



**WISCONSIN AIR NATIONAL GUARD  
HEADQUARTERS 115<sup>TH</sup> FIGHTER WING (ACC) (ANG)  
31 10 MITCHELL STREET  
MADISON WISCONSIN 53704-2529**

21 September 2021

MEMORANDUM FOR WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FROM: 115 CES/CC

SUBJECT: XGFG182010 F-35 Addition/Alteration Building 404, Truax Field. Materials Management Plan Addendum – BRRTS #: 02-13-585319

1. Pursuant to the 21 July 2021 approved materials management plan, this serves as a project specific addendum for the subject project.
2. Attachment 1 details PFAS sampling results for the subject project. Attachment 2 details the areas which were found to contain PFAS. For materials removed within the red box associated with Sample Point E2-20, only material from the ground surface down to 2' will be managed as PFAS compromised soil. For Sample Point E3-20, materials within the red box, below '2, are considered compromised. For Sample Points E5-20 and E6-20, materials removed within the red box (vertically and horizontally) will be managed as PFAS compromised soil. Materials removed will be managed in accordance with the 21 July 2021 letter, BRRTS #: 02-13-585319.
3. If you have any additional questions, please feel free to contact me at 608-286-0010 or [michael.dunlap@us.af.mil](mailto:michael.dunlap@us.af.mil) at any time. Thank you in advance for your review of this material management plan.

**DUNLAP.MICHAEL.J.1138452693** Digitally signed by  
DUNLAP.MICHAEL.J.1138452693  
Date: 2021.09.21 14:28:37 -05'00'

MICHAEL J. DUNLAP, Lt Col, WI ANG  
Commander, 115th Civil Engineer Squadron  
Base Civil Engineer, 115th Fighter Wing

Attachment:

1. B404 Sampling Report Results
2. B404 Sampling Plan

B404 Soil sampling results - PFAS

Site	Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	WI RCL NI (ng/g)	EPA RSL (ng/g)
E2-20,S1,1'	PFHxA	307-24-4	0.396	0.209	0.484	J, Q		
E2-20,S1,1'	PFHxS	355-46-4	0.535	0.378	0.484	Q		
E2-20,S1,1'	PFOA	335-67-1	0.568	0.455	0.484		1260	1260
E2-20,S1,1'	PFOS	1763-23-1	0.978	0.416	0.484	Q	1260	1260
E3-20,S2,5'	PFOA	335-67-1	0.953	0.462	0.492		1260	1260
E3-20,S2,5'	PFOS	1763-23-1	3.31	0.423	0.492	Q	1260	1260
E5-20,S1,1'	PFOS	1763-23-1	0.816	0.424	0.493		1260	1260
E5-20,S2,5'	PFHxS	355-46-4	0.560	0.380	0.488			
E5-20,S2,5'	PFNA	375-95-1	0.602	0.304	0.488			
E5-20,S2,5'	PFOS	1763-23-1	11.5	0.419	0.488		1260	1260
E6-20,S1,1'	PFOS	1763-23-1	1.48	0.428	0.497		1260	1260
E6-20,S2,5'	PFHxS	355-46-4	0.934	0.384	0.492			
E6-20,S2,5'	PFNA	375-95-1	0.602	0.307	0.492			
E6-20,S2,5'	PFOS	1763-23-1	7.49	0.423	0.492		1260	1260

RCL NI - Residual Contaminant Level - non-industrial

RSL - US EPA Regional Screening Level (AF guidance for soils and sediments)

MDL = Method Detection Limit

J = The amount detected is below the Reporting Limit/LOQ

RL = Reporting Limit

Q = The ion transition ratio is outside of the acceptance criteria.





**Soils &  
Engineering  
Services, Inc.**

December 14, 2020

Project 507.98 R01

Mr. Jeremy Bluhm, P.E.  
Mead & Hunt, Inc.  
2440 Deming Way  
Middleton, Wisconsin 53562-1562

Subject: Environmental Exploration Report  
Truax Air National Guard Base  
Building 404 Additions  
115<sup>th</sup> Fighter Wing  
City of Madison  
Dane County, Wisconsin

Dear Mr. Bluhm:

We have completed the requested environmental exploration consisting of the performance of seven soil borings at the subject site and the associated chemical and physical laboratory testing. The purpose of these soil borings was to obtain information about the soil, bedrock, and groundwater conditions at the soil boring locations. We present our findings and analyses results in the enclosed *Environmental Exploration Report* for the subject project. Analysis of the chemical analyses results was not included in our scope of services for this work.

Respectfully submitted,

**SOILS & ENGINEERING SERVICES, INC.**

Duane E. Reichel, P.E.

DER:CMB:cmb

Enclosure

Delivered by email: [jeremy.bluhm@meadhunt.com](mailto:jeremy.bluhm@meadhunt.com)



# ENVIRONMENTAL EXPLORATION REPORT

**TRUAX AIR NATIONAL GUARD BASE  
BUILDING 404 ADDITIONS  
115TH FIGHTER WING  
CITY OF MADISON  
DANE COUNTY, WISCONSIN**

SES Project Number 507.98

Prepared By

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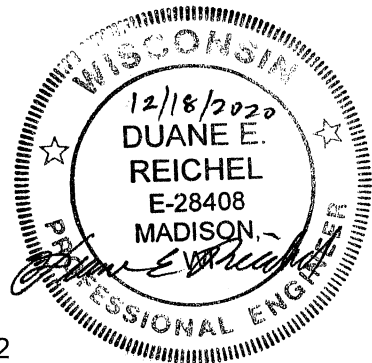
Duane E. Reichel, P.E.

Submitted To

Mead & Hunt, Inc.  
2440 Deming Way  
Middleton, Wisconsin 53562-1562  
Phone: (608) 443-0552

Mr. Jeremy Bluhm, P.E.

December 18, 2020



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# TABLE OF CONTENTS

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## LIST OF REPORT SECTIONS

I.	INTRODUCTION .....	Page 1
II.	PROJECT INFORMATION .....	Page 1
III.	ENVIRONMENTAL EXPLORATION .....	Page 2
	A. Soil Boring Locations .....	Page 2
	B. Soil Boring Elevations .....	Page 2
	C. Soil Boring Procedures .....	Page 2
	D. Subsurface Stratigraphy .....	Page 4
	E. Subsurface Water .....	Page 5
IV.	LABORATORY TESTS .....	Page 6
	A. Physical Tests .....	Page 6
	B. Chemical Tests .....	Page 6
V.	DISCUSSION .....	Page 15
	A. Groundwater Samples .....	Page 15
	1. PFA Analyses Results .....	Page 15
	2. VOC Analyses Results .....	Page 17
	B. Soil Samples .....	Page 18
VI.	CLOSING COMMENTS .....	Page 19

## LIST OF TABLES

Table 1:	Summary of the chemical analyses results of individual soil samples .....	Page 8
Table 2:	Summary of the chemical analyses results of individual groundwater samples .....	Page 12



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## TABLE OF CONTENTS

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### LIST OF APPENDICES

#### Appendix A

- Location Sketch, Drawing 507.98-1
- Notes and Legend Record for WDNR Boring Log Information Forms
- WDNR Boring Log Information Forms for Borings E1-20 through E7-20
- Laboratory Test Result Records, Figures 1 and 2

#### Appendix B

- CT Laboratories, LLC Analytical Report dated October 6, 2020.
- VISTA Analytical Laboratory Analytical Report dated September 25, 2020.
- CT Laboratories, LLC Analytical Report dated October 16, 2020.
- VISTA Analytical Laboratory Analytical Report dated October 15, 2020.

#### Appendix C

- *Important Information about This Geoenvironmental Report advisory*



## I. INTRODUCTION

This *Environmental Exploration Report* summarizes the findings of the environmental exploration, and the related laboratory and field tests performed in the areas of two new additions to Building 404 for the 115th Fighter Wing stationed at the Truax Air National Guard Base in the City of Madison, in Dane County, Wisconsin. We completed this work under the general direction of Mead & Hunt, Inc., who established the general scope of the work. We completed the field work for Building 404 in conjunction with environmental sampling for Building 406. Building 406 is adjacent to the north of Building 404. Duplicate samples for the two project areas were collected from the Building 406 soil borings.

The intent of this report is to: (1) convey the environmental information obtained from the seven borings and (2) present the results of the laboratory and field tests. Analysis of the chemical analyses results was not included our current scope of work for this project.

## II. PROJECT INFORMATION

The project includes the design and construction of two single-story additions to the existing building. We understand that one of the additions will consist of post and beam construction and the other addition will consist of masonry bearing and shear walls construction. Both additions will have a metal roof supported on steel joists and girders. The post and beam construction addition is anticipated to have column spread footing loads ranging from approximately 25 to 35 kips. The masonry bearing and shear walls construction is anticipated to have strip spread footing loads of approximately 3.0 kips per lineal foot.

We anticipate both additions will have concrete slab-on-grade floors that meet the existing building's slab-on-grade floor elevation.

The environmental exploration was requested to meet requirements specified by the State of Wisconsin Department of Natural Resources (WDNR) to determine if environmental contamination is present at the location of the two proposed additions of Building 404, specifically as it related to the proposed site excavations. WDNR prepared a document entitled *Site Characterization Sampling For Contaminated Material Management Purposes Proposed ADAL Building 404 Additions, Truax Field* dated February 26, 2020. This document specified testing soil and water samples for volatile organic compounds (VOCs) and perfluoroalkyl and polyfluoroalkyl compounds (PFAS). This document provided the following scope of the field work.

- Seven soil borings
- Collect two discrete soil samples from each boring at depths of 1 to 2 feet below ground surface and at one foot above the water table and test for VOCs and PFAS
- Collect and test one groundwater sample from each boring
- Test two soil samples for Total Organic Carbon
- Test two soil samples for grain size distribution



The relative locations of the borings were provided in the WDNR document.

### III. ENVIRONMENTAL EXPLORATION

The field exploration for the subject structure additions consisted of the performance of seven standard borings, (designated Borings E1-20 through E7-20), at the project site.

#### A. Soil Boring Locations

We located Borings E1-20 through E7-20 in the vicinity of the requested locations, as indicated on the Location Sketch, Drawing 507.98-1, enclosed in Appendix A. Our drilling crew met with 2<sup>nd</sup> Lt Cory R. Corson with Wisconsin Air National Guard to review the proposed sampling locations. Our crew adjusted the soil boring locations to avoid utility lines or existing trees.

#### B. Soil Boring Elevations

Soils & Engineering Services, Inc. personnel determined the ground surface elevation at the locations of Borings E1-20 through E7-20 using a surveying level and a leveling rod. We used the rim of the sanitary sewer manhole located between Buildings 404 and 406. The benchmark has a given elevation of 857.79 feet.

We include the ground surface elevations for the soil borings on the WDNR Boring Log Information Forms enclosed in Appendix A. We include the ground surface elevation for Borings E1-20 through E7-20 on the WDNR Boring Log Information Forms enclosed in Appendix A. The WDNR Boring Log Information Forms are plotted with a depth scale for reference.

#### C. Soil Boring Procedures

We extended Borings E1-20 through E7-20 to the following depths below ground surface and corresponding elevations:

Soil Boring	Ground Surface Elevation (feet)	Bottom of Soil Boring	
		Depth (feet-inch)	Elevation (feet)
E1-20	858.9	12'-0"	846.9
E2-20	858.9	12'-0"	846.9
E3-20	859.4	12'-0"	847.4
E4-20	856.4	12'-0"	844.4



Soil Boring	Ground Surface Elevation (feet)	Bottom of Soil Boring	
		Depth (feet-inch)	Elevation (feet)
E5-20	857.9	12'-0"	845.9
E6-20	858.0	12'-0"	846.0
E7-20	858.5	12'-0"	846.5

We used a Geoprobe 7822DT drill rig mounted on a rubber-tracked carrier to complete the borings. We used a dual-tube direct push sampler to maintain an open borehole as we advanced the borehole of each boring to the termination depth. We obtained soil samples continuously at 4-foot intervals starting at the ground surface and extended to the stated termination depth. We selected the soil sampling depth to extend into the groundwater table. We visually identified the recovered soils in general compliance with the Unified Soil Classification System (USCS) identification procedures as defined in ASTM Designation D2488.

After reaching the termination depth at each boring and removing the inner-tube of the sampler, we installed 3/4-inch-diameter polyvinyl chloride (PVC) casing and screen into inside of the outer Geoprobe casing at each borehole. We then removed the outer casing to expose the PVC screen to the subsurface water. The PVC casing and screen was manufactured by Monoflex and each section of PVC was factory sealed in plastic sheeting. We then used a Geopump peristaltic pump to obtain a groundwater sample from each borehole using high density polyethylene tubing inserted into each of the temporary wells. We disposed of the tubing following the water sample collection from each soil boring.

We used reagent-grade water and Alconox to decontaminate the soil sampling tooling, followed by a triple rinse with reagent-grade water. We collected a sample of the rinsate water from the peristaltic pump and a sample of the rinsate water from the Geoprobe soil sampling tooling and submitted these two samples for testing for VOCs. These are the 'equipment blanks.' which we identified as 'Probe Blank' and 'Pump Blank.'

In addition to the equipment blanks, we submitted two samples of reagent-grade water for testing for VOCs. These are the 'trip blanks' for this project. We collected field duplicates from the testing of samples that we recovered for Building 406.

Please refer to the WDNR Boring Log Information Forms enclosed in Appendix A for additional information regarding the sampling of Borings E1-20 through E7-20. We provide information pertinent to the WDNR Boring Log Information Forms on the Notes and Legend Record enclosed in Appendix A.





#### D. Subsurface Stratigraphy

The soil stratigraphy encountered at Borings E1-20 through E7-20 consisted of fill topsoil over fill material overlying native soil strata. None of the borings encountered bedrock below the native soil strata within the depths sampled.

The borings encountered variable fill material strata. We describe the fill material strata encountered at the borings as follows:

- Boring E1-20 encountered 12 inches of very dark brown LEAN CLAY (CL) FILL TOPSOIL over 24 inches of dark brown fine SILTY SAND WITH GRAVEL (SM) FILL mixed with LEAN CLAY (CL) TOPSOIL.
- Boring E2-20 encountered 12 inches of very dark brown LEAN CLAY (CL) FILL TOPSOIL over 12 inches of brown and dark brown fine to medium POORLY-GRADED SAND WITH GRAVEL (SP) FILL.
- Boring E3-20 encountered 6 inches of brown LEAN CLAY (CL) FILL TOPSOIL over 9 inches of brown fine SILTY GRAVEL WITH SAND (GM) FILL over 33 inches of brown and dark brown LEAN CLAY (CL) FILL mixed with SILTY SAND WITH GRAVEL (SM).
- Boring E4-20 encountered 4 inches of dark brown fine SILTY SAND WITH GRAVEL (SM) FILL base course over 44 inches of dark brown SANDY LEAN CLAY (CL) FILL mixed with ORGANIC SOIL (OL/OH).
- Borings E5-20 through 7-20 encountered 3 to 4 inches of FILL hot-mix asphalt (HMA) pavement over 32 to 45 inches of brown fine to coarse SILTY GRAVEL WITH SAND (GM) FILL.

We noted the FILL TOPSOIL contained trace organics and no to occasional gravel.

Below the fill material, Borings E1-20 through E7-20 encountered a native soil strata that was variable. We describe the native soil strata encountered at the borings as follows:

- Borings E1-20 and E2-20 encountered very dark brown ORGANIC SOIL (OL/OH) over grayish-brown to brownish-gray fine SILTY SAND (SM) stratified with POORLY-GRADED SAND (SP) seams and layers.
- Borings E3-20 and E5-20 encounter grayish-green or brown LEAN CLAY (CL) over grayish-brown to brownish-gray fine SILTY SAND (SM) stratified with POORLY-GRADED SAND (SP) seams and layers.
- Boring E4-20 and E7-20 encountered black ORGANIC SOIL (OL/OH) over grayish-brown SANDY LEAN CLAY (CL) over grayish-brown to brownish-gray fine SILTY SAND (SM) stratified with POORLY-GRADED SAND (SP) seams and layers.



- Boring E6-20 encountered grayish-brown to brownish-gray fine SILTY SAND (SM) stratified with POORLY-GRADED SAND (SP) seams and layers.
- Boring E7-20 encountered black ORGANIC SOIL (OL/OH) over brown and gray LEAN CLAY (CL) over grayish-brown to brownish-gray fine SILTY SAND (SM) stratified with POORLY-GRADED SAND (SP) seams and layers.

We noted the stratified native soil contained a variable gravel quantity from no to few and had occasional fine to coarse grained seams.

Please refer to the WDNR Boring Log Information Forms enclosed in Appendix A for a further description of the fill material and native soil strata encountered at the boring locations.

#### E. Subsurface Water

Our drilling crew found the boreholes of the borings to be in the following states:

- Borings E1-20, E2-20, E4-20, and E5-20 had a water level and were caved at the completion of the soil and water sampling of each of these borings.
- Borings E3-20, E6-20, and E7-20 had a water level and were open to the bottom of the boring at the completion of the soil and water sampling of these borings.

We summarize the water and caved level depths and respective elevations at completion for each boring as follows:

Boring	Ground Surface Elevation (feet)	Subsurface Water		Caved Level	
		Depth (feet-inch)	Elevation (feet)	Depth (feet-inch)	Elevation (feet)
E1-20	858.9	6'-9"	852.2	7'-5"	851.5
E2-20	858.9	6'-9"	852.2	7'-6"	851.4
E3-20	859.4	6'-9"	852.7	—	—
E4-20	856.4	6'-9"	849.7	8'-0"	848.4
E5-20	857.9	5'-4"	852.6	9'-6"	848.4
E6-20	858.0	5'-4"	852.7	—	—
E7-20	858.5	5'-9"	852.8	—	—



We expect the subsurface water (groundwater) level to fluctuate as influenced by precipitation, snowmelt, surface water runoff, and other hydrological and hydrogeological factors. The groundwater level at the time of construction of the building additions may be higher or lower than the groundwater levels encountered on the days that we performed the soil borings.

#### IV. LABORATORY TESTS

We performed physical and chemical tests on selected portions of the soil samples recovered by the borings and chemical tests on groundwater samples obtained from the borings. The physical tests were performed in our laboratory. The chemical tests were performed by CT Laboratories, LLC and VISTA Analytical Laboratory.

##### A. Physical Tests

As requested by WDNR, we performed moisture content (MC), percentage of soil particles passing the No. 200-mesh sieve ( $P_{200}$ ), and particle size distribution analysis including percentage of silt and clay particles analyses on two soil samples. We selected one sample from each of Borings E2-20 and E6-20.

We include the physical laboratory test results obtained for this report on the WDNR Boring Log Information Forms and Laboratory Test Result Records, Figures 1 and 2, enclosed in Appendix A. We used the results from the  $P_{200}$  and particle size distribution tests to confirm or modify the USCS soil identifications in general compliance with USCS classification procedures as defined in ASTM Designation D2487.

