinquished by: <u>JSires</u> <u>3/21/19</u> <u>1323</u>	
Date/Time _____	
Received by _____	
Temp <u>1.1</u> °C	
Ice <u>Y</u> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
PO# verbal _____	
Quote#: 1016295	
QC deliverables	
<input checked="" type="checkbox"/> A <input type="checkbox"/> A+ <input type="checkbox"/> B <input type="checkbox"/> B+ <input type="checkbox"/> C <input type="checkbox"/> MA MCP	
Relinquished by _____	
Date/Time _____	
Received by _____	



Eastern Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

193248

HEBNH P 2433

Sample IDs	Date/Time Composites need start and stop dates/times	Matrix	Parameters and Sample Notes	# of containers
Lavrich 11 Snow Rd	3/21/19	aqueous Grab or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate				
White 10 Snow Rd	3/21/19	aqueous Grab or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate				
Silvia 1019 Province Lake Rd	3/21/19	aqueous Grab or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate				
Center Effingham Baptist Church	3/21/19	aqueous Grab or Comp	AqTot/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate				

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 5192

Project Name Effingham LF Residential Testing

State NH

Client (Pro Mgr) Jeff Sires

Customer HEB Engineers, Inc.

Address 2605 White Mountain Highway, PO

City North Conway NH 03860

Phone 356-6936

Fax 356-7715

Email: jsires@HEBEngineers.com

Direct 356-6936

Results Needed by: Preferred date

Reporting Options

PO# verbal

Quote#: 1016295

Temp 1.1 °C

Ice Y ☒ N ☐

QC deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Relinquished by

Date/Time

Received by



193248

HEBNH P 349

Sample IDs	Date/Time	Matrix	Parameters and Sample Notes	# of containers
Libby 1030 Province Lake Rd	3/21/19 1408	aqueous Grab or Comp	AqTo/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MeOH Na ₂ S ₂ O ₈ (ICE)				
Effingham Historical Society	3/21/19 1032	aqueous Grab or Comp	AqTo/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MeOH Na ₂ S ₂ O ₈ (ICE)				
Van Auker 31 Gray Fox Rd	3/21/19 1431	aqueous Grab or Comp	AqTo/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MeOH Na ₂ S ₂ O ₈ (ICE)				
Romanovic 1004 Province Lake Rd	3/21/19 1120	aqueous Grab or Comp	AqTo/PFCs9CmpdsSubVAL	2
<input type="checkbox"/> Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MeOH Na ₂ S ₂ O ₈ (ICE)				

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 5192	Results Needed by: Preferred date _____	Reporting Options	PO# verbal
Project Name Effingham LF Residential Testing	Notes: _____	<input checked="" type="checkbox"/> HC	Quote#: 1016295
State NH	Report samples on individual pages.	<input type="checkbox"/> EDD PDF	Temp 1.1°C
Client (Pro Mgr) Jeff Sires	PFAS NHDES 9 compound list.	<input checked="" type="checkbox"/> EDD email	Ice <input checked="" type="checkbox"/> Y <input type="checkbox"/> NO
Customer HEB Engineers, Inc.		<input checked="" type="checkbox"/> PDF prelin, NO FAX	
Address 2605 White Mountain Highway, PO		<input type="checkbox"/> e-mail Login Confirmation	
City North Conway NH 03860		Samples Collected by: [Signature] 3/21/19 1905	Received by: [Signature]
Phone 356-6936		Relinquished by: [Signature]	Date/Time
Fax 356-7715			Received by

QC deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Relinquished by

Date/Time

Received by

Email: jsires@HEBEngineers.com

Direct 356-6936

Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com