##### B. Chemical Tests

We submitted two soil samples and one groundwater sample from each boring for laboratory analyses to CT Laboratories, LLC (CTL). CTL subcontracted with VISTA Analytical Laboratory for the PFAS testing. The requested laboratory analyses consisted of the following:

Sample Type	Requested Laboratory Analyses
Groundwater	Volatile Organic Compounds (EPA Method 8260C) Perfluoroalkyl and Polyfluoroalkyl (PFAS Isotope Dilution Method)
Soil	Percent Solids (EPA Method 8000C) Total Organic Carbon (L-Kahn Method 9060A) Volatile Organic Compounds (EPA Method 8260C) Perfluoroalkyl and Polyfluoroalkyl (PFAS Isotope Dilution Method)

We provide the following information regarding the soil and groundwater samples obtained from each of the borings:



Boring	Matrix	Sample Number	Approximate Sample Depth (feet)	SES Sample Identification	Samples Obtained	Laboratory Received
E1-20	Soil	1	1	E1-20,S1,1'	9/8/2020	9/8/2020
		2	6	E1-20,S2,6'		
	Water	—	—	E1-20		
E2-20	Soil	1	1	E2-20,S1,1'	9/8/2020	9/8/2020
		2	6½	E2-20,S2,6½'		
	Water	—	—	E2-20		
E3-20	Soil	1	1	E3-20,1,1'	9/16/2020	9/18/2020
		1A	1½	E3-20,1A,1½'		
		2	5	E3-20,2,5'		
	Water	—	—	E3-20		
E4-20	Soil	1	1	E4-20,S1,1'	9/16/2020	9/18/2020
		2	5	E4-20,S2,5'		
	Water	—	—	E4-20		
E5-20	Soil	1	1	E5-20,S1,1'	9/16/2020	9/18/2020
		2	5	E5-20,S2,5'		
	Water	—	—	E5-20		
E6-20	Soil	1	1	E6-20,S1,1'	9/17/2020	9/18/2020
		2	5	E6-20,S2,5'		
	Water	—	—	E6-20		
E7-20	Soil	1	1	E7-20,S1,1'	9/17/2020	9/18/2020
		2	4½	E7-20,S2,4½'		
	Water	—	—	E7-20		

We present a summary of the results of those analytes detected in at least one sample in Tables 1 and 2 on pages 8 through 12. A copy of the Analytical Reports from CT Laboratories, LLC and VISTA Analytical Laboratory are included in Appendix B. The analytical reports from these laboratories include the chain of custodies for the samples submitted to them.



Table 1: Summary of the chemical analyses results of individual soil samples.

Analyte	SES Sample Identification			
	E1-20,S1,1'	E1-20,S2,6'	E2-20,S1,1'	E2-20,S2,6½'
Physical analyses. Results in %.				
Solids	86.1	91.2	87.6	88.8
Moisture Content	13.9	8.8	12.4	11.2
Inorganic analyses. Results in mg/kg.				
Total Organic Carbon	—	—	—	19900
No Volatile Organic Compounds detected for any of these samples.				
Perfluoroalkyl and Polyfluoroalkyl (PFAs) analyses. Results in ng/g.				
Perfluorobutanoic acid (PFBA)	<0.340	<0.338	<0.335	<0.341
Perfluorohexanoic acid (PFHxA)	<0.212	<0.211	<0.396>Q	<0.213
Perfluorohexanesulfonic acid (PFHxS)	<0.383	<0.381	0.535Q	<0.385
Perfluorooctanoic acid (PFOA)	<0.462	<0.459	0.568	<0.464
Perfluorononanoic acid (PFNA)	<0.307	<0.305	<0.302	<0.308
Perfluorooctanesulfonic acid (PFOS)	<0.423	<0.420	0.978Q	<0.424

- 
- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
  - < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
  - < > = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
  - = No sample submitted for this analysis.
  - Q = The ion transition ratio is outside of the acceptance criteria.
- mg/kg = milligrams per kilogram    ng/g = nanograms per gram



Table 1: Summary of the chemical analyses results of individual soil samples.  
(continued)

Analyte	SES Sample Identification			
	E3-20,S1,1'	E3-20,S1A,1½'	E3-20,S2,5'	E4-20,S1,1'
Physical analyses. Results in %.				
Solids, Percent	—	78.2	74.9	76.5
Moisture Content	—	21.8	25.1	23.5
Inorganic analyses. Results in mg/kg.				
Total Organic Carbon	—	—	—	—
No Volatile Organic Compounds detected for any of these samples.				
Perfluoroalkyl and Polyfluoroalkyl (PFAs) analyses. Results in ng/g.				
Perfluorobutanoic acid (PFBA)	<0.333	—	<0.340	<0.409>
Perfluorohexanoic acid (PFHxA)	<0.208	—	<0.212	<0.213
Perfluorohexanesulfonic acid (PFHxS)	<0.375	—	<0.384	<0.385
Perfluorooctanoic acid (PFOA)	<0.452	—	0.953	<0.463
Perfluorononanoic acid (PFNA)	<0.300	—	<0.307	<0.308
Perfluorooctanesulfonic acid (PFOS)	<0.413	—	3.31Q	<0.424

- 
- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
  - < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
  - < > = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
  - = No sample submitted for this analysis.
  - Q = The ion transition ratio is outside of the acceptance criteria.
- mg/kg = milligrams per kilogram      ng/g = nanograms per gram





Table 1: Summary of the chemical analyses results of individual soil samples.  
(continued)

Analyte	SES Sample Identification			
	E4-20,S2,5'	E5-20,S1,1'	E5-20,S2,5'	E6-20,S1,1'
Physical analyses. Results in %.				
Solids, Percent	88.4	94.5	76.0	94.2
Moisture Content	11.6	5.5	24.0	5.8
Inorganic analyses. Results in mg/kg.				
Total Organic Carbon	—	—	—	—
No Volatile Organic Compounds detected for any of these samples.				
Perfluoroalkyl and Polyfluoroalkyl (PFAs) analyses. Results in ng/g.				
Perfluorobutanoic acid (PFBA)	<0.341	<0.341	<0.337	<0.344
Perfluorohexanoic acid (PFHxA)	<0.213	<0.213	<0.211	<0.215
Perfluorohexanesulfonic acid (PFHxS)	<0.385	<0.384	<b>0.560</b>	<0.388
Perfluorooctanoic acid (PFOA)	<0.464	<0.463	<0.458	<0.467
Perfluorononanoic acid (PFNA)	<0.308	<0.308	0.602	<0.310
Perfluorooctanesulfonic acid (PFOS)	<0.424	<b>0.816</b>	<b>11.5</b>	<b>1.48</b>

- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
- < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
- < > = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
- = No sample submitted for this analysis.
- Q = The ion transition ratio is outside of the acceptance criteria.
- mg/kg = milligrams per kilogram      ng/g = nanograms per gram



Table 1: Summary of the chemical analyses results of individual soil samples.  
(continued)

Analyte	SES Sample Identification		
	E6-20,S2,5'	E7-20,S1,1'	E7-20,S2,4½'
Physical analyses. Results in %.			
Solids, Percent	87.7	94.4	82.6
Moisture Content	12.3	5.6	17.4
Inorganic analyses. Results in mg/kg.			
Total Organic Carbon	10800	—	—
No Volatile Organic Compounds detected for any of these samples.			
Perfluoroalkyl and Polyfluoroalkyl (PFAs) analyses. Results in ng/g.			
Perfluorobutanoic acid (PFBA)	<0.341	<0.346	<0.347
Perfluorohexanoic acid (PFHxA)	<0.213	<0.216	<0.253>Q
Perfluorohexanesulfonic acid (PFHxS)	0.934	<0.390	<0.391
Perfluorooctanoic acid (PFOA)	<0.463	<0.470	<0.472
Perfluorononanoic acid (PFNA)	0.602	<0.312	<0.313
Perfluorooctanesulfonic acid (PFOS)	7.49	<0.430	<0.431

- 
- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
  - < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
  - <> = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
  - = No sample submitted for this analysis.
  - Q = The ion transition ratio is outside of the acceptance criteria.
- mg/kg = milligrams per kilogram      ng/g = nanograms per gram



Table 2: Summary of the chemical analyses results of individual groundwater samples.

Analyte	SES Sample Identification			
	E1-20	E2-20	E3-20	E4-20
Volatile Organic Compounds (VOC) analyses. Results in µg/L.				
4-Methyl-2-pentanone	<2.2	<2.2	<2.9>	<2.2
Dichlorodifluoromethane	<0.40	2.2	2.0	1.9
Methylene chloride	<0.40	<0.40	<0.40	<0.40
Tetrahydrofuran	<3.0	<3.0	<3.0	19
Toluene	<0.22>	<0.22>	<0.21	<0.36>
Trichlorofluoromethane	<0.40	<0.40	<0.40	2.0
Perfluoroalkyl and Polyfluoroalkyl (PFA) analyses. Results in ng/L.				
Perfluorobutanoic acid (PFBA)	17.8	26.5	43.4	34.1
Perfluoropentanoic acid (PFPeA)	13.7	28.3	52.7	46.4
Perfluorobutanesulfonic acid (PFBS)	7.78	8.60	7.92	11.6
Perfluorohexanoic acid (PFHxA)	10.1	33.4	56.3	53.4
Perfluoropentane sulfonic acid (PFPeS)	<1.24>	3.89	5.13	5.40
Perfluoroheptanoic acid (PFHpA)	6.59	30.3	26.1	34.7
Perfluorohexanesulfonic acid (PFHxS)	11.6	68.7	38.3	41.8
Perfluorooctanoic acid (PFOA)	5.15	97.9	55.6	50.5
Perfluoroheptane sulfonate (PFHpS)	<0.463	4.36	<0.490	<0.471
Perfluorononanoic acid (PFNA)	<0.400	<1.87>	4.07	<0.913>
Perfluorooctane sulfonamide (PFOSA)	3.64	<1.01>Q	4.00	2.03
Perfluorooctanesulfonic acid (PFOS)	2.75	235	32.0	6.69
Perfluorodecanoic acid (PFDA)	<0.736	<0.728	2.59	<0.749
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	<1.02	<1.51>Q	<1.08	<1.04
Perfluoroundecanoic acid (PFUnA)	<0.518	<0.513	<0.550	<0.528

- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
- < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
- < > = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
- = No sample submitted for this analysis.
- Q = The ion transition ratio is outside of the acceptance criteria.
- µg/L = micrograms per liter      ng/L = nanograms per liter



Table 2: Summary of the chemical analyses results of individual groundwater samples.  
(continued)

Analyte	SES Sample Identification			
	E5-20	E6-20	E7-20	PROBE BLANK
Volatile Organic Compounds (VOC) analyses. Results in µg/L.				
4-Methyl-2-pentanone	<2.2	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<0.40	<0.40	<0.40	<0.40
Methylene chloride	<0.40	<0.40	<0.40	<b>2.0</b>
Tetrahydrofuran	<3.0	<3.0	<3.0	<3.0
Toluene	<b>&lt;0.31&gt;</b>	<b>&lt;0.34&gt;</b>	<b>&lt;0.38&gt;</b>	<b>0.71</b>
Trichlorofluoromethane	<0.40	<0.40	<0.40	<0.40
Perfluoroalkyl and Polyfluoroalkyl (PFA) analyses. Results in ng/L.				
Perfluorobutanoic acid (PFBA)	<b>33.3</b>	<b>11.0</b>	<b>11.7</b>	<0.371
Perfluoropentanoic acid (PFPeA)	<b>55.9</b>	<b>14.9</b>	<b>17.1</b>	<0.652
Perfluorobutanesulfonic acid (PFBS)	<b>11.6</b>	<b>6.40</b>	<b>7.64</b>	<b>2.18Q</b>
Perfluorohexanoic acid (PFHxA)	<b>60.8</b>	<b>12.8</b>	<b>14.0</b>	<1.11
Perfluoropentane sulfonic acid (PFPeS)	<b>22.6</b>	<b>6.43</b>	<b>4.30</b>	<1.23
Perfluoroheptanoic acid (PFHpA)	<b>55.0</b>	<b>5.77</b>	<b>6.71</b>	<0.301
Perfluorohexanesulfonic acid (PFHxS)	<b>385</b>	<b>57.1</b>	<b>46.4</b>	<0.482
Perfluorooctanoic acid (PFOA)	<b>103</b>	<b>7.56</b>	<b>7.45</b>	<0.332
Perfluoroheptane sulfonate (PFHpS)	<b>47.4Q</b>	<b>&lt;0.939&gt;</b>	<b>&lt;0.671&gt;</b>	<0.477
Perfluorononanoic acid (PFNA)	<b>8.42</b>	<b>&lt;1.53&gt;</b>	<b>&lt;1.17&gt;</b>	<0.413
Perfluorooctane sulfonamide (PFOSA)	<b>3.37</b>	<b>&lt;1.10&gt;Q</b>	<0.912	<0.902
Perfluorooctanesulfonic acid (PFOS)	<b>205</b>	<b>50.4</b>	<b>19.7Q</b>	<0.411
Perfluorodecanoic acid (PFDA)	<0.777	<b>&lt;1.30&gt;</b>	<0.768	<0.759
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	<1.07	<1.01	<1.06	<1.05
Perfluoroundecanoic acid (PFUnA)	<0.548	<b>2.42</b>	<0.541	<0.535

- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
- < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
- < > = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
- = No sample submitted for this analysis.
- Q = The ion transition ratio is outside of the acceptance criteria.
- µg/L = micrograms per liter      ng/L = nanograms per liter



Table 2: Summary of the chemical analyses results of individual groundwater samples.  
(continued)

Analyte	SES Sample Identification		
	PUMP BLANK	TRIP BLANK 09/08/2020	TRIP BLANK 09/17/2020
Volatile Organic Compounds (VOC) analyses. Results in µg/L.			
4-Methyl-2-pentanone	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<0.40	<0.40	<0.40
Methylene chloride	<0.40	<0.40	<1.1>
Tetrahydrofuran	<3.0	<3.0	<3.0
Toluene	<0.48>	<0.21	<0.21
Trichlorofluoromethane	<0.40	<0.40	<0.40
Perfluoroalkyl and Polyfluoroalkyl (PFA) analyses. Results in ng/L.			
Perfluorobutanoic acid (PFBA)	<0.371	—	—
Perfluoropentanoic acid (PFPeA)	<0.652	—	—
Perfluorobutanesulfonic acid (PFBS)	<0.912	—	—
Perfluorohexanoic acid (PFHxA)	<1.11	—	—
Perfluoropentane sulfonic acid (PFPeS)	<1.23	—	—
Perfluoroheptanoic acid (PFHpA)	<0.301	—	—
Perfluorohexanesulfonic acid (PFHxS)	<0.482	—	—
Perfluorooctanoic acid (PFOA)	<0.332	—	—
Perfluoroheptane sulfonate (PFHpS)	<0.477	—	—
Perfluorononanoic acid (PFNA)	<0.413	—	—
Perfluorooctane sulfonamide (PFOSA)	<0.902	—	—
Perfluorooctanesulfonic acid (PFOS)	<0.411	—	—
Perfluorodecanoic acid (PFDA)	<0.759	—	—
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	<1.05	—	—
Perfluoroundecanoic acid (PFUnA)	<0.535	—	—

- † = Only compounds detected in at least one sample are listed. All other compounds in the analysis scan list were not detected above the Limit of Detection.
- < = Values with less than sign (<) indicate a compound that was not detected above the Limit of Detection for the sample.
- < > = Estimated value. Analyte detected at a level less than the Limit of Quantification but greater than or equal to the Limit of Detection.
- = No sample submitted for this analysis.
- Q = The ion transition ratio is outside of the acceptance criteria.
- µg/L = micrograms per liter      ng/L = nanograms per liter



An environmental engineering analysis of the chemical laboratory test results is not a part of our scope of work.

## V. DISCUSSION

### A. Groundwater Samples

#### 1. PFA Analyses Results

The Wisconsin Department of Health Services (DHS) Per- and Polyfluoroalkyl Substances (PFAS) website [<https://www.dhs.wisconsin.gov/chemical/pfas.htm>] includes recommended groundwater limits for these substances. This website presents the DHS recommended limits for these substances presented to the Wisconsin Department of Natural Resources (WDNR) use in developing the rules for the protection of public health. Per DHS *Groundwater Standard Recommendations (Cycle 10)* issued in June 2019, DHS recommended a groundwater enforcement standard of 20 ng/L and a preventative action limit of 2 ng/L for the sum of PFOA and PFOS concentrations. Per DHS *Recommended Groundwater Standards (Cycle 11)* issued November 2020, DHS lists recommended enforcement standards and preventive action limits for additional PFAS compounds. Per this DHS website, the EPA does not have drinking water standards for any PFAS, but does have a health advisory level of 70 ppt for combined levels of PFOA and PFOS.<sup>1</sup>

Following is a summary of the DHS recommended enforcement standards and preventive action limits for the analytes for which the water samples for Building 404 encountered detections. All of the standards and limits provided in this table are in nanograms per liter (ng/L) rather than a combination of µg/L and ng/L as the DHS website table lists the values.

Compound	Recommended DHS Enforcement Standard (ng/L)	Recommended DHS Preventive Action Limit (ng/L)
Perfluorobutanoic acid (PFBA)	10,000	2,000
Perfluoropentanoic acid (PFPeA)	not listed	not listed
Perfluorobutanesulfonic acid (PFBS)	450,000	90,000
Perfluorohexanoic acid (PFHxA)	150,000	30,000
Perfluoropentane sulfonic acid (PFPeS)	not listed	not listed

<sup>1</sup> 1 part per trillion (ppt) = 1 nanograms per liter (ng/L)  
 1 part per billion (ppb) = 1 micrograms per liter (µg/L)  
 1 part per million (ppm) = 1 milligrams per liter (mg/L)





Compound	Recommended DHS Enforcement Standard (ng/L)	Recommended DHS Preventive Action Limit (ng/L)
Perfluoroheptanoic acid (PFHpA)	not listed	not listed
Perfluorohexanesulfonic acid (PFHxS)	40	4
Perfluorooctanoic acid (PFOA)	not listed	not listed
Perfluoroheptane sulfonate (PFHpS)	not listed	not listed
Perfluorononanoic acid (PFNA)	30	3
Perfluorooctane sulfonamide (PFOSA)	20	2
Perfluorooctanesulfonic acid (PFOS)	not listed	not listed
Perfluorodecanoic acid (PFDA)	300	60
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	not listed	not listed
Perfluoroundecanoic acid (PFUnA)	3,000	600
Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)	20	2

Per the DHS recommended standards and limits and EPA level presented above, the water samples from the following soil borings had results for the following analytes that exceed either the recommended enforcement standards, preventative action limits, or health advisory level.

Boring	Test Result (ng/L)	Comment
Perfluorohexanesulfonic acid (PFHxS) Enforcement Standard = 40 ng/L Preventative Action Limit = 4 ng/L		
E1-20	11.6	Above Preventative Action Limit
E2-20	68.7	Above Enforcement Standard
E3-20	38.3	Above Preventative Action Limit
E4-20	41.8	Above Enforcement Standard
E5-20	385	Above Enforcement Standard
E6-20	57.1	Above Enforcement Standard
E7-20	46.4	Above Enforcement Standard
Perfluorononanoic acid (PFNA) Enforcement Standard = 30 ng/L Preventative Action Limit = 3 ng/L		
E1-20	4.07	Above Preventative Action Limit



Boring	Test Result (ng/L)	Comment
Perfluorooctane sulfonamide (PFOSA) Enforcement Standard = 20 ng/L Preventative Action Limit = 2 ng/L		
E1-20	3.64	Above Preventative Action Limit
E3-20	4.00	Above Preventative Action Limit
E4-20	2.03	Above Preventative Action Limit
E5-20	3.37	Above Preventative Action Limit
Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) combined Enforcement Standard = 20 ng/L Preventative Action Limit = 2 ng/L EPA Health Advisory Level = 70 ng/L (ppt)		
E1-20	7.9	Above Preventative Action Limit
E2-20	332.9	Above Enforcement Standard, Above EPA Health Advisory Level
E3-20	87.6	Above Enforcement Standard, Above EPA Health Advisory Level
E4-20	57.19	Above Enforcement Standard
E5-20	308	Above Enforcement Standard, Above EPA Health Advisory Level
E6-20	57.96	Above Enforcement Standard
E7-20	27.15	Above Enforcement Standard <sup>2</sup>

## 2. VOC Analyses Results

WDNR has established the following enforcement standards and preventative action limits in Wisconsin Administrative Code Chapter NR140 for the VOC compounds for which the water samples from the borings for Building 404 encountered detections.

Compound	Recommended WDNR Enforcement Standard (µg/L)	Recommended WDNR Preventive Action Limit (µg/L)
4-Methyl-2-pentanone	not listed	not listed
Dichlorodifluoromethane	1,000	200
Tetrahydrofuran	50	10
Toluene	800	160
Trichlorofluoromethane	not listed	not listed

<sup>2</sup>VISTA noted that the ion transition ratio for the PFOS test for the groundwater sample from Boring E7-20 is outside of the acceptance criteria.



Using the Regional Screening Level calculator on the EPA's website [[https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search)] for tap water with a Hazard Quotient of 1.0 and a target risk of  $10^{-6}$  for chronic exposure for a resident, we computed the following screening levels for these VOC's.

Compound	EPA Health Screening Level (µg/L)
4-Methyl-2-pentanone	6,260
Dichlorodifluoromethane	197
Tetrahydrofuran	3,380
Toluene	1,100
Trichlorofluoromethane	5,160

Per the WDNR recommended standards and limits and EPA level presented above, none of the water samples from the borings had results that exceed either the recommended enforcement standards, preventative action limits, or health advisory level.

#### B. Soil Samples

WDNR and DHS do not have any set standards or limits for VOCs or PFAS to apply to soil. WDNR requires that soil residual contaminant levels be determined on a site by site basis based on the type of soils present and the usage of the site per Wisconsin Administrative Code Chapter NR720. Determining soil residual contaminant levels for the VOCs or PFAS is beyond the scope of our work.

We did use the EPA Regional Screening Level calculator for tap water with a Hazard Quotient of 1.0 and a target risk of  $10^{-6}$  for chronic exposure for a resident to compute the following screening levels for the PFAS components detected in these soil borings.

Compound	Health Screening Level (mg/kg)
Perfluorohexanoic Acid (PFBA)	Not listed
Perfluorohexanoic acid (PFHxA)	Not listed
Perfluorohexanesulfonic acid (PFHxS)	Not listed
Perfluorooctanoic acid (PFOA)	1.26
Perfluorononanoic acid (PFNA)	Not listed
Perfluorooctanesulfonic acid (PFOS)	1.26

The test results of the soil samples tested from Borings E1-20 through E7-20 are below the screening levels listed for PFOA and PFOS.



## VI. CLOSING COMMENTS

Soils & Engineering Services, Inc. prepared this *Environmental Exploration Report* for the exclusive use of Mead & Hunt, Inc. to aid in the design of two new additions to Building 404 located on the Truax Air National Guard Base in the City of Madison, Dane County, Wisconsin.

Please read the *Important Information about This Geoenvironmental Report* advisory sheet enclosed in Appendix C which provides comments about how to interpret and use this *Environmental Exploration Report* for the Truax Air National Guard Base Building 404 Additions project.

Soils & Engineering Services, Inc. prepared this report for the subject project in accordance with generally accepted engineering practices at this time. Soils & Engineering Services, Inc. offers no other expressed or implied warranty.

Soils & Engineering Services, Inc. will store the soil samples obtained from the borings performed for this project for a period of 60 calendar days after the date of this report. Please advise us if we should extend this period.

**Soils & Engineering Services, Inc.** respectfully submits this *Environmental Exploration Report*, dated December 18, 2020, to **Mead & Hunt, Inc.**



# APPENDIX A

## Appendix A Contents

- Location Sketch, Drawing 507.98-1
- Notes and Legend Record for WDNR Boring Log Information Forms
- WDNR Boring Log Information Forms for Borings E1-20 through E7-20
- Laboratory Test Result Records, Figures 1 and 2







**NOTES**

1. The boundary lines between different subsurface strata, as shown on the WDNR Soil Boring Log Information Forms 4400-122 and WDNR Soil Boring Log Information Supplement Forms 4400-122a, are approximate and may be gradual.
2. The boring field log contains a description of the subsurface conditions between samples based on the equipment performance and the cuttings returned to the ground surface. The WDNR Soil Boring Log Information Forms 4400-122 and WDNR Soil Boring Log Information Supplement Forms 4400-122a contains the description of the subsurface conditions as interpreted by a geotechnical engineer and/or a geologist after review of the boring field logs and subsurface samples and/or laboratory test results.
3. We define "Caved Level" as the depth below the existing ground surface at a boring location where material has collapsed into the borehole following removal of the drilling tools.
4. We define "Water Level" as the depth below the existing ground surface at a boring location to the level of water in the open borehole at the time indicated unless otherwise defined on the WDNR Soil Boring Log Information Forms 4400-122 or WDNR Soil Boring Log Information Supplement Forms 4400-122a.
5. We define "at completion" for a boring as being the time when our drilling crew has completed the removal of all drilling tools from the borehole.
6. The Notes and Legend Record and the WDNR Soil Boring Log Information Forms 4400-122 and WDNR Soil Boring Log Information Supplement Forms 4400-122a are a part of the environmental report. The environmental report should be included in the bidding or reference documents.

**RELATIVE PERCENTAGE TERMS**

(Used in Material Descriptions)

no	0%
trace	<5%
few	5 to <10%
little	10 to <30%
some	30 to < 50%

**SOIL PROPERTIES LEGEND**

Pocket Penetrometer, <sup>ton</sup>/<sub>ft<sup>2</sup></sub>  
 Water Content = % moisture by weight  
 Liquid Limit = % moisture by weight  
 Plasticity Index = % moisture by weight  
 P200 = % Passing the No. 200-mesh Sieve


**RELATIVE MOISTURE TERMS AT TIME OF SAMPLING**


Frozen or F = Frozen material  
 Dry = Dusty, dry to touch, absence of moisture  
 Moist or M = Damp to touch, no visible water  
 Wet or W = Visible free water

**DRILLING METHODS LEGEND**

DP = Direct push

**SAMPLER TYPE LEGEND**

 1 3/8-inch-inside-diameter, direct push sampler

 <p><b>Soils &amp; Engineering Services, Inc.</b>                  1102 STEWART STREET • MADISON, WISCONSIN 53713                  Phone: (608) 274-7600 • 888-866-SOIL (7645)                  Fax: (608) 274-7511 • Email: soils@soils.ws                  CONSULTING CIVIL ENGINEERS SINCE 1966</p>	<p><b>NOTES AND LEGEND RECORD</b>                  Truax Air National Guard Base                  Building 404 Additions                  115<sup>th</sup> Fighter Wing                  City of Madison, Dane County, Wisconsin</p>	507.98
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E1-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 8, 2020</b>		Date Drilling Completed <b>September 8, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.2 Feet</b>		Surface Elevation <b>858.9 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E) W		Lat _____		_____ Feet <input type="checkbox"/> N _____ Feet <input type="checkbox"/> E _____ Feet <input type="checkbox"/> S _____ Feet <input type="checkbox"/> W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	48	40	1	<b>LEAN CLAY (CL)</b> — fine grained, medium plasticity fines, very dark brown, moist, <b>FILL TOPSOIL</b> , trace organics, occasional gravel-[12" thick]	CL	[Cross-hatched pattern]									chemical sample obtained M
			2	<b>SILTY SAND WITH GRAVEL (SM)</b> — fine grained, non-plastic to low plasticity fines, dark brown, moist, <b>FILL</b> , mixed with <b>LEAN CLAY (CL)</b> TOPSOIL-[24" thick]	CL SM	[Vertical lines]									
			3	<b>ORGANIC SOIL (OL/OH)</b> — non-plastic to high plasticity, very dark brown, moist	OL/OH	[Wavy pattern]									
			4	<b>SILTY SAND (SM)</b> — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with <b>POORLY-GRADED SAND (SP)</b> seams and layers, with occasional fine to coarse grained seams	SM SP	[Dotted pattern]								M-W chemical sample obtained ▼6'-9" at completion ■(caved) 7'-5" at completion	
2	48	38	7												
			8												W

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

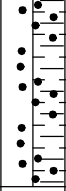
This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
Boring Number **E1-20**

SES Project Number **507.98**

Use only as an attachment to Form 4400-122.

Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	48		11 12		SM SP										
<p><b>NOTES</b></p> <p>1. Set temporary 1-inch-diameter PVC well with 5 feet of screen to 9'-0" depth. Used peristaltic pump to purge approximately 1 1/2 gallons of water. Then collected water samples from peristaltic pump discharge. Water was clear and had no odors.</p> <p>2. The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form for Boring E1-20.</p>															
			13												
			14												
			15												
			16												
			17												
			18												
			19												
			20												
			21												
			22												
			23												
			24												
			25												
			26												

Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E2-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 8, 2020</b>		Date Drilling Completed <b>September 8, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.1 Feet</b>		Surface Elevation <b>858.9 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E)W		Lat _____		_____ N _____ E _____ S _____ W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	40	48	1	<b>LEAN CLAY (CL)</b> — fine grained, medium plasticity fines, very dark brown, moist, <b>FILL TOPSOIL</b> , trace organics-[12" thick]	CL	[Cross-hatched pattern]									chemical sample obtained M
			2	<b>POORLY-GRADED SAND WITH GRAVEL (SP)</b> — fine to medium grained, brown and dark brown, moist, <b>FILL</b> -[12" thick]	SP	[Dotted pattern]									
			3	<b>ORGANIC SOIL (OL/OH)</b> — non-plastic to high plasticity, black, moist	OL/OH	[Wavy pattern]									
2	42	48	4	<b>SILTY SAND (SM)</b> — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with <b>POORLY-GRADED SAND (SP)</b> seams and layers, with occasional fine to coarse grained seams	SM SP	[Dotted pattern with dots]	[Well diagram with water table symbol]								M-W
			5												
			6												
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			9												
			10												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

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Printed on 10/20/2020

Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
 Boring Number **E2-20**

SES Project Number **507.98**

Use only as an attachment to Form 4400-122.

Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	48	42	11		SM SP										
			12												
			13	<p><b>NOTES</b></p> <p>1. Set temporary 1-inch-diameter PVC well with 5 feet of screen to 9'-6" depth. Used peristaltic pump to purge approximately 1 1/2 gallons of water. Then collected water samples from peristaltic pump discharge. Water was brown, slightly turbid, and had no odors.</p> <p>2. The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form and WDNR Soil Boring Log Information Supplement form for Boring E2-20.</p>											
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E3-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 16, 2020</b>		Date Drilling Completed <b>September 16, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.7 Feet</b>		Surface Elevation <b>859.4 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E) W		Lat _____		_____ Feet <input type="checkbox"/> N _____ Feet <input type="checkbox"/> E _____ Feet <input type="checkbox"/> S _____ Feet <input type="checkbox"/> W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments	
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200			
1	38		1	<b>LEAN CLAY (CL)</b> — fine grained, medium plasticity fines, brown, moist, <b>FILL TOPSOIL</b> , trace organics-[6" thick]	CL										chemical sample obtained	
			2	<b>SILTY GRAVEL WITH SAND (GM)</b> — fine grained, non-plastic to low plasticity fines, brown, moist, <b>FILL</b> -[9" thick]	GM											chemical sample obtained
			3	<b>LEAN CLAY (CL)</b> — medium plasticity, brown and dark brown, moist, <b>FILL</b> , mixed with <b>SILTY SAND WITH GRAVEL (SM)</b> -[33" thick]	CL SM											
2	44		4	<b>LEAN CLAY (CL)</b> — medium plasticity, grayish-green, moist	CL										chemical sample obtained	
			6	<b>SILTY SAND (SM)</b> — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with <b>POORLY-GRADED SAND (SP)</b> seams and layers, with occasional fine to coarse grained seams	SM SP											M-W
			7													
			8													W

I hereby certify that the information on this form is true and correct to the best of my knowledge.

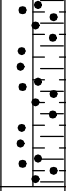
Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
Boring Number **E3-20**

SES Project Number **507.98**

Use only as an attachment to Form 4400-122.

Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	30 48		11 12		SM SP										
<p><b>NOTES</b></p> <p>1. Set temporary 3/4-inch-diameter PVC well with 5 feet of screen to 12'-0" depth. Used peristaltic pump to purge approximately 1 1/2 gallons of water. Then collected water samples from peristaltic pump discharge. Water was clear to slightly turbid and had a rotten egg odor.</p> <p>2. The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form and WDNR Soil Boring Log Information Supplement form for Boring E3-20.</p>															
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E4-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 16, 2020</b>		Date Drilling Completed <b>September 16, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.7 Feet</b>		Surface Elevation <b>859.4 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E) W		Lat _____		_____ Feet <input type="checkbox"/> N _____ Feet <input type="checkbox"/> E _____ Feet <input type="checkbox"/> S _____ Feet <input type="checkbox"/> W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	38		1	<b>SILTY SAND WITH GRAVEL (SM)</b> — fine grained, non-plastic to low plasticity fines, dark brown, moist, <b>FILL</b> , base course-[4" thick]	SM										chemical sample obtained -M
			2	<b>SANDY LEAN CLAY (CL)</b> — medium plasticity, dark brown, moist, <b>FILL</b> , mixed with <b>ORGANIC SOIL (OL/OH)</b> -[3'-8" thick]	CL OL/OH										
2	48		4	<b>ORGANIC SOIL (OL/OH)</b> — non-plastic to high plasticity, black, moist	OL/OH									chemical sample obtained -M-W	
			5	<b>SANDY LEAN CLAY (CL)</b> — medium plasticity, grayish-brown, moist	CL										
			6	<b>SILTY SAND (SM)</b> — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with <b>POORLY-GRADED SAND (SP)</b> seams and layers, with occasional fine to coarse grained seams	SM SP									▼6'-9" at completion	
			8										■(caved) 8'-0" at completion		
			10											-W	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

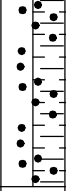


Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
Boring Number **E4-20**

SES Project Number **507.98**

Use only as an attachment to Form 4400-122.

Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	48	38	11		SM SP										
			12												
			13	<p><b>NOTES</b></p> <p>1. Set temporary 3/4-inch-diameter PVC well with 5 feet of screen to 12'-0" depth. Used peristaltic pump to purge approximately 1 1/2 gallons of water. Then collected water samples from peristaltic pump discharge. Water was brown, slightly turbid, and had no odors.</p> <p>2. The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form and WDNR Soil Boring Log Information Supplement form for Boring E4-20.</p>											
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E5-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 16, 2020</b>		Date Drilling Completed <b>September 16, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.6 Feet</b>		Surface Elevation <b>857.9 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E) W		Lat _____		_____ Feet <input type="checkbox"/> N _____ Feet <input type="checkbox"/> E _____ Feet <input type="checkbox"/> S _____ Feet <input type="checkbox"/> W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	36 -48		1-3	<b>FILL, hot mix asphalt-[3" thick]</b> <b>SILTY GRAVEL WITH SAND (GM) — fine to coarse grained, non-plastic to low plasticity fines, brown, moist, FILL-[3'-9" thick]</b>	GM										chemical sample obtained M
2	38 -48		4-8	<b>LEAN CLAY (CL) — medium plasticity, brown, moist</b>	CL										chemical sample obtained M-W
				<b>SILTY SAND (SM) — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with POORLY-GRADED SAND (SP) seams and layers, with occasional fine to coarse grained seams</b>											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

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Printed on 10/20/2020

Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
Boring Number **E5-20**

SES Project Number **507.98**

Use only as an attachment to Form 4400-122.

Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	48 44		11 12		SM SP										
<p><b>NOTES</b></p> <ol style="list-style-type: none"> <li>Set temporary 3/4-inch-diameter PVC well with 5 feet of screen to 9'-6" depth. Used peristaltic pump to purge approximately 1 gallon of water. Then collected water samples from peristaltic pump discharge. Water was brown, moderately turbid, and had a rotten egg odor.</li> <li>Poured Vista Ultra Pure water through lead probe rod with sample liner to collect the probe water blank.</li> <li>The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form and WDNR Soil Boring Log Information Supplement form for Boring E5-20.</li> </ol>															
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Page 1 of 2

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E6-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 17, 2020</b>		Date Drilling Completed <b>September 17, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.7 Feet</b>		Surface Elevation <b>858.0 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E) W		Lat _____		_____ Feet <input type="checkbox"/> N _____ Feet <input type="checkbox"/> E _____ Feet <input type="checkbox"/> S _____ Feet <input type="checkbox"/> W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	34		1-2	<b>FILL, hot mix asphalt-[3" thick]</b>	GM									chemical sample obtained M	
				<b>SILTY GRAVEL WITH SAND (GM) — fine to coarse grained, non-plastic to low plasticity fines, brown, moist, FILL-[3'-3" thick]</b>											
2	48	38	4-7	<b>SILTY SAND (SM) — fine grained, non-plastic to low plasticity fines, brown, moist, FILL, mixed with LEAN CLAY (CL)-[6" thick]</b>	CL SM							15.7	17.4	▼5'-4" at completion M-W chemical sample obtained	
				<b>SILTY SAND (SM) — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with POORLY-GRADED SAND (SP) seams and layers, with occasional fine to coarse grained seams</b>											
			8-10		SM SP									W	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

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Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
 Boring Number **E6-20**

SES Project Number **507.98**

Use only as an attachment to Form 4400-122.

Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	48	42	11		SM SP										
			12												
			13	<p><b>NOTES</b></p> <p>1. Set temporary 3/4-inch-diameter PVC well with 5 feet of screen to 12'-0" depth. Used peristaltic pump to purge approximately 1 gallon of water. Then collected water samples from peristaltic pump discharge. Water was brown, slightly turbid, and had a rotten egg odor.</p> <p>2. The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form and WDNR Soil Boring Log Information Supplement form for Boring E6-20.</p>											
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

SES Project Number **507.98**

Facility/Project Name <b>Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing</b>		License/Permit/Monitoring Number		Boring Number <b>E7-20</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Scott W. Klumb Soils &amp; Engineering Services, Inc.</b>		Date Drilling Started <b>September 17, 2020</b>		Date Drilling Completed <b>September 17, 2020</b>	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level <b>852.7 Feet</b>		Surface Elevation <b>858.5 Feet</b>		Borehole Diameter <b>2.25 in</b>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		State Plane _____ ft. N, _____ ft. E. S / C / N		Local Grid Location	
NW 1/4 of NE 1/4 of Sec. 29, T. 8 N, R. 10 (E) W		Lat _____		_____ N _____ E _____ S _____ W	
Facility ID		County <b>Dane</b>		County Code <b>13</b>	
				Civil Town/City/ or Village <b>City of Madison/Civil Township of Burke</b>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
									Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1	48	44	0-1	<b>FILL, hot mix asphalt-[4" thick]</b>	GM										chemical sample obtained M
			1-2	<b>SILTY GRAVEL WITH SAND (GM) — fine to coarse grained, non-plastic to low plasticity fines, brown, moist, FILL-[32" thick]</b>											
	48	40	2-3	<b>ORGANIC SOIL (OL/OH) — non-plastic to high plasticity, black, moist</b>	OL/OH										chemical sample obtained
			3-4	<b>LEAN CLAY (CL) — medium plasticity, brown and gray, moist</b>											
2	48	40	4-5	<b>LEAN CLAY (CL) — medium plasticity, brown and gray, moist</b>	CL										M-W 5'-9" at completion
			5-6	<b>SILTY SAND (SM) — fine grained, non-plastic to low plasticity fines, grayish-brown to brownish-gray, moist to wet, stratified, no to few gravel, with POORLY-GRADED SAND (SP) seams and layers, with occasional fine to coarse grained seams</b>											
			6-7		SM SP										W
			7-8												
			8-9												
			9-10												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig M. Bower Firm **Soils & Engineering Services, Inc.** Tel: (608) 274-7600  
1102 Stewart Street Madison, Wisconsin 53713 Fax: (608) 274-7511

Facility/Project Name **Truax Air National Guard Base, Building 404 Additions, 115<sup>th</sup> Fighter Wing**  
Boring Number **E7-20**

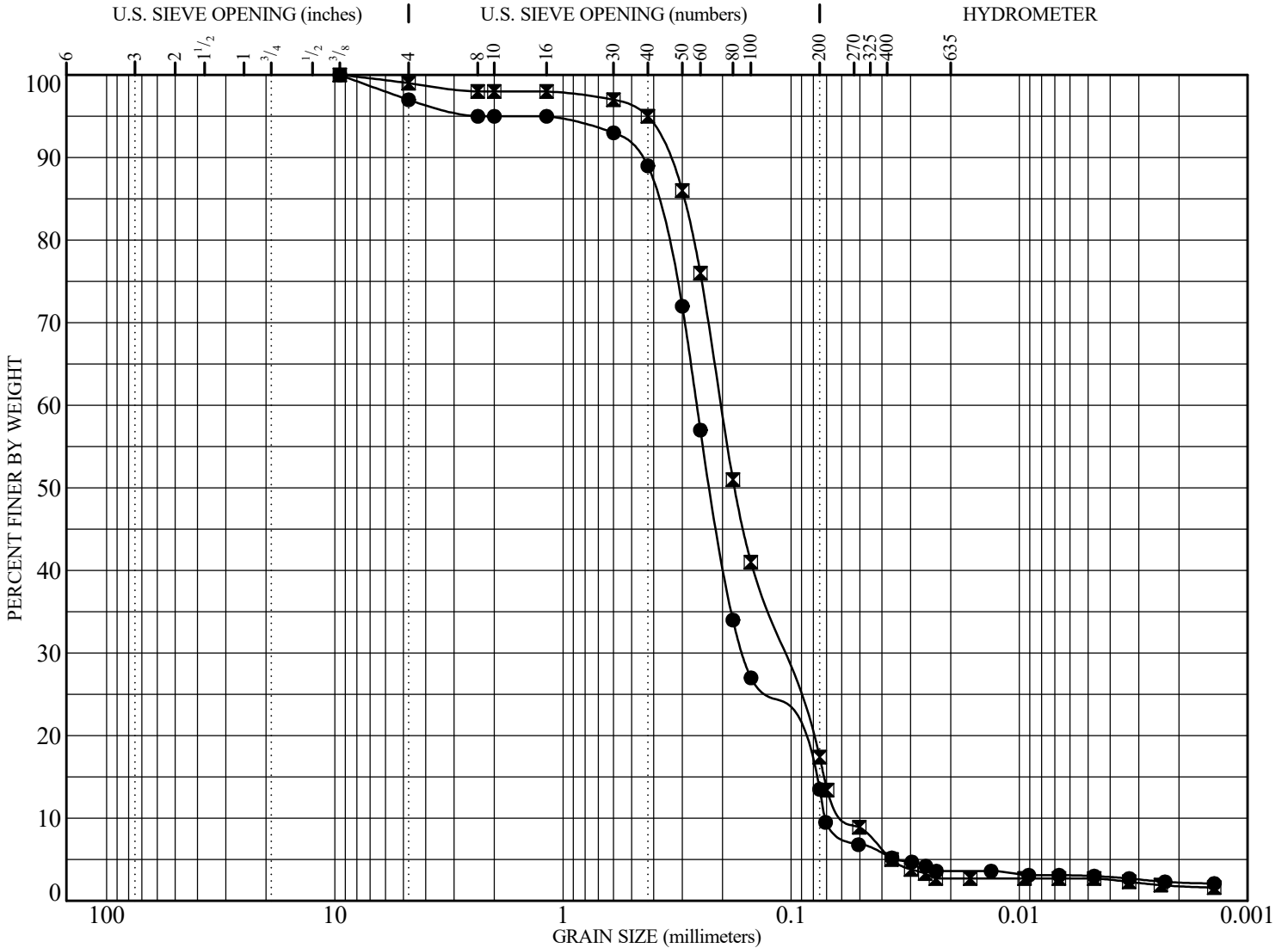
SES Project Number **507.98**

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Page **2** of **2**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID Readings	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Pocket Penetrometer	Moisture Content	Liquid Limit	Plasticity Index	P 200		
3	48 44		11 12		SM SP										
<p><b>NOTES</b></p> <p>1. Set temporary 3/4-inch-diameter PVC well with 5 feet of screen to 12'-0" depth. Used peristaltic pump to purge approximately 1 gallon of water. Then collected water samples from peristaltic pump discharge. Water was brown, slightly turbid, and had a rotten egg odor.</p> <p>2. The Notes and Legend Record is considered a part of the WDNR Soil Boring Log Information form and WDNR Soil Boring Log Information Supplement form for Boring E7-20.</p>															
			13												
			14												
			15												
			16												
			17												
			18												
			19												
			20												
			21												
			22												
			23												
			24												
			25												
			26												

# PARTICLE SIZE DISTRIBUTION ANALYSIS REPORT



COBBLES (%)	GRAVEL (%)		SAND (%)			FINES (%)	
	coarse	fine	coarse	medium	fine	SILT (%)	CLAY (%)
●	0	3	2	6	76	10.5	3.0
☒	0	1	1	3	78	14.7	2.7

Sieve Size	Percent Finer	
	●	☒
3/8-inch	100	100
#4	97	99
#8	95	98
#10	95	98
#16	95	98
#30	93	97
#40	89	95
#50	72	86
#60	57	76
#80	34	51
#100	27	41
#200	13.5	17.4

Sieve Size	Percent Finer	
	●	☒

	Grain Size (mm)			Coefficients	
	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>c</sub>	C <sub>u</sub>
●	0.26	0.16	0.071	1.4	3.7
☒	0.20	0.11	0.054	1.1	3.7

Sample Information	
●	Boring E2-20, 5'-9" Depth: <b>SILTY SAND (SM)</b> — fine grained, non-plastic to low plasticity fines, brown, moist to wet, trace gravel
☒	Boring E6-20, 5'-7" Depth: <b>SILTY SAND (SM)</b> — fine grained, non-plastic to low plasticity fines, brown, moist to wet, trace gravel

**Soils & Engineering Services, Inc.**

1102 STEWART STREET • MADISON, WISCONSIN 53713  
 Phone: (608) 274-7600 • 888-866-SOIL (7645)  
 Fax: (608) 274-7511 • Email: soils@soils.ws

CONSULTING CIVIL ENGINEERS SINCE 1966

**LABORATORY TEST RESULT RECORD**  
 Truax Air National Guard Base  
 Building 404 Additions  
 115<sup>th</sup> Fighter Wing  
 City of Madison, Dane County, Wisconsin

507.98  
FIGURE 1



# APPENDIX B

## Appendix B Contents

- CT Laboratories, LLC Analytical Report dated October 6, 2020.
- VISTA Analytical Laboratory Analytical Report dated September 25, 2020.
- CT Laboratories, LLC Analytical Report dated October 16, 2020.
- VISTA Analytical Laboratory Analytical Report dated October 15, 2020.



**ANALYTICAL REPORT**

SOILS & ENGINEERING SERVICES  
 DUANE REICHEL  
 1102 STEWART ST  
 MADISON, WI 53713

Project Name: TRUAX  
 Project Phase: BLDG 404  
 Contract #: 1560  
 Project #: 507.98  
 Folder #: 156267  
 Purchase Order #:

Page 1 of 23  
 Arrival Temperature: See COC  
 Report Date: 10/06/2020  
 Date Received: 09/08/2020  
 Reprint Date: 10/06/2020

CT LAB Sample#: 470311 Sample Description: E1-20,S1,1' Sampled: 09/08/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	86.1	%	0.1	0.1	1			09/10/2020 13:40	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.055	mg/kg	0.055	0.18	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.015	mg/kg	0.015	0.048	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.018	mg/kg	0.018	0.065	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.0092	mg/kg	0.0092	0.037	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,1-Dichloroethane	<0.0065	mg/kg	0.0065	0.021	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,1-Dichloroethene	<0.019	mg/kg	0.019	0.066	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,1-Dichloropropene	<0.028	mg/kg	0.028	0.083	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.010	mg/kg	0.010	0.034	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.037	mg/kg	0.037	0.13	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.016	mg/kg	0.016	0.054	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.010	mg/kg	0.010	0.032	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.065	mg/kg	0.065	0.22	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2-Dibromoethane	<0.0092	mg/kg	0.0092	0.037	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470311 Sample Description: E1-20,S1,1'

Sampled: 09/08/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichlorobenzene	<0.014	mg/kg	0.014	0.045	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2-Dichloroethane	<0.020	mg/kg	0.020	0.068	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,2-Dichloropropane	<0.024	mg/kg	0.024	0.079	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.012	mg/kg	0.012	0.041	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,3-Dichloropropane	<0.013	mg/kg	0.013	0.044	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.014	mg/kg	0.014	0.047	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
2,2-Dichloropropane	<0.019	mg/kg	0.019	0.065	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
2-Butanone	<0.37	mg/kg	0.37	1.1	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
2-Chlorotoluene	<0.017	mg/kg	0.017	0.054	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
2-Hexanone	<0.18	mg/kg	0.18	0.65	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
4-Chlorotoluene	<0.014	mg/kg	0.014	0.045	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.17	mg/kg	0.17	0.56	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Acetone	<0.37	mg/kg	0.37	1.2	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Benzene	<0.010	mg/kg	0.010	0.032	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Bromobenzene	<0.015	mg/kg	0.015	0.048	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Bromochloromethane	<0.016	mg/kg	0.016	0.054	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Bromodichloromethane	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Bromoform	<0.055	mg/kg	0.055	0.18	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Bromomethane	<0.083	mg/kg	0.083	0.28	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Carbon disulfide	<0.037	mg/kg	0.037	0.11	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Carbon tetrachloride	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Chlorobenzene	<0.0092	mg/kg	0.0092	0.030	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Chloroethane	<0.028	mg/kg	0.028	0.11	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Chloroform	<0.015	mg/kg	0.015	0.049	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C

CT LAB Sample#: 470311 Sample Description: E1-20,S1,1'

Sampled: 09/08/2020 10:15

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloromethane	<0.028	mg/kg	0.028	0.092	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.025	mg/kg	0.025	0.083	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.013	mg/kg	0.013	0.044	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Dibromochloromethane	<0.037	mg/kg	0.037	0.13	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Dibromomethane	<0.019	mg/kg	0.019	0.065	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Dichlorodifluoromethane	<0.046	mg/kg	0.046	0.16	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Diisopropyl ether	<0.017	mg/kg	0.017	0.056	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Ethylbenzene	<0.010	mg/kg	0.010	0.032	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Hexachlorobutadiene	<0.021	mg/kg	0.021	0.072	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Isopropylbenzene	<0.012	mg/kg	0.012	0.040	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
m & p-Xylene	<0.023	mg/kg	0.023	0.076	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Methyl tert-butyl ether	<0.015	mg/kg	0.015	0.049	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Methylene chloride	<0.055	mg/kg	0.055	0.19	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
n-Butylbenzene	<0.016	mg/kg	0.016	0.051	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
n-Propylbenzene	<0.012	mg/kg	0.012	0.039	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Naphthalene	<0.014	mg/kg	0.014	0.045	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
o-Xylene	<0.0065	mg/kg	0.0065	0.020	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
p-Isopropyltoluene	<0.012	mg/kg	0.012	0.041	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
sec-Butylbenzene	<0.010	mg/kg	0.010	0.032	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Styrene	<0.015	mg/kg	0.015	0.048	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
tert-Butylbenzene	<0.011	mg/kg	0.011	0.038	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Tetrachloroethene	<0.010	mg/kg	0.010	0.034	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Tetrahydrofuran	<0.23	mg/kg	0.23	0.77	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Toluene	<0.015	mg/kg	0.015	0.049	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.013	mg/kg	0.013	0.043	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C

CT LAB Sample#: 470311 Sample Description: E1-20,S1,1'

Sampled: 09/08/2020 1015

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,3-Dichloropropene	<0.037	mg/kg	0.037	0.11	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Trichloroethene	<0.018	mg/kg	0.018	0.057	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Trichlorofluoromethane	<0.037	mg/kg	0.037	0.11	1	M	09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C
Vinyl chloride	<0.018	mg/kg	0.018	0.059	1		09/09/2020 11:30	09/17/2020 09:47	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	
PFOS	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	

CT LAB Sample#: 470312 Sample Description: E1-20,S2,6'

Sampled: 09/08/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	<b>91.2</b>	%	0.1	0.1	1			09/10/2020 13:40	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.073	mg/kg	0.073	0.24	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.063	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.024	mg/kg	0.024	0.085	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.049	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,1-Dichloroethane	<0.0085	mg/kg	0.0085	0.028	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.086	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,1-Dichloropropene	<0.036	mg/kg	0.036	0.11	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.045	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.049	mg/kg	0.049	0.17	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.021	mg/kg	0.021	0.070	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C

CT LAB Sample#: 470312 Sample Description: E1-20,S2,6'

Sampled: 09/08/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.085	mg/kg	0.085	0.29	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.049	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2-Dichloroethane	<0.027	mg/kg	0.027	0.090	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,2-Dichloropropane	<0.032	mg/kg	0.032	0.10	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.055	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.058	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.062	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.085	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
2-Butanone	<0.49	mg/kg	0.49	1.5	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.072	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.85	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.74	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Acetone	<0.49	mg/kg	0.49	1.6	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.063	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Bromochloromethane	<0.021	mg/kg	0.021	0.070	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.056	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Bromoform	<0.073	mg/kg	0.073	0.23	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Carbon disulfide	<0.049	mg/kg	0.049	0.15	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.055	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470312 Sample Description: E1-20,S2,6'

Sampled: 09/08/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.012	mg/kg	0.012	0.039	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.15	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Chloroform	<0.019	mg/kg	0.019	0.064	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.033	mg/kg	0.033	0.11	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.058	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Dibromochloromethane	<0.049	mg/kg	0.049	0.17	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.085	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Dichlorodifluoromethane	<0.061	mg/kg	0.061	0.21	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.074	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.095	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.052	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.099	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.064	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Methylene chloride	<0.073	mg/kg	0.073	0.25	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
n-Butylbenzene	<0.021	mg/kg	0.021	0.067	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.051	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
o-Xylene	<0.0085	mg/kg	0.0085	0.027	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.063	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
tert-Butylbenzene	<0.015	mg/kg	0.015	0.050	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.045	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470312 Sample Description: E1-20,S2,6'

Sampled: 09/08/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrahydrofuran	<0.30	mg/kg	0.30	1.0	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.064	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.057	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.049	mg/kg	0.049	0.15	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.075	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Trichlorofluoromethane	<0.049	mg/kg	0.049	0.15	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.078	1		09/09/2020 11:30	09/17/2020 10:17	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	
PFOS	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	

CT LAB Sample#: 470313 Sample Description: E1-20

Sampled: 09/08/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/17/2020 21:48	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/17/2020 21:48	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/17/2020 21:48	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/17/2020 21:48	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/17/2020 21:48	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/17/2020 21:48	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C



CT LAB Sample#: 470313 Sample Description: E1-20

Sampled: 09/08/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			09/17/2020 21:48	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			09/17/2020 21:48	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			09/17/2020 21:48	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			09/17/2020 21:48	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			09/17/2020 21:48	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			09/17/2020 21:48	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			09/17/2020 21:48	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			09/17/2020 21:48	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			09/17/2020 21:48	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			09/17/2020 21:48	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			09/17/2020 21:48	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			09/17/2020 21:48	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			09/17/2020 21:48	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			09/17/2020 21:48	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1			09/17/2020 21:48	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			09/17/2020 21:48	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			09/17/2020 21:48	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			09/17/2020 21:48	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			09/17/2020 21:48	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			09/17/2020 21:48	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			09/17/2020 21:48	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			09/17/2020 21:48	RLD	EPA 8260C

CT LAB Sample#: 470313 Sample Description: E1-20

Sampled: 09/08/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/17/2020	21:48	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/17/2020	21:48	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/17/2020	21:48	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/17/2020	21:48	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/17/2020	21:48	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/17/2020	21:48	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/17/2020	21:48	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/17/2020	21:48	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/17/2020	21:48	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/17/2020	21:48	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/17/2020	21:48	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/17/2020	21:48	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/17/2020	21:48	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/17/2020	21:48	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/17/2020	21:48	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/17/2020	21:48	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/17/2020	21:48	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470313 Sample Description: E1-20 Sampled: 09/08/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			09/17/2020 21:48	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			09/17/2020 21:48	RLD	EPA 8260C
Toluene	<b>0.22</b>	ug/L	0.21 *	0.69	1			09/17/2020 21:48	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/17/2020 21:48	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			09/17/2020 21:48	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/17/2020 21:48	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			09/17/2020 21:48	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/17/2020 21:48	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	
PFOS	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	

CT LAB Sample#: 470314 Sample Description: E2-20,S1,1' Sampled: 09/08/2020 1225

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	<b>87.6</b>	%	0.1	0.1	1			09/10/2020 13:40	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.052	mg/kg	0.052	0.17	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.014	mg/kg	0.014	0.045	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.017	mg/kg	0.017	0.061	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.0087	mg/kg	0.0087	0.035	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,1-Dichloroethane	<0.0061	mg/kg	0.0061	0.020	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,1-Dichloroethene	<0.018	mg/kg	0.018	0.062	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C

CT LAB Sample#: 470314 Sample Description: E2-20,S1,1'

Sampled: 09/08/2020 1225

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloropropene	<0.026	mg/kg	0.026	0.079	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.0096	mg/kg	0.0096	0.032	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.035	mg/kg	0.035	0.12	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.015	mg/kg	0.015	0.051	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.0096	mg/kg	0.0096	0.031	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.061	mg/kg	0.061	0.21	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2-Dibromoethane	<0.0087	mg/kg	0.0087	0.035	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.013	mg/kg	0.013	0.043	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2-Dichloroethane	<0.019	mg/kg	0.019	0.065	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,2-Dichloropropane	<0.023	mg/kg	0.023	0.075	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.011	mg/kg	0.011	0.038	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.012	mg/kg	0.012	0.039	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,3-Dichloropropane	<0.012	mg/kg	0.012	0.042	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.013	mg/kg	0.013	0.045	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
2,2-Dichloropropane	<0.018	mg/kg	0.018	0.061	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
2-Butanone	<0.35	mg/kg	0.35	1.0	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
2-Chlorotoluene	<0.016	mg/kg	0.016	0.051	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
2-Hexanone	<0.17	mg/kg	0.17	0.61	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
4-Chlorotoluene	<0.013	mg/kg	0.013	0.043	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.16	mg/kg	0.16	0.53	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Acetone	<0.35	mg/kg	0.35	1.1	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Benzene	<0.0096	mg/kg	0.0096	0.031	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Bromobenzene	<0.014	mg/kg	0.014	0.045	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Bromochloromethane	<0.015	mg/kg	0.015	0.051	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Bromodichloromethane	<0.012	mg/kg	0.012	0.040	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C

CT LAB Sample#: 470314 Sample Description: E2-20,S1,1'

Sampled: 09/08/2020 1225

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromoform	<0.052	mg/kg	0.052	0.17	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Bromomethane	<0.079	mg/kg	0.079	0.26	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Carbon disulfide	<0.035	mg/kg	0.035	0.10	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Carbon tetrachloride	<0.012	mg/kg	0.012	0.039	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Chlorobenzene	<0.0087	mg/kg	0.0087	0.028	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Chloroethane	<0.026	mg/kg	0.026	0.10	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Chloroform	<0.014	mg/kg	0.014	0.046	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Chloromethane	<0.026	mg/kg	0.026	0.087	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.024	mg/kg	0.024	0.079	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.012	mg/kg	0.012	0.042	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Dibromochloromethane	<0.035	mg/kg	0.035	0.12	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Dibromomethane	<0.018	mg/kg	0.018	0.061	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Dichlorodifluoromethane	<0.044	mg/kg	0.044	0.15	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Diisopropyl ether	<0.016	mg/kg	0.016	0.053	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Ethylbenzene	<0.0096	mg/kg	0.0096	0.031	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Hexachlorobutadiene	<0.020	mg/kg	0.020	0.068	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Isopropylbenzene	<0.011	mg/kg	0.011	0.038	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
m & p-Xylene	<0.022	mg/kg	0.022	0.072	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Methyl tert-butyl ether	<0.014	mg/kg	0.014	0.046	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Methylene chloride	<0.052	mg/kg	0.052	0.18	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
n-Butylbenzene	<0.015	mg/kg	0.015	0.048	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
n-Propylbenzene	<0.011	mg/kg	0.011	0.037	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Naphthalene	<0.013	mg/kg	0.013	0.043	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
o-Xylene	<0.0061	mg/kg	0.0061	0.019	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
p-Isopropyltoluene	<0.011	mg/kg	0.011	0.038	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470314 Sample Description: E2-20,S1,1'

Sampled: 09/08/2020 1225

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
sec-Butylbenzene	<0.0096	mg/kg	0.0096	0.031	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Styrene	<0.014	mg/kg	0.014	0.045	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
tert-Butylbenzene	<0.010	mg/kg	0.010	0.036	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Tetrachloroethene	<0.0096	mg/kg	0.0096	0.032	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Tetrahydrofuran	<0.22	mg/kg	0.22	0.72	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Toluene	<0.014	mg/kg	0.014	0.046	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.012	mg/kg	0.012	0.041	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.035	mg/kg	0.035	0.10	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Trichloroethene	<0.017	mg/kg	0.017	0.054	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Trichlorofluoromethane	<0.035	mg/kg	0.035	0.10	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C
Vinyl chloride	<0.017	mg/kg	0.017	0.056	1		09/09/2020 11:30	09/17/2020 10:46	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	
PFOS	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	

CT LAB Sample#: 470315 Sample Description: E2-20,S2,6 1/2'

Sampled: 09/08/2020 1235

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	<b>88.8</b>	%	0.1	0.1	1			09/10/2020 13:40	TMG	EPA 8000C
Total Organic Carbon	<b>19900</b>	mg/kg	41	140	1			09/30/2020 13:23	KMT	L-Kahn/9060A
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.069	mg/kg	0.069	0.23	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.060	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C

CT LAB Sample#: 470315 Sample Description: E2-20,S2,6 1/2'

Sampled: 09/08/2020 1235

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1,2,2-Tetrachloroethane	<0.023	mg/kg	0.023	0.081	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.046	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,1-Dichloroethane	<0.0081	mg/kg	0.0081	0.026	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,1-Dichloroethene	<0.024	mg/kg	0.024	0.082	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,1-Dichloropropene	<0.035	mg/kg	0.035	0.10	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.043	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.046	mg/kg	0.046	0.16	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.020	mg/kg	0.020	0.067	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.040	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.081	mg/kg	0.081	0.28	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.046	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.017	mg/kg	0.017	0.056	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2-Dichloroethane	<0.025	mg/kg	0.025	0.085	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,2-Dichloropropane	<0.030	mg/kg	0.030	0.099	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.015	mg/kg	0.015	0.051	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.016	mg/kg	0.016	0.052	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,3-Dichloropropane	<0.016	mg/kg	0.016	0.055	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	mg/kg	0.017	0.059	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
2,2-Dichloropropane	<0.024	mg/kg	0.024	0.081	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
2-Butanone	<0.46	mg/kg	0.46	1.4	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
2-Chlorotoluene	<0.021	mg/kg	0.021	0.068	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
2-Hexanone	<0.23	mg/kg	0.23	0.81	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
4-Chlorotoluene	<0.017	mg/kg	0.017	0.056	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.21	mg/kg	0.21	0.70	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Acetone	<0.46	mg/kg	0.46	1.5	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470315 Sample Description: E2-20,S2,6 1/2'

Sampled: 09/08/2020 1235

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Benzene	<0.013	mg/kg	0.013	0.040	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.060	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Bromochloromethane	<0.020	mg/kg	0.020	0.067	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Bromodichloromethane	<0.016	mg/kg	0.016	0.053	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Bromoform	<0.069	mg/kg	0.069	0.22	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Bromomethane	<0.10	mg/kg	0.10	0.35	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Carbon disulfide	<0.046	mg/kg	0.046	0.14	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Carbon tetrachloride	<0.016	mg/kg	0.016	0.052	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Chlorobenzene	<0.012	mg/kg	0.012	0.037	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Chloroethane	<0.035	mg/kg	0.035	0.14	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.061	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Chloromethane	<0.035	mg/kg	0.035	0.12	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.031	mg/kg	0.031	0.10	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.016	mg/kg	0.016	0.055	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Dibromochloromethane	<0.046	mg/kg	0.046	0.16	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Dibromomethane	<0.024	mg/kg	0.024	0.081	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Dichlorodifluoromethane	<0.058	mg/kg	0.058	0.20	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Diisopropyl ether	<0.021	mg/kg	0.021	0.070	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.040	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Hexachlorobutadiene	<0.026	mg/kg	0.026	0.090	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Isopropylbenzene	<0.015	mg/kg	0.015	0.050	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
m & p-Xylene	<0.029	mg/kg	0.029	0.094	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.061	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Methylene chloride	<0.069	mg/kg	0.069	0.24	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
n-Butylbenzene	<0.020	mg/kg	0.020	0.063	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis



CT LAB Sample#: 470315 Sample Description: E2-20,S2,6 1/2'

Sampled: 09/08/2020 1235

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
n-Propylbenzene	<0.015	mg/kg	0.015	0.048	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Naphthalene	<0.017	mg/kg	0.017	0.056	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
o-Xylene	<0.0081	mg/kg	0.0081	0.025	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
p-Isopropyltoluene	<0.015	mg/kg	0.015	0.051	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.040	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Styrene	<0.018	mg/kg	0.018	0.060	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
tert-Butylbenzene	<0.014	mg/kg	0.014	0.047	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.043	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Tetrahydrofuran	<0.29	mg/kg	0.29	0.96	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.061	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.016	mg/kg	0.016	0.054	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.046	mg/kg	0.046	0.14	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Trichloroethene	<0.022	mg/kg	0.022	0.071	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Trichlorofluoromethane	<0.046	mg/kg	0.046	0.14	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C
Vinyl chloride	<0.022	mg/kg	0.022	0.074	1		09/09/2020 11:30	09/17/2020 11:15	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	
PFOS	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	

CT LAB Sample#: 470316 Sample Description: E2-20

Sampled: 09/08/2020 1255

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/17/2020 22:17	RLD	EPA 8260C

**Organic Results**

CT LAB Sample#: 470316 Sample Description: E2-20

Sampled: 09/08/2020 1255

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/17/2020 22:17	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/17/2020 22:17	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/17/2020 22:17	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/17/2020 22:17	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/17/2020 22:17	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			09/17/2020 22:17	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			09/17/2020 22:17	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			09/17/2020 22:17	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			09/17/2020 22:17	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			09/17/2020 22:17	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			09/17/2020 22:17	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			09/17/2020 22:17	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			09/17/2020 22:17	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			09/17/2020 22:17	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1			09/17/2020 22:17	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			09/17/2020 22:17	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			09/17/2020 22:17	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			09/17/2020 22:17	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			09/17/2020 22:17	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470316 Sample Description: E2-20

Sampled: 09/08/2020 1255

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Acetone	<4.0	ug/L	4.0	12	1		09/17/2020	22:17	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1		09/17/2020	22:17	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1		09/17/2020	22:17	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1		09/17/2020	22:17	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1		09/17/2020	22:17	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1		09/17/2020	22:17	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1		09/17/2020	22:17	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1		09/17/2020	22:17	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/17/2020	22:17	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/17/2020	22:17	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/17/2020	22:17	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/17/2020	22:17	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/17/2020	22:17	RLD	EPA 8260C
Dichlorodifluoromethane	<b>2.2</b>	ug/L	0.40	1.3	1		09/17/2020	22:17	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/17/2020	22:17	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/17/2020	22:17	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/17/2020	22:17	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1		09/17/2020	22:17	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/17/2020	22:17	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470316 Sample Description: E2-20 Sampled: 09/08/2020 1255

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			09/17/2020 22:17	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			09/17/2020 22:17	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			09/17/2020 22:17	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			09/17/2020 22:17	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			09/17/2020 22:17	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			09/17/2020 22:17	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			09/17/2020 22:17	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			09/17/2020 22:17	RLD	EPA 8260C
Toluene	<b>0.22</b>	ug/L	0.21 *	0.69	1			09/17/2020 22:17	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/17/2020 22:17	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1			09/17/2020 22:17	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/17/2020 22:17	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			09/17/2020 22:17	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/17/2020 22:17	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	
PFOS	<b>ATTACHED</b>		N/A	N/A	1			09/28/2020 00:00	SUB	

CT LAB Sample#: 470317 Sample Description: TRIP BLANK Sampled: 09/08/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
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**Organic Results**

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470317 Sample Description: TRIP BLANK

Sampled: 09/08/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1		09/17/2020	11:23	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1		09/17/2020	11:23	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1		09/17/2020	11:23	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1		09/17/2020	11:23	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1		09/17/2020	11:23	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1		09/17/2020	11:23	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1		09/17/2020	11:23	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1		09/17/2020	11:23	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1		09/17/2020	11:23	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1		09/17/2020	11:23	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1		09/17/2020	11:23	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1		09/17/2020	11:23	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1		09/17/2020	11:23	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1		09/17/2020	11:23	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1		09/17/2020	11:23	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1		09/17/2020	11:23	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1		09/17/2020	11:23	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1		09/17/2020	11:23	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1		09/17/2020	11:23	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 470317 Sample Description: TRIP BLANK

Sampled: 09/08/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1		09/17/2020	11:23	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1		09/17/2020	11:23	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1		09/17/2020	11:23	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1		09/17/2020	11:23	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1		09/17/2020	11:23	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1		09/17/2020	11:23	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1		09/17/2020	11:23	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1		09/17/2020	11:23	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1		09/17/2020	11:23	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/17/2020	11:23	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/17/2020	11:23	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/17/2020	11:23	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/17/2020	11:23	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/17/2020	11:23	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/17/2020	11:23	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/17/2020	11:23	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/17/2020	11:23	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/17/2020	11:23	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C

CT LAB Sample#: 470317 Sample Description: TRIP BLANK

Sampled: 09/08/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/17/2020	11:23	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/17/2020	11:23	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/17/2020	11:23	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/17/2020	11:23	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/17/2020	11:23	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/17/2020	11:23	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/17/2020	11:23	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1		09/17/2020	11:23	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1		09/17/2020	11:23	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1		09/17/2020	11:23	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1		09/17/2020	11:23	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1		09/17/2020	11:23	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1		09/17/2020	11:23	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1		09/17/2020	11:23	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1		09/17/2020	11:23	RLD	EPA 8260C

**Notes regarding entire Chain of Custody:**

Notes: \* Indicates a value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution and also any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals  
 Project Manager  
 608-356-2760

**QC Qualifiers**

<u>Code</u>	<u>Description</u>
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

**Current CT Laboratories Certifications**

Wisconsin (WDNR) Chemistry ID# 157066030  
 Wisconsin (DATCP) Bacteriology ID# 289  
 Louisiana NELAP (primary) ID# ACC20190002  
 Illinois NELAP Lab ID# 200073  
 Kansas NELAP Lab ID# E-10368  
 Virginia NELAP Lab ID# 460203  
 ISO/IEC 17025-2005 A2LA Cert # 3806.01  
 DoD-ELAP A2LA 3806.01  
 GA EPD Stipulation ID ACC20190002



September 25, 2020

**Vista Work Order No. 2001925**

Mr. Eric Korthals  
C T Laboratories  
1230 Lange Court  
Baraboo, WI 53913-3109

Dear Mr. Korthals,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on September 10, 2020 under your Project Name 'TRUAX'.

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](mailto:mmaier@vista-analytical.com).

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

Sincerely,

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 Work Order No. 2001925**

### **Case Narrative**

#### **Sample Condition on Receipt:**

Four soil samples and two groundwater 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. The analytical procedures followed the State of Wisconsin requirements.

#### **Analytical Notes:**

##### **PFAS Isotope Dilution Method - Soil**

The soil samples were extracted and analyzed for a selected list of PFAS using Vista's Isotope Dilution Method. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

##### Holding Times

The samples were extracted and analyzed within the hold times.

##### Quality Control

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

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

The internal standard recoveries outside the acceptance criteria are listed in the table below.

##### **PFAS Isotope Dilution Method - Aqueous**

The aqueous samples contained particulate and were centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of PFAS using Vista's PFAS Isotope Dilution Method. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

##### Holding Times

The samples were extracted and analyzed within the hold times.

##### Quality Control

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

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with each preparation batch. No analytes were detected in the Method Blanks above the Reporting Limit. The OPR recoveries were within the method acceptance criteria.

The recoveries of all internal standards in the QC and field samples were within the acceptance criteria.

#### QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
2001925-04	E2-20,S1,1'	PFAS Isotope Dilution Method	13C2-PFHxDA	H	23.2
2001925-05	E2-20,S2,6 1/2'	PFAS Isotope Dilution Method	d3-MeFOSA	H	9.90
2001925-05	E2-20,S2,6 1/2'	PFAS Isotope Dilution Method	d5-EtFOSA	H	9.50

H = Recovery was outside laboratory acceptance criteria.

## TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	4
Sample Inventory.....	5
Analytical Results.....	6
Qualifiers.....	29
Certifications.....	30
Sample Receipt.....	33

# Sample Inventory Report

<b>Vista Sample ID</b>	<b>Client Sample ID</b>	<b>Sampled</b>	<b>Received</b>	<b>Components/Containers</b>
2001925-01	E1-20,S1,1'	08-Sep-20 10:15	10-Sep-20 09:46	HDPE Jar, 6 oz
2001925-02	E1-20,S2,6'	08-Sep-20 10:20	10-Sep-20 09:46	HDPE Jar, 6 oz
2001925-03	E1-20	08-Sep-20 10:55	10-Sep-20 09:46	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001925-04	E2-20,S1,1'	08-Sep-20 12:25	10-Sep-20 09:46	HDPE Jar, 6 oz
2001925-05	E2-20,S2,6 1/2'	08-Sep-20 12:35	10-Sep-20 09:46	HDPE Jar, 6 oz
2001925-06	E2-20	08-Sep-20 12:55	10-Sep-20 09:46	HDPE Bottle, 250 mL HDPE Bottle, 250 mL

## **ANALYTICAL RESULTS**

Sample ID: Method Blank					PFAS Isotope Dilution Method					
Client Data				Laboratory Data						
Name:	C T Laboratories	Matrix:	Solid	Lab Sample:	B0I0116-BLK1	Column:	BEH C18			
Project:	TRUAX									
Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.346	0.346	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFPeA	2706-90-3	<0.398	0.398	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFBS	375-73-5	<0.304	0.304	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
4:2 FTS	757124-72-4	<0.360	0.360	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFHxA	307-24-4	<0.216	0.216	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFPeS	2706-91-4	<0.658	0.658	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
HFPO-DA	13252-13-6	<1.18	1.18	1.50		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFHpA	375-85-9	<0.478	0.478	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
ADONA	919005-14-4	<0.340	0.340	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFHxS	355-46-4	<0.390	0.390	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
6:2 FTS	27619-97-2	<0.654	0.654	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFOA	335-67-1	<0.470	0.470	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFHpS	375-92-8	<0.738	0.738	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFNA	375-95-1	<0.312	0.312	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFOSA	754-91-6	<1.01	1.01	1.50		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFOS	1763-23-1	<0.430	0.430	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
9CI-PF3ONS	756426-58-1	<0.370	0.370	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFDA	335-76-2	<0.452	0.452	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
8:2 FTS	39108-34-4	<0.722	0.722	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFNS	68259-12-1	<1.15	1.15	1.50		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
MeFOSAA	2355-31-9	<0.736	0.736	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
EtFOSAA	2991-50-6	<0.688	0.688	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFUnA	2058-94-8	<0.258	0.258	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFDS	335-77-3	<0.690	0.690	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
11CI-PF3OUdS	763051-92-9	<0.722	0.722	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
10:2 FTS	120226-60-0	<1.02	1.02	1.50		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFDoA	307-55-1	<0.404	0.404	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
MeFOSA	31506-32-8	<5.78	5.78	10.0		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFTTrDA	72629-94-8	<0.402	0.402	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFDoS	79780-39-5	<0.600	0.600	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFTeDA	376-06-7	<0.264	0.264	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
EtFOSA	4151-50-2	<3.84	3.84	10.0		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFHxDA	67905-19-5	<0.170	0.170	0.500		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
PFODA	16517-11-6	<0.500	0.500	1.00		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
MeFOSE	24448-09-7	<4.96	4.96	10.0		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
EtFOSE	1691-99-2	<5.38	5.38	10.0		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBA	IS	80.5	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1	

**Sample ID: Method Blank** **PFAS Isotope Dilution Method**

<b>Client Data</b>				<b>Laboratory Data</b>			
Name:	C T Laboratories	Matrix:	Solid	Lab Sample:	B0I0116-BLK1	Column:	BEH C18
Project:	TRUAX						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	66.5	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C3-PFBS	IS	71.5	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C3-HFPO-DA	IS	76.2	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-4:2 FTS	IS	75.6	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFHxA	IS	68.2	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C4-PFHpA	IS	72.7	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C3-PFHxS	IS	71.9	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-6:2 FTS	IS	80.2	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C5-PFNA	IS	69.2	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C8-PFOA	IS	48.0	10 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFOA	IS	65.8	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C8-PFOS	IS	75.0	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFDA	IS	59.5	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-8:2 FTS	IS	63.4	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
d3-MeFOSAA	IS	45.9	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFUnA	IS	51.8	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
d5-EtFOSAA	IS	51.8	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-10:2 FTS	IS	58.6	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFDoA	IS	52.2	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
d3-MeFOSA	IS	10.7	10 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFTeDA	IS	54.0	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
d5-EtFOSA	IS	10.1	10 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
13C2-PFHxDA	IS	50.4	25 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
d7-MeFOSE	IS	38.2	10 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1
d9-EtFOSE	IS	35.1	10 - 150		B0I0116	17-Sep-20	1.00 g	21-Sep-20 12:54	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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:	C T Laboratories	Matrix:	Solid		Lab Sample:	B0I0116-BS1	Column:	BEH C18				
Project:	TRUAX											

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	1.95	2.00	97.3	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFPeA	2706-90-3	1.92	2.00	96.1	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFBS	375-73-5	1.82	2.00	91.2	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
4:2 FTS	757124-72-4	1.85	2.00	92.4	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFHxA	307-24-4	1.95	2.00	97.5	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFPeS	2706-91-4	2.00	2.00	100	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
HFPO-DA	13252-13-6	1.80	2.00	89.9	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFHpA	375-85-9	1.97	2.00	98.3	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
ADONA	919005-14-4	1.90	2.00	94.8	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFHxS	355-46-4	2.18	2.00	109	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
6:2 FTS	27619-97-2	1.98	2.00	99.1	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFOA	335-67-1	2.02	2.00	101	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFHpS	375-92-8	2.16	2.00	108	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFNA	375-95-1	1.98	2.00	99.2	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFOSA	754-91-6	2.05	2.00	103	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFOS	1763-23-1	1.88	2.00	94.0	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
9Cl-PF3ONS	756426-58-1	2.03	2.00	102	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFDA	335-76-2	2.17	2.00	109	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
8:2 FTS	39108-34-4	1.93	2.00	96.3	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFNS	68259-12-1	1.68	2.00	83.8	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
MeFOSAA	2355-31-9	1.67	2.00	83.3	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
EtFOSAA	2991-50-6	1.76	2.00	87.8	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFUnA	2058-94-8	2.08	2.00	104	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFDS	335-77-3	1.93	2.00	96.4	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
11Cl-PF3OUdS	763051-92-9	2.10	2.00	105	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
10:2 FTS	120226-60-0	2.14	2.00	107	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFDoA	307-55-1	1.64	2.00	82.0	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
MeFOSA	31506-32-8	9.66	10.0	96.6	50 - 150	J	B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFTTrDA	72629-94-8	2.00	2.00	100	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFDoS	79780-39-5	2.02	2.00	101	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFTeDA	376-06-7	2.04	2.00	102	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
EtFOSA	4151-50-2	12.2	10.0	122	50 - 150	Q	B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFHxDA	67905-19-5	1.94	2.00	97.2	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
PFODA	16517-11-6	1.30	2.00	64.8	50 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1

**Sample ID: OPR**

**PFAS Isotope Dilution Method**

Client Data					Laboratory Data						
Name:	C T Laboratories	Matrix:	Solid		Lab Sample:	B0I0116-BS1	Column:	BEH C18			
Project:	TRUAX										

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
MeFOSE	24448-09-7	9.81	10.0	98.1	50 - 150	J	B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
EtFOSE	1691-99-2	9.84	10.0	98.4	50 - 150	J	B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
Labeled Standards		Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA		IS		104	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C3-PFPeA		IS		73.2	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C3-PFBS		IS		80.1	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C3-HFPO-DA		IS		84.3	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-4:2 FTS		IS		76.5	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFHxA		IS		73.2	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C4-PFHpA		IS		77.0	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C3-PFHxS		IS		76.2	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-6:2 FTS		IS		82.0	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C5-PFNA		IS		70.3	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C8-PFOSA		IS		49.2	10 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFOA		IS		74.2	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C8-PFOS		IS		74.2	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFDA		IS		63.7	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-8:2 FTS		IS		67.8	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
d3-MeFOSAA		IS		61.9	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFUnA		IS		55.3	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
d5-EtFOSAA		IS		56.6	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-10:2 FTS		IS		62.3	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFDoA		IS		59.1	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
d3-MeFOSA		IS		13.6	10 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFTeDA		IS		52.7	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
d5-EtFOSA		IS		11.6	10 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
13C2-PFHxDA		IS		49.4	25 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
d7-MeFOSE		IS		41.0	10 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1
d9-EtFOSE		IS		43.7	10 - 150		B0I0116	17-Sep-20	1.00 g	22-Sep-20 16:20	1

**Sample ID: E1-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-01	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 10:15	Date Received:	10-Sep-20 09:46		
Location:	470311			% Solids:	72.6		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.340	0.340	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFPeA	2706-90-3	<0.391	0.391	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFBS	375-73-5	<0.299	0.299	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
4:2 FTS	757124-72-4	<0.354	0.354	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFHxA	307-24-4	<0.212	0.212	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFPeS	2706-91-4	<0.647	0.647	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFHpA	375-85-9	<0.470	0.470	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
ADONA	919005-14-4	<0.334	0.334	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFHxS	355-46-4	<0.383	0.383	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
6:2 FTS	27619-97-2	<0.643	0.643	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFOA	335-67-1	<0.462	0.462	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFHpS	375-92-8	<0.726	0.726	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFNA	375-95-1	<0.307	0.307	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFOSA	754-91-6	<0.991	0.991	1.48		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFOS	1763-23-1	<0.423	0.423	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
9Cl-PF3ONS	756426-58-1	<0.364	0.364	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFDA	335-76-2	<0.444	0.444	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
8:2 FTS	39108-34-4	<0.710	0.710	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
MeFOSAA	2355-31-9	<0.724	0.724	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
EtFOSAA	2991-50-6	<0.677	0.677	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFUnA	2058-94-8	<0.254	0.254	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFDS	335-77-3	<0.678	0.678	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
11Cl-PF3OUdS	763051-92-9	<0.710	0.710	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
10:2 FTS	120226-60-0	<0.999	0.999	1.48		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFDoA	307-55-1	<0.397	0.397	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
MeFOSA	31506-32-8	<5.68	5.68	9.83		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFTrDA	72629-94-8	<0.395	0.395	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFDoS	79780-39-5	<0.590	0.590	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFTeDA	376-06-7	<0.260	0.260	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
EtFOSA	4151-50-2	<3.78	3.78	9.83		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFHxDA	67905-19-5	<0.167	0.167	0.492		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
PFODA	16517-11-6	<0.492	0.492	0.983		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
MeFOSE	24448-09-7	<4.88	4.88	9.83		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
EtFOSE	1691-99-2	<5.29	5.29	9.83		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	85.0	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1

**Sample ID: E1-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-01	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 10:15	Date Received:	10-Sep-20 09:46		
Location:	470311			% Solids:	72.6		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	74.3	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C3-PFBS	IS	83.2	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C3-HFPO-DA	IS	85.7	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-4:2 FTS	IS	86.4	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFHxA	IS	73.9	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C4-PFHpA	IS	77.6	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C3-PFHxS	IS	76.1	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-6:2 FTS	IS	84.7	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C5-PFNA	IS	72.4	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C8-PFOA	IS	56.9	10 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFOA	IS	70.9	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C8-PFOS	IS	81.8	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFDA	IS	68.3	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-8:2 FTS	IS	77.8	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
d3-MeFOSAA	IS	64.2	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFUnA	IS	60.4	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
d5-EtFOSAA	IS	61.5	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-10:2 FTS	IS	70.0	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFDoA	IS	60.8	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
d3-MeFOSA	IS	21.6	10 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFTeDA	IS	50.6	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
d5-EtFOSA	IS	22.9	10 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
13C2-PFHxDA	IS	34.8	25 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
d7-MeFOSE	IS	51.4	10 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1
d9-EtFOSE	IS	50.7	10 - 150		B0I0116	17-Sep-20	1.40 g	21-Sep-20 13:36	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E1-20,S2,6'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-02	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 10:20	Date Received:	10-Sep-20 09:46		
Location:	470312			% Solids:	79.3		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.338	0.338	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFPeA	2706-90-3	<0.389	0.389	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFBS	375-73-5	<0.297	0.297	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
4:2 FTS	757124-72-4	<0.352	0.352	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFHxA	307-24-4	<0.211	0.211	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFPeS	2706-91-4	<0.643	0.643	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
HFPO-DA	13252-13-6	<1.15	1.15	1.47		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFHpA	375-85-9	<0.467	0.467	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
ADONA	919005-14-4	<0.332	0.332	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFHxS	355-46-4	<0.381	0.381	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
6:2 FTS	27619-97-2	<0.639	0.639	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFOA	335-67-1	<0.459	0.459	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFHpS	375-92-8	<0.721	0.721	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFNA	375-95-1	<0.305	0.305	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFOSA	754-91-6	<0.985	0.985	1.47		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFOS	1763-23-1	<0.420	0.420	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
9Cl-PF3ONS	756426-58-1	<0.361	0.361	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFDA	335-76-2	<0.442	0.442	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
8:2 FTS	39108-34-4	<0.705	0.705	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFNS	68259-12-1	<1.12	1.12	1.47		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
MeFOSAA	2355-31-9	<0.719	0.719	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
EtFOSAA	2991-50-6	<0.672	0.672	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFUnA	2058-94-8	<0.252	0.252	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFDS	335-77-3	<0.674	0.674	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
11Cl-PF3OUdS	763051-92-9	<0.705	0.705	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
10:2 FTS	120226-60-0	<0.993	0.993	1.47		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFDoA	307-55-1	<0.395	0.395	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
MeFOSA	31506-32-8	<5.65	5.65	9.77		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFTrDA	72629-94-8	<0.393	0.393	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFDoS	79780-39-5	<0.586	0.586	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFTeDA	376-06-7	<0.258	0.258	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
EtFOSA	4151-50-2	<3.75	3.75	9.77		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFHxDA	67905-19-5	<0.166	0.166	0.488		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
PFODA	16517-11-6	<0.488	0.488	0.977		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
MeFOSE	24448-09-7	<4.85	4.85	9.77		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
EtFOSE	1691-99-2	<5.26	5.26	9.77		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	90.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1

**Sample ID: E1-20,S2,6'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-02	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 10:20	Date Received:	10-Sep-20 09:46		
Location:	470312			% Solids:	79.3		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	79.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C3-PFBS	IS	90.2	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C3-HFPO-DA	IS	90.4	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-4:2 FTS	IS	87.4	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFHxA	IS	78.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C4-PFHpA	IS	82.7	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C3-PFHxS	IS	83.5	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-6:2 FTS	IS	89.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C5-PFNA	IS	79.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C8-PFOA	IS	62.0	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFOA	IS	77.1	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C8-PFOS	IS	92.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFDA	IS	76.1	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-8:2 FTS	IS	57.1	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
d3-MeFOSAA	IS	63.2	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFUnA	IS	65.7	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
d5-EtFOSAA	IS	61.7	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-10:2 FTS	IS	71.5	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFDoA	IS	67.4	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
d3-MeFOSA	IS	14.4	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFTeDA	IS	65.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
d5-EtFOSA	IS	14.0	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
13C2-PFHxDA	IS	49.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
d7-MeFOSE	IS	52.0	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1
d9-EtFOSE	IS	49.9	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 13:46	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E2-20,S1,1'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-04	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 12:25	Date Received:	10-Sep-20 09:46		
Location:	470314			% Solids:	71.2		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.335	0.335	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFPeA	2706-90-3	<0.385	0.385	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFBS	375-73-5	<0.294	0.294	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
4:2 FTS	757124-72-4	<0.349	0.349	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFHxA	307-24-4	0.396	0.209	0.484	J, Q	B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFPeS	2706-91-4	<0.637	0.637	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
HFPO-DA	13252-13-6	<1.14	1.14	1.45		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFHpA	375-85-9	<0.463	0.463	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
ADONA	919005-14-4	<0.329	0.329	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFHxS	355-46-4	0.535	0.378	0.484	Q	B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
6:2 FTS	27619-97-2	<0.633	0.633	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFOA	335-67-1	0.568	0.455	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFHpS	375-92-8	<0.715	0.715	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFNA	375-95-1	<0.302	0.302	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFOSA	754-91-6	<0.976	0.976	1.45		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFOS	1763-23-1	0.978	0.416	0.484	Q	B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
9Cl-PF3ONS	756426-58-1	<0.358	0.358	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFDA	335-76-2	<0.438	0.438	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
8:2 FTS	39108-34-4	<0.699	0.699	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFNS	68259-12-1	<1.11	1.11	1.45		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
MeFOSAA	2355-31-9	<0.713	0.713	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
EtFOSAA	2991-50-6	<0.666	0.666	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFUnA	2058-94-8	<0.250	0.250	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFDS	335-77-3	<0.668	0.668	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
11Cl-PF3OUdS	763051-92-9	<0.699	0.699	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
10:2 FTS	120226-60-0	<0.984	0.984	1.45		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFDoA	307-55-1	<0.391	0.391	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
MeFOSA	31506-32-8	<5.60	5.60	9.68		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFTrDA	72629-94-8	<0.389	0.389	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFDoS	79780-39-5	<0.581	0.581	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFTeDA	376-06-7	<0.256	0.256	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
EtFOSA	4151-50-2	<3.72	3.72	9.68		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFHxDA	67905-19-5	<0.165	0.165	0.484		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
PFODA	16517-11-6	<0.484	0.484	0.968		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
MeFOSE	24448-09-7	<4.80	4.80	9.68		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
EtFOSE	1691-99-2	<5.21	5.21	9.68		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	110	25 - 150			B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1



**Sample ID: E2-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-04	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 12:25	Date Received:	10-Sep-20 09:46		
Location:	470314			% Solids:	71.2		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	72.5	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C3-PFBS	IS	79.9	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C3-HFPO-DA	IS	78.0	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-4:2 FTS	IS	79.6	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFHxA	IS	72.6	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C4-PFHpA	IS	78.8	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C3-PFHxS	IS	81.4	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-6:2 FTS	IS	77.6	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C5-PFNA	IS	69.2	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C8-PFOA	IS	52.9	10 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFOA	IS	74.7	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C8-PFOS	IS	76.8	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFDA	IS	61.1	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-8:2 FTS	IS	84.3	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
d3-MeFOSAA	IS	60.1	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFUnA	IS	64.2	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
d5-EtFOSAA	IS	59.6	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-10:2 FTS	IS	61.6	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFDoA	IS	57.9	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
d3-MeFOSA	IS	24.0	10 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFTeDA	IS	36.7	25 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
d5-EtFOSA	IS	25.4	10 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
13C2-PFHxDA	IS	23.2	25 - 150	H	B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
d7-MeFOSE	IS	49.6	10 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1
d9-EtFOSE	IS	52.0	10 - 150		B0I0116	17-Sep-20	1.45 g	24-Sep-20 15:05	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E2-20,S2,6 1/2'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-05	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 12:35	Date Received:	10-Sep-20 09:46		
Location:	470315			% Solids:	78.6		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.341	0.341	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFPeA	2706-90-3	<0.393	0.393	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFBS	375-73-5	<0.300	0.300	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
4:2 FTS	757124-72-4	<0.355	0.355	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFHxA	307-24-4	<0.213	0.213	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFPeS	2706-91-4	<0.649	0.649	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFHpA	375-85-9	<0.472	0.472	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
ADONA	919005-14-4	<0.335	0.335	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFHxS	355-46-4	<0.385	0.385	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
6:2 FTS	27619-97-2	<0.645	0.645	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFOA	335-67-1	<0.464	0.464	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFHpS	375-92-8	<0.728	0.728	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFNA	375-95-1	<0.308	0.308	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFOSA	754-91-6	<0.995	0.995	1.48		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFOS	1763-23-1	<0.424	0.424	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
9Cl-PF3ONS	756426-58-1	<0.365	0.365	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFDA	335-76-2	<0.446	0.446	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
8:2 FTS	39108-34-4	<0.712	0.712	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
MeFOSAA	2355-31-9	<0.726	0.726	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
EtFOSAA	2991-50-6	<0.679	0.679	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFUnA	2058-94-8	<0.255	0.255	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFDS	335-77-3	<0.681	0.681	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
11Cl-PF3OUdS	763051-92-9	<0.712	0.712	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
10:2 FTS	120226-60-0	<1.00	1.00	1.48		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFDoA	307-55-1	<0.399	0.399	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
MeFOSA	31506-32-8	<5.70	5.70	9.87		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFTTrDA	72629-94-8	<0.397	0.397	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFDoS	79780-39-5	<0.592	0.592	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFTeDA	376-06-7	<0.260	0.260	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
EtFOSA	4151-50-2	<3.79	3.79	9.87		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFHxDA	67905-19-5	<0.168	0.168	0.493		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
PFODA	16517-11-6	<0.493	0.493	0.987		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
MeFOSE	24448-09-7	<4.89	4.89	9.87		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
EtFOSE	1691-99-2	<5.31	5.31	9.87		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBA	IS	84.4	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1	

**Sample ID: E2-20,S2,6 1/2'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001925-05	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 12:35	Date Received:	10-Sep-20 09:46		
Location:	470315			% Solids:	78.6		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	71.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C3-PFBS	IS	83.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C3-HFPO-DA	IS	80.9	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-4:2 FTS	IS	79.9	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFHxA	IS	73.9	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C4-PFHpA	IS	78.7	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C3-PFHxS	IS	76.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-6:2 FTS	IS	76.1	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C5-PFNA	IS	74.1	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C8-PFOA	IS	51.9	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFOA	IS	74.2	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C8-PFOS	IS	81.4	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFDA	IS	65.3	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-8:2 FTS	IS	86.2	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
d3-MeFOSAA	IS	52.0	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFUnA	IS	54.7	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
d5-EtFOSAA	IS	52.4	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-10:2 FTS	IS	63.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFDoA	IS	56.5	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
d3-MeFOSA	IS	9.90	10 - 150	H	B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFTeDA	IS	55.0	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
d5-EtFOSA	IS	9.50	10 - 150	H	B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
13C2-PFHxDA	IS	47.6	25 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
d7-MeFOSE	IS	37.2	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1
d9-EtFOSE	IS	36.9	10 - 150		B0I0116	17-Sep-20	1.29 g	21-Sep-20 14:07	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: Method Blank					PFAS Isotope Dilution Method						
Client Data				Laboratory Data							
Name:	C T Laboratories	Matrix:	Aqueous	Lab Sample:	B0I0089-BLK1	Column:	BEH C18				
Project:	TRUAX										
Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
PFBA	375-22-4	<0.365	0.365	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFPeA	2706-90-3	<0.640	0.640	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFBS	375-73-5	<0.895	0.895	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
4:2 FTS	757124-72-4	<0.695	0.695	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFHxA	307-24-4	<1.09	1.09	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFPeS	2706-91-4	<1.21	1.21	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
HFPO-DA	13252-13-6	<2.41	2.41	2.50		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFHpA	375-85-9	<0.296	0.296	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
ADONA	919005-14-4	<0.361	0.361	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFHxS	355-46-4	<0.474	0.474	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
6:2 FTS	27619-97-2	<1.00	1.00	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFOA	335-67-1	<0.326	0.326	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFHpS	375-92-8	<0.469	0.469	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFNA	375-95-1	<0.405	0.405	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFOSA	754-91-6	<0.885	0.885	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFOS	1763-23-1	<0.404	0.404	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
9Cl-PF3ONS	756426-58-1	<0.725	0.725	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFDA	335-76-2	<0.745	0.745	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
8:2 FTS	39108-34-4	<1.03	1.03	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFNS	68259-12-1	<1.94	1.94	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
MeFOSAA	2355-31-9	<0.825	0.825	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
EtFOSAA	2991-50-6	<0.685	0.685	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFUnA	2058-94-8	<0.525	0.525	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFDS	335-77-3	<0.615	0.615	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
11Cl-PF3OUdS	763051-92-9	<1.21	1.21	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
10:2 FTS	120226-60-0	<1.57	1.57	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFDoA	307-55-1	<0.396	0.396	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
MeFOSA	31506-32-8	<1.92	1.92	10.0		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFTTrDA	72629-94-8	<0.247	0.247	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFDoS	79780-39-5	<2.09	2.09	2.50		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFTeDA	376-06-7	<0.378	0.378	2.00		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
EtFOSA	4151-50-2	<2.56	2.56	10.0		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
PFHxDA	67905-19-5	0.150	0.147	2.00	J, Q	B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
MeFOSE	24448-09-7	<3.04	3.04	10.0		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
EtFOSE	1691-99-2	<4.72	4.72	10.0		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1	
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution		
13C3-PFBA	IS	70.7	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1		
13C3-PFPeA	IS	75.8	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1		

**Sample ID: Method Blank** **PFAS Isotope Dilution Method**

<b>Client Data</b>	<b>Laboratory Data</b>
Name: C T Laboratories	Lab Sample: B0I0089-BLK1
Project: TRUAX	Column: BEH C18
Matrix: Aqueous	

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	75.1	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C3-HFPO-DA	IS	62.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-4:2 FTS	IS	78.0	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFHxA	IS	77.7	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C4-PFHpA	IS	77.1	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C3-PFHxS	IS	77.6	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-6:2 FTS	IS	70.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C5-PFNA	IS	74.2	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C8-PFOA	IS	39.3	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFOA	IS	73.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C8-PFOS	IS	80.2	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFDA	IS	73.3	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-8:2 FTS	IS	77.6	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
d3-MeFOSAA	IS	66.5	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFUnA	IS	71.5	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
d5-EtFOSAA	IS	60.5	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-10:2 FTS	IS	63.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFDoA	IS	67.0	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
d3-MeFOSA	IS	17.0	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFTeDA	IS	65.2	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
d5-EtFOSA	IS	15.7	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
13C2-PFHxDA	IS	66.2	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
d7-MeFOSE	IS	34.8	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1
d9-EtFOSE	IS	34.6	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:40	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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:	C T Laboratories	Matrix:	Aqueous		Lab Sample:	B0I0089-BS1	Column:	BEH C18				
Project:	TRUAX											

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	8.27	8.00	103	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFPeA	2706-90-3	8.33	8.00	104	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFBS	375-73-5	7.71	8.00	96.4	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
4:2 FTS	757124-72-4	9.26	8.00	116	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFHxA	307-24-4	8.21	8.00	103	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFPeS	2706-91-4	8.34	8.00	104	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
HFPO-DA	13252-13-6	9.33	8.00	117	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFHpA	375-85-9	8.17	8.00	102	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
ADONA	919005-14-4	8.04	8.00	101	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFHxS	355-46-4	8.02	8.00	100	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
6:2 FTS	27619-97-2	7.52	8.00	94.0	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFOA	335-67-1	8.07	8.00	101	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFHpS	375-92-8	9.28	8.00	116	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFNA	375-95-1	8.41	8.00	105	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFOSA	754-91-6	7.81	8.00	97.7	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFOS	1763-23-1	8.79	8.00	110	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
9Cl-PF3ONS	756426-58-1	8.28	8.00	104	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFDA	335-76-2	8.46	8.00	106	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
8:2 FTS	39108-34-4	9.74	8.00	122	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFNS	68259-12-1	7.72	8.00	96.5	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
MeFOSAA	2355-31-9	8.80	8.00	110	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
EtFOSAA	2991-50-6	7.67	8.00	95.9	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFUnA	2058-94-8	7.50	8.00	93.7	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFDS	335-77-3	6.55	8.00	81.8	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
11Cl-PF3OUdS	763051-92-9	7.76	8.00	96.9	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
10:2 FTS	120226-60-0	8.21	8.00	103	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFDoA	307-55-1	7.36	8.00	92.0	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
MeFOSA	31506-32-8	42.9	40.0	107	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFTTrDA	72629-94-8	7.19	8.00	89.9	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFDoS	79780-39-5	8.40	8.00	105	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFTTeDA	376-06-7	8.50	8.00	106	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
EtFOSA	4151-50-2	39.6	40.0	98.9	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
PFHxDA	67905-19-5	8.86	8.00	111	50 - 150	B	B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
MeFOSE	24448-09-7	40.2	40.0	101	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1

**Sample ID: OPR** **PFAS Isotope Dilution Method**

Client Data					Laboratory Data						
Name:	C T Laboratories	Matrix:	Aqueous		Lab Sample:	B0I0089-BS1	Column:	BEH C18			
Project:	TRUAX										

Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
EtFOSE	1691-99-2	37.0	40.0	92.4	50 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
Labeled Standards		Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA		IS		68.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C3-PFPeA		IS		76.3	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C3-PFBS		IS		80.8	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C3-HFPO-DA		IS		69.2	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-4:2 FTS		IS		82.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFHxA		IS		77.6	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C4-PFHpA		IS		79.8	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C3-PFHxS		IS		79.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-6:2 FTS		IS		75.8	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C5-PFNA		IS		77.1	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C8-PFOA		IS		41.8	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFOA		IS		77.3	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C8-PFOS		IS		76.0	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFDA		IS		75.3	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-8:2 FTS		IS		69.3	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
d3-MeFOSAA		IS		70.7	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFUnA		IS		72.5	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
d5-EtFOSAA		IS		64.9	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-10:2 FTS		IS		65.8	40 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFDoA		IS		70.1	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
d3-MeFOSA		IS		22.0	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFTeDA		IS		61.0	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
d5-EtFOSA		IS		19.2	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
13C2-PFHxDA		IS		52.5	25 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
d7-MeFOSE		IS		36.3	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1
d9-EtFOSE		IS		37.7	10 - 150		B0I0089	13-Sep-20	0.250 L	15-Sep-20 15:50	1

Sample ID: Method Blank					PFAS Isotope Dilution Method					
Client Data				Laboratory Data						
Name:	C T Laboratories	Matrix:	Aqueous	Lab Sample:	B0I0123-BLK1	Column:	BEH C18			
Project:	TRUAX									
Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFODA	16517-11-6	<3.07	3.07	3.50		B0I0123	17-Sep-20	0.250 L	21-Sep-20 14:17	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C2-PFHxDA	IS	73.6	25 - 150		B0I0123	17-Sep-20	0.250 L	21-Sep-20 14:17	1	

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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:	C T Laboratories		Matrix:	Aqueous		Lab Sample:	B0I0123-BS1		Column:	BEH C18		
Project:	TRUAX											
Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
PFODA	16517-11-6	6.67	8.00	83.4	50 - 150		B0I0123	17-Sep-20	0.250 L	21-Sep-20 14:27	1	
Labeled Standards		Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C2-PFHxDA		IS		80.6	25 - 150		B0I0123	17-Sep-20	0.250 L	21-Sep-20 14:27	1	



**Sample ID: E1-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001925-03	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 10:55	Date Received:	10-Sep-20 09:46		
Location:	470313						

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	17.8	0.360	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFPeA	2706-90-3	13.7	0.632	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFBS	375-73-5	7.78	0.884	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
4:2 FTS	757124-72-4	<0.686	0.686	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFHxA	307-24-4	10.1	1.08	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFPeS	2706-91-4	1.24	1.19	1.98	J	B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
HFPO-DA	13252-13-6	<2.38	2.38	2.47		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFHpA	375-85-9	6.59	0.292	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
ADONA	919005-14-4	<0.357	0.357	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFHxS	355-46-4	11.6	0.468	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
6:2 FTS	27619-97-2	<0.988	0.988	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFOA	335-67-1	5.15	0.321	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFHpS	375-92-8	<0.463	0.463	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFNA	375-95-1	<0.400	0.400	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFOSA	754-91-6	3.64	0.874	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFOS	1763-23-1	2.75	0.398	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
9Cl-PF3ONS	756426-58-1	<0.716	0.716	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFDA	335-76-2	<0.736	0.736	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
8:2 FTS	39108-34-4	<1.02	1.02	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFNS	68259-12-1	<1.91	1.91	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
MeFOSAA	2355-31-9	<0.815	0.815	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
EtFOSAA	2991-50-6	<0.677	0.677	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFUnA	2058-94-8	<0.518	0.518	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFDS	335-77-3	<0.607	0.607	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
11Cl-PF3OUdS	763051-92-9	<1.19	1.19	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
10:2 FTS	120226-60-0	<1.55	1.55	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFDoA	307-55-1	<0.391	0.391	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
MeFOSA	31506-32-8	<1.89	1.89	9.88		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFTTrDA	72629-94-8	<0.244	0.244	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFDoS	79780-39-5	<2.06	2.06	2.47		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFTeDA	376-06-7	<0.373	0.373	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
EtFOSA	4151-50-2	<2.52	2.52	9.88		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFHxDA	67905-19-5	<0.145	0.145	1.98		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
PFODA	16517-11-6	<3.16	3.16	3.61		B0I0123	17-Sep-20	0.243 L	21-Sep-20 14:38	1
MeFOSE	24448-09-7	<3.00	3.00	9.88		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
EtFOSE	1691-99-2	<4.66	4.66	9.88		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	65.6	25 - 150			B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1

**Sample ID: E1-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001925-03	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 10:55	Date Received:	10-Sep-20 09:46		
Location:	470313						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	77.2	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C3-PFBS	IS	77.6	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C3-HFPO-DA	IS	70.7	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-4:2 FTS	IS	84.2	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFHxA	IS	79.1	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C4-PFHpA	IS	77.9	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C3-PFHxS	IS	76.0	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-6:2 FTS	IS	70.5	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C5-PFNA	IS	73.5	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C8-PFOA	IS	50.3	10 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFOA	IS	74.5	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C8-PFOS	IS	80.9	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFDA	IS	77.5	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-8:2 FTS	IS	72.7	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
d3-MeFOSAA	IS	77.4	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFUnA	IS	72.4	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
d5-EtFOSAA	IS	69.5	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-10:2 FTS	IS	54.3	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFDoA	IS	70.8	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
d3-MeFOSA	IS	24.6	10 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFTeDA	IS	57.6	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
d5-EtFOSA	IS	23.1	10 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
13C2-PFHxDA	IS	54.3	25 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
d7-MeFOSE	IS	49.8	10 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1
d9-EtFOSE	IS	56.6	10 - 150		B0I0089	13-Sep-20	0.253 L	15-Sep-20 16:01	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: E2-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001925-06	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 12:55	Date Received:	10-Sep-20 09:46		
Location:	470316						

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	26.5	0.356	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFPeA	2706-90-3	28.3	0.626	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFBS	375-73-5	8.60	0.875	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
4:2 FTS	757124-72-4	<0.679	0.679	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFHxA	307-24-4	33.4	1.07	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFPeS	2706-91-4	3.89	1.18	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
HFPO-DA	13252-13-6	<2.36	2.36	2.44		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFHpA	375-85-9	30.3	0.289	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
ADONA	919005-14-4	<0.353	0.353	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFHxS	355-46-4	68.7	0.463	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
6:2 FTS	27619-97-2	<0.978	0.978	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFOA	335-67-1	97.9	0.318	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFHpS	375-92-8	4.36	0.458	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFNA	375-95-1	1.87	0.396	1.96	J	B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFOSA	754-91-6	1.01	0.865	1.96	J, Q	B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFOS	1763-23-1	235	0.394	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
9Cl-PF3ONS	756426-58-1	<0.709	0.709	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFDA	335-76-2	<0.728	0.728	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
8:2 FTS	39108-34-4	1.51	1.01	1.96	J, Q	B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFNS	68259-12-1	<1.89	1.89	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
MeFOSAA	2355-31-9	<0.806	0.806	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
EtFOSAA	2991-50-6	<0.670	0.670	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFUnA	2058-94-8	<0.513	0.513	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFDS	335-77-3	<0.601	0.601	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
11Cl-PF3OUdS	763051-92-9	<1.18	1.18	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
10:2 FTS	120226-60-0	<1.53	1.53	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFDoA	307-55-1	<0.387	0.387	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
MeFOSA	31506-32-8	<1.87	1.87	9.78		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFTTrDA	72629-94-8	<0.241	0.241	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFDoS	79780-39-5	<2.04	2.04	2.44		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFTeDA	376-06-7	<0.369	0.369	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
EtFOSA	4151-50-2	<2.50	2.50	9.78		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFHxDA	67905-19-5	<0.144	0.144	1.96		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
PFODA	16517-11-6	<3.14	3.14	3.57		B0I0123	17-Sep-20	0.245 L	21-Sep-20 14:48	1
MeFOSE	24448-09-7	<2.97	2.97	9.78		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
EtFOSE	1691-99-2	<4.61	4.61	9.78		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBA	IS	59.9	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1	

**Sample ID: E2-20** **PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001925-06	Column:	BEH C18
Project:	TRUAX	Date Collected:	08-Sep-20 12:55	Date Received:	10-Sep-20 09:46		
Location:	470316						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	73.5	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C3-PFBS	IS	73.5	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C3-HFPO-DA	IS	62.5	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-4:2 FTS	IS	76.8	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFHxA	IS	75.8	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C4-PFHpA	IS	72.9	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C3-PFHxS	IS	71.7	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-6:2 FTS	IS	72.7	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C5-PFNA	IS	72.0	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C8-PFOA	IS	44.7	10 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFOA	IS	74.6	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C8-PFOS	IS	78.4	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFDA	IS	71.7	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-8:2 FTS	IS	75.4	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
d3-MeFOSAA	IS	76.3	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFUnA	IS	74.2	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
d5-EtFOSAA	IS	66.3	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-10:2 FTS	IS	61.5	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFDoA	IS	65.8	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
d3-MeFOSA	IS	21.3	10 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFTeDA	IS	56.7	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
d5-EtFOSA	IS	18.8	10 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
13C2-PFHxDA	IS	60.2	25 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
d7-MeFOSE	IS	38.5	10 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1
d9-EtFOSE	IS	39.3	10 - 150		B0I0089	13-Sep-20	0.256 L	15-Sep-20 16:11	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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
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	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
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



**Sub-Contract Laboratory Chain-of-Custody and Purchase Order**

2001925 2.6°C

**PURCHASE ORDER #** 156267 VISTA

**The PO# must appear on all invoice and reports!**

Upon Receipt of Samples, please verify that samples were received in acceptable condition then sign this form and fax to (608)356-2766 or email to the project manager. Sample temperature, upon receipt, must be recorded on this document unless thermal preservation is not a method requirement.

**Ship to:** Vista Analytical  
1104 Winfield Way  
El Dorado Hills, CA

**Return Invoice and Results to:** ekorthals@ctlaboratories.com

**Government UPS Shipping Acct ?**  Y  N

**CTLaboratories**  
Eric Korthals  
1230 Lange Court  
Baraboo WI 53913

**Ship by:** Speedee  UPS Grnd  UPS 2nd  UPS NDA

**Date Due:** STD **RUSH TURNAROUND NEEDED?** Y or  N (Circle One)

**Project Name:** TRUAX **Project State:** WI

**Analytical/QC Criteria:** NONE INDICATED  STATE  DOD QSM  NELAP (Circle one)  OTHER \_\_\_\_\_

**Report results as EDD?** N  Y (Circle one and indicate type: EXCEL, REPORT) **Data Deliverable Package LEVEL:** STD (LEVEL IV NOT NEEDED)  
NON-DETECTS TO DL

CTLabs ID#	Sample Date/Time	Matrix	Sample Description	Analyses / Method	Cost
470311	09/08/2020 1015	SOIL	E1-20,S1,1'	PFOS/PFOA	_____
470312	09/08/2020 1020	SOIL	E1-20,S2,6'	PFOS/PFOA	_____
470313	09/08/2020 1055	GROUND WATER	E1-20	PFOS/PFOA	_____
470314	09/08/2020 1225	SOIL	E2-20,S1,1'	PFOS/PFOA	_____
470315	09/08/2020 1235	SOIL	E2-20,S2,6 1/2'	PFOS/PFOA	_____
470316	09/08/2020 1255	GROUND WATER	E2-20	PFOS/PFOA	_____

**Relinquished by:** [Signature] **Date/Time:** 9-9-2020 / 0900h

**Received by:** [Signature] **Date/Time:** 9/10/20 9:46 **Receipt Temperature (C)** 2.6

**COMMENTS:** REPORT NON-DETECTS, PER STATE REQUIREMENTS, TO DETECTION LIMIT

**REPORT ALL SOLIDS ON A DRY WEIGHT BASIS UNLESS OTHERWISE INDICATED**

Form #: FPM1-01  
Effective Date: 02/15/14

# Sample Log-In Checklist

 Page # 1 of 1

 Vista Work Order #: 2001925 TAT Std

Samples Arrival:	Date/Time <u>9/10/20 9:46</u>		Initials: <u>WRW</u>		Location: <u>WR-2</u>		
					Shelf/Rack: <u>NA</u>		
Delivered By:	FedEx	<u>UPS</u>	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	<u>Ice</u>		Blue Ice		Techni Ice	Dry Ice	None
Temp °C: <u>2.6</u>	(uncorrected)		Probe used: Y / <u>N</u>		Thermometer ID: <u>IR-3</u>		
Temp °C: <u>2.6</u>	(corrected)						

	YES	NO	NA
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Custody Seals Intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Airbill <input checked="" type="checkbox"/> Trk # <u>1Z 1A4A85 01 4194 B/6</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping Container	Vista	<u>Client</u>	Retain
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chain of Custody / Sample Documentation Complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Holding Time Acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logged In:	Date/Time <u>09/10/20 13:19</u>	Initials: <u>NA</u>	Location: <u>WR-2 R-13</u> <u>↓ ↓</u> Shelf/Rack: <u>A4, E2 A-2</u>
COC Anomaly/Sample Acceptance Form completed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

# CoC/Label Reconciliation Report WO# 2001925

LabNumber	CoC Sample ID		SampleAlias	Sample Date/Time		Container	BaseMatrix	Sample Comments
2001925-01	A E1-20,S1,1'	<input checked="" type="checkbox"/>	470311	08-Sep-20 10:15	<input checked="" type="checkbox"/>	HDPE Jar, 6 oz	Solid	
2001925-02	A E1-20,S2,6'	<input checked="" type="checkbox"/>	470312	08-Sep-20 10:20	<input checked="" type="checkbox"/>	HDPE Jar, 6 oz	Solid	
2001925-03	A E1-20	<input checked="" type="checkbox"/>	470313	08-Sep-20 10:55	<input checked="" type="checkbox"/>	HDPE Bottle, 250 mL	Aqueous	
2001925-03	B E1-20	<input checked="" type="checkbox"/>	470313	08-Sep-20 10:55	<input checked="" type="checkbox"/>	HDPE Bottle, 250 mL	Aqueous	
2001925-04	A E2-20,S1,1'	<input checked="" type="checkbox"/>	470314	08-Sep-20 12:25	<input checked="" type="checkbox"/>	HDPE Jar, 6 oz	Solid	
2001925-05	A E2-20,S2,6 1/2'	<input checked="" type="checkbox"/>	470315	08-Sep-20 12:35	<input checked="" type="checkbox"/>	HDPE Jar, 6 oz	Solid	
2001925-06	A E2-20	<input checked="" type="checkbox"/>	470316	08-Sep-20 12:55	<input checked="" type="checkbox"/>	HDPE Bottle, 250 mL	Aqueous	
2001925-06	B E2-20	<input checked="" type="checkbox"/>	470316	08-Sep-20 12:55	<input checked="" type="checkbox"/>	HDPE Bottle, 250 mL	Aqueous	

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

	Yes	No	NA	Comments:
Sample Container Intact?	✓			
Sample Custody Seals Intact?			✓	
Adequate Sample Volume?	✓			
Container Type Appropriate for Analysis(es)	✓			
Preservation Documented: Na2S2O3 Trizma <u>None</u> Other		✓	✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓	

Verified by/Date: lgr 09/11/20

Company: **SOILS AND ENGINEERING SERV.**  
 Project Contact: **DUANE REICHEL**  
 Telephone: **608-274-7600**  
 Project Name: **TRUAX**  
 Project #: **507.98**  
 Location: **BLDG 404**  
 Sampled By: **GEOFF PRIOR GPP**

Folder #: **156267**  
 Company: **SOILS & ENGINEERING**  
 Project: **TRUAX**  
 Logged By: **ERC PM: ET**

1230 Lange Court, Baraboo, WI 53913  
 608-356-2760 Fax 608-356-2766  
 www.ctlaboratories.com

Report To: **DUANE REICHEL**  
 EMAIL:  
 Company: **SOILS + ENGINEERING**  
 Address: **1102 STEWART ST. MADISON WI 53713**  
 Invoice To:\*  
 EMAIL:  
 Company: **SAME**  
 Address:

Program:  
 QSM RCRA SDWA NPDES  
 Solid Waste Other  
 PO #

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

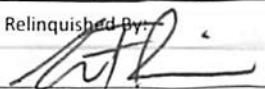
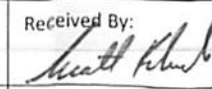
Client Special Instructions

Filtered? Y/N	ANALYSES REQUESTED												Total # Containers	Designated MS/MSD	
	SOIL PFOs	SOIL 8260 VOC	WATER PFOs	WATER VOC 8260											
N	1	2													
N	1	2													
N			1	3											
N	1	2													
N	1	2													
N			1	3											
N				1											

Turnaround Time  
Normal RUSH\*  
 Date Needed: \_\_\_\_\_  
 Rush analysis requires prior CT Laboratories' approval  
 Surcharges:  
 24 hr 200%  
 2-3 days 100%  
 4-9 days 50%

Matrix:  
 GW - groundwater SW - surface water WW - wastewater DW - drinking water  
 S - soil/sediment SL - sludge A - air M - misc/waste

Collection		Matrix	Grab/Comp	Sample #	Sample ID Description	Filtered?	Fill in Spaces with Bottles per Test												CT Lab ID # <i>Lab use only</i>
Date	Time																		
9-8-20	1015	S	G		E1-20, S1, 1'	N	1	2									470311		
	1020	S	G		E1-20, S2, 6'	N	1	2									470312		
	1055	GW	G		E1-20	N			1	3							470313		
	1225	S	G		E2-20, S1, 1'	N	1	2									470314		
	1235	S	G		E2-20, S2, 6 1/2'	N	1	2									470315		
	1255	GW	G		E2-20	N			1	3							470316		
	-	GW	G		TRIP BLANK	N				1							470317		

Relinquished By: 	Date/Time: <b>9-8-20 1450</b>	Received By: 	Date/Time: <b>9-8-20 1450</b>	Lab Use Only Ice Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temp <b>4.9</b> IR Gun <b>28</b> Cooler # <b>5421</b>
Received by:	Date/Time:	Received for Laboratory by: <b>ERC</b>	Date/Time: <b>9-8-20 1615</b>	

**ANALYTICAL REPORT**

SOILS & ENGINEERING SERVICES  
 DUANE REICHEL  
 1102 STEWART ST  
 MADISON, WI 53713

Project Name: TRUAX FIELD  
 Project Phase: BLDG #404  
 Contract #: 1560  
 Project #: 507.98  
 Folder #: 156580  
 Purchase Order #:

Page 1 of 57  
 Arrival Temperature: See COC  
 Report Date: 10/16/2020  
 Date Received: 09/18/2020  
 Reprint Date: 10/16/2020

CT LAB Sample#: 475753    Sample Description: E4-20,S1,1'	Sampled: 09/16/2020 1350
---	--------------------------

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	<b>76.5</b>	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.077	mg/kg	0.077	0.26	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.026	mg/kg	0.026	0.089	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.013	mg/kg	0.013	0.051	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,1-Dichloroethane	<0.0089	mg/kg	0.0089	0.029	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,1-Dichloroethene	<0.027	mg/kg	0.027	0.091	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,1-Dichloropropene	<0.038	mg/kg	0.038	0.11	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.051	mg/kg	0.051	0.18	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.022	mg/kg	0.022	0.074	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.089	mg/kg	0.089	0.31	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.051	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis



CT LAB Sample#: 475753 Sample Description: E4-20,S1,1'

Sampled: 09/16/2020 1350

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichlorobenzene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2-Dichloroethane	<0.028	mg/kg	0.028	0.094	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,2-Dichloropropane	<0.033	mg/kg	0.033	0.11	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.018	mg/kg	0.018	0.057	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,3-Dichloropropane	<0.018	mg/kg	0.018	0.061	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.019	mg/kg	0.019	0.065	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
2,2-Dichloropropane	<0.027	mg/kg	0.027	0.089	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
2-Butanone	<0.51	mg/kg	0.51	1.5	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
2-Chlorotoluene	<0.023	mg/kg	0.023	0.075	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
2-Hexanone	<0.26	mg/kg	0.26	0.89	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
4-Chlorotoluene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.23	mg/kg	0.23	0.78	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Acetone	<0.51	mg/kg	0.51	1.7	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Benzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Bromobenzene	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Bromochloromethane	<0.022	mg/kg	0.022	0.074	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Bromodichloromethane	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Bromoform	<0.077	mg/kg	0.077	0.24	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.38	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Carbon disulfide	<0.051	mg/kg	0.051	0.15	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Carbon tetrachloride	<0.018	mg/kg	0.018	0.057	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Chlorobenzene	<0.013	mg/kg	0.013	0.041	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Chloroethane	<0.038	mg/kg	0.038	0.15	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Chloroform	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475753 Sample Description: E4-20,S1,1'

Sampled: 09/16/2020 1350

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloromethane	<0.038	mg/kg	0.038	0.13	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.034	mg/kg	0.034	0.11	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.018	mg/kg	0.018	0.061	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Dibromochloromethane	<0.051	mg/kg	0.051	0.18	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Dibromomethane	<0.027	mg/kg	0.027	0.089	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Dichlorodifluoromethane	<0.064	mg/kg	0.064	0.22	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Diisopropyl ether	<0.023	mg/kg	0.023	0.078	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Ethylbenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Hexachlorobutadiene	<0.029	mg/kg	0.029	0.10	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Isopropylbenzene	<0.017	mg/kg	0.017	0.055	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
m & p-Xylene	<0.032	mg/kg	0.032	0.10	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Methyl tert-butyl ether	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Methylene chloride	<0.077	mg/kg	0.077	0.27	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
n-Butylbenzene	<0.022	mg/kg	0.022	0.070	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
n-Propylbenzene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Naphthalene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
o-Xylene	<0.0089	mg/kg	0.0089	0.028	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
p-Isopropyltoluene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
sec-Butylbenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Styrene	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
tert-Butylbenzene	<0.015	mg/kg	0.015	0.052	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Tetrachloroethene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Tetrahydrofuran	<0.32	mg/kg	0.32	1.1	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Toluene	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.018	mg/kg	0.018	0.060	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C

CT LAB Sample#: 475753 Sample Description: E4-20,S1,1'

Sampled: 09/16/2020 1350

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,3-Dichloropropene	<0.051	mg/kg	0.051	0.15	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Trichloroethene	<0.024	mg/kg	0.024	0.079	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Trichlorofluoromethane	<0.051	mg/kg	0.051	0.15	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C
Vinyl chloride	<0.024	mg/kg	0.024	0.082	1		09/25/2020 14:15	09/27/2020 17:29	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475754 Sample Description: E4-20,S2,5'

Sampled: 09/16/2020 1355

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	<b>88.4</b>	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.073	mg/kg	0.073	0.24	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.063	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.024	mg/kg	0.024	0.085	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.048	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,1-Dichloroethane	<0.0085	mg/kg	0.0085	0.028	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.086	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,1-Dichloropropene	<0.036	mg/kg	0.036	0.11	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.045	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.048	mg/kg	0.048	0.17	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.021	mg/kg	0.021	0.070	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C



CT LAB Sample#: 475754 Sample Description: E4-20,S2,5'

Sampled: 09/16/2020 1355

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.085	mg/kg	0.085	0.29	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.048	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2-Dichloroethane	<0.027	mg/kg	0.027	0.090	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,2-Dichloropropane	<0.031	mg/kg	0.031	0.10	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.055	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.058	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.062	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.085	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
2-Butanone	<0.48	mg/kg	0.48	1.5	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.071	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.85	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.74	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Acetone	<0.48	mg/kg	0.48	1.6	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Bromochloromethane	<0.021	mg/kg	0.021	0.070	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.056	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Bromoform	<0.073	mg/kg	0.073	0.23	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Carbon disulfide	<0.048	mg/kg	0.048	0.15	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.055	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475754 Sample Description: E4-20,S2,5'

Sampled: 09/16/2020 1355

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.15	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Chloroform	<0.019	mg/kg	0.019	0.064	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.033	mg/kg	0.033	0.11	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.058	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Dibromochloromethane	<0.048	mg/kg	0.048	0.17	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.085	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Dichlorodifluoromethane	<0.061	mg/kg	0.061	0.21	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.074	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.094	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.052	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.099	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.064	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Methylene chloride	<0.073	mg/kg	0.073	0.25	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
n-Butylbenzene	<0.021	mg/kg	0.021	0.067	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.051	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
o-Xylene	<0.0085	mg/kg	0.0085	0.027	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
tert-Butylbenzene	<0.015	mg/kg	0.015	0.050	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.045	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475754 Sample Description: E4-20,S2,5'

Sampled: 09/16/2020 1355

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrahydrofuran	<0.30	mg/kg	0.30	1.0	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.064	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.048	mg/kg	0.048	0.15	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.075	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Trichlorofluoromethane	<0.048	mg/kg	0.048	0.15	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.078	1		09/25/2020 14:15	09/27/2020 17:58	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475755 Sample Description: E4-20

Sampled: 09/16/2020 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 17:40	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/25/2020 17:40	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/25/2020 17:40	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/25/2020 17:40	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/25/2020 17:40	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/25/2020 17:40	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C

CT LAB Sample#: 475755 Sample Description: E4-20

Sampled: 09/16/2020 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1		09/25/2020	17:40	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1		09/25/2020	17:40	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1		09/25/2020	17:40	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	17:40	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	17:40	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1		09/25/2020	17:40	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1		09/25/2020	17:40	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1		09/25/2020	17:40	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1		09/25/2020	17:40	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1		09/25/2020	17:40	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	17:40	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y	09/25/2020	17:40	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1		09/25/2020	17:40	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1		09/25/2020	17:40	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1		09/25/2020	17:40	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	17:40	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1		09/25/2020	17:40	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z	09/25/2020	17:40	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1		09/25/2020	17:40	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1		09/25/2020	17:40	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	17:40	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1		09/25/2020	17:40	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1		09/25/2020	17:40	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1		09/25/2020	17:40	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1		09/25/2020	17:40	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475755 Sample Description: E4-20

Sampled: 09/16/2020 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			09/25/2020 17:40	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			09/25/2020 17:40	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			09/25/2020 17:40	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			09/25/2020 17:40	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			09/25/2020 17:40	RLD	EPA 8260C
Dichlorodifluoromethane	<b>1.9</b>	ug/L	0.40	1.3	1			09/25/2020 17:40	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			09/25/2020 17:40	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			09/25/2020 17:40	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1			09/25/2020 17:40	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q		09/25/2020 17:40	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1			09/25/2020 17:40	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			09/25/2020 17:40	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			09/25/2020 17:40	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			09/25/2020 17:40	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			09/25/2020 17:40	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			09/25/2020 17:40	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			09/25/2020 17:40	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475755 Sample Description: E4-20 Sampled: 09/16/2020 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			09/25/2020 17:40	RLD	EPA 8260C
Tetrahydrofuran	<b>19</b>	ug/L	3.0	10	1			09/25/2020 17:40	RLD	EPA 8260C
Toluene	<b>0.36</b>	ug/L	0.21 *	0.69	1			09/25/2020 17:40	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/25/2020 17:40	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q		09/25/2020 17:40	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 17:40	RLD	EPA 8260C
Trichlorofluoromethane	<b>2.0</b>	ug/L	0.40	1.4	1			09/25/2020 17:40	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/25/2020 17:40	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475756 Sample Description: E3-20,S1,1' Sampled: 09/16/2020 1435

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
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**Inorganic Results**

Solids, Percent	<b>100</b>	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
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**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475757 Sample Description: E3-20,S2,5' Sampled: 09/16/2020 1445

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
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CT LAB Sample#: 475757 Sample Description: E3-20,S2,5'

Sampled: 09/16/2020 1445

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	74.9	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.079	mg/kg	0.079	0.26	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.021	mg/kg	0.021	0.068	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.026	mg/kg	0.026	0.092	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.013	mg/kg	0.013	0.053	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,1-Dichloroethane	<0.0092	mg/kg	0.0092	0.030	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,1-Dichloroethene	<0.028	mg/kg	0.028	0.093	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,1-Dichloropropene	<0.040	mg/kg	0.040	0.12	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.053	mg/kg	0.053	0.18	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.022	mg/kg	0.022	0.076	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.092	mg/kg	0.092	0.32	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.053	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.020	mg/kg	0.020	0.065	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2-Dichloroethane	<0.029	mg/kg	0.029	0.097	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,2-Dichloropropane	<0.034	mg/kg	0.034	0.11	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.017	mg/kg	0.017	0.058	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,3-Dichloropropane	<0.018	mg/kg	0.018	0.063	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.020	mg/kg	0.020	0.067	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
2,2-Dichloropropane	<0.028	mg/kg	0.028	0.092	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
2-Butanone	<0.53	mg/kg	0.53	1.6	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475757 Sample Description: E3-20,S2,5'

Sampled: 09/16/2020 1445

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Chlorotoluene	<0.024	mg/kg	0.024	0.078	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
2-Hexanone	<0.26	mg/kg	0.26	0.92	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
4-Chlorotoluene	<0.020	mg/kg	0.020	0.065	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.24	mg/kg	0.24	0.80	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Acetone	<0.53	mg/kg	0.53	1.7	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Benzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Bromobenzene	<0.021	mg/kg	0.021	0.068	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Bromochloromethane	<0.022	mg/kg	0.022	0.076	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Bromodichloromethane	<0.018	mg/kg	0.018	0.061	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Bromoform	<0.079	mg/kg	0.079	0.25	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Bromomethane	<0.12	mg/kg	0.12	0.40	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Carbon disulfide	<0.053	mg/kg	0.053	0.16	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Carbon tetrachloride	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Chlorobenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Chloroethane	<0.040	mg/kg	0.040	0.16	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Chloroform	<0.021	mg/kg	0.021	0.070	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Chloromethane	<0.040	mg/kg	0.040	0.13	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.036	mg/kg	0.036	0.12	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.018	mg/kg	0.018	0.063	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Dibromochloromethane	<0.053	mg/kg	0.053	0.18	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Dibromomethane	<0.028	mg/kg	0.028	0.092	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Dichlorodifluoromethane	<0.066	mg/kg	0.066	0.22	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Diisopropyl ether	<0.024	mg/kg	0.024	0.080	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Ethylbenzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Hexachlorobutadiene	<0.030	mg/kg	0.030	0.10	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis



CT LAB Sample#: 475757 Sample Description: E3-20,S2,5'

Sampled: 09/16/2020 1445

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Isopropylbenzene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
m & p-Xylene	<0.033	mg/kg	0.033	0.11	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Methyl tert-butyl ether	<0.021	mg/kg	0.021	0.070	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Methylene chloride	<0.079	mg/kg	0.079	0.28	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
n-Butylbenzene	<0.022	mg/kg	0.022	0.072	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
n-Propylbenzene	<0.017	mg/kg	0.017	0.055	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Naphthalene	<0.020	mg/kg	0.020	0.065	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
o-Xylene	<0.0092	mg/kg	0.0092	0.029	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
p-Isopropyltoluene	<0.017	mg/kg	0.017	0.058	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
sec-Butylbenzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Styrene	<0.021	mg/kg	0.021	0.068	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
tert-Butylbenzene	<0.016	mg/kg	0.016	0.054	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Tetrachloroethene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Tetrahydrofuran	<0.33	mg/kg	0.33	1.1	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Toluene	<0.021	mg/kg	0.021	0.070	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.018	mg/kg	0.018	0.062	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.053	mg/kg	0.053	0.16	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Trichloroethene	<0.025	mg/kg	0.025	0.082	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Trichlorofluoromethane	<0.053	mg/kg	0.053	0.16	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C
Vinyl chloride	<0.025	mg/kg	0.025	0.084	1		09/25/2020 14:15	09/27/2020 18:26	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00		SUB
PFOS	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00		SUB

CT LAB Sample#: 475758 Sample Description: E3-20,S1A,1 1/2'

Sampled: 09/16/2020 1435

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	78.2	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.076	mg/kg	0.076	0.25	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.025	0.089	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.013	mg/kg	0.013	0.051	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,1-Dichloroethane	<0.0089	mg/kg	0.0089	0.029	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,1-Dichloroethene	<0.027	mg/kg	0.027	0.090	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,1-Dichloropropene	<0.038	mg/kg	0.038	0.11	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.051	mg/kg	0.051	0.18	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.022	mg/kg	0.022	0.074	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.089	mg/kg	0.089	0.31	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.051	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.019	mg/kg	0.019	0.062	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2-Dichloroethane	<0.028	mg/kg	0.028	0.094	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,2-Dichloropropane	<0.033	mg/kg	0.033	0.11	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.018	mg/kg	0.018	0.057	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,3-Dichloropropane	<0.018	mg/kg	0.018	0.061	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.019	mg/kg	0.019	0.065	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
2,2-Dichloropropane	<0.027	mg/kg	0.027	0.089	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475758 Sample Description: E3-20,S1A,1 1/2'

Sampled: 09/16/2020 1435

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Butanone	<0.51	mg/kg	0.51	1.5	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
2-Chlorotoluene	<0.023	mg/kg	0.023	0.075	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
2-Hexanone	<0.25	mg/kg	0.25	0.89	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
4-Chlorotoluene	<0.019	mg/kg	0.019	0.062	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.23	mg/kg	0.23	0.78	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Acetone	<0.51	mg/kg	0.51	1.7	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Benzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Bromobenzene	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Bromochloromethane	<0.022	mg/kg	0.022	0.074	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Bromodichloromethane	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Bromoform	<0.076	mg/kg	0.076	0.24	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.38	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Carbon disulfide	<0.051	mg/kg	0.051	0.15	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Carbon tetrachloride	<0.018	mg/kg	0.018	0.057	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Chlorobenzene	<0.013	mg/kg	0.013	0.041	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Chloroethane	<0.038	mg/kg	0.038	0.15	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Chloroform	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Chloromethane	<0.038	mg/kg	0.038	0.13	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.034	mg/kg	0.034	0.11	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.018	mg/kg	0.018	0.061	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Dibromochloromethane	<0.051	mg/kg	0.051	0.18	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Dibromomethane	<0.027	mg/kg	0.027	0.089	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Dichlorodifluoromethane	<0.064	mg/kg	0.064	0.22	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Diisopropyl ether	<0.023	mg/kg	0.023	0.078	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Ethylbenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C

CT LAB Sample#: 475758 Sample Description: E3-20,S1A,1 1/2'

Sampled: 09/16/2020 1435

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.029	mg/kg	0.029	0.099	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Isopropylbenzene	<0.017	mg/kg	0.017	0.055	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
m & p-Xylene	<0.032	mg/kg	0.032	0.10	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Methyl tert-butyl ether	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Methylene chloride	<0.076	mg/kg	0.076	0.27	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
n-Butylbenzene	<0.022	mg/kg	0.022	0.070	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
n-Propylbenzene	<0.017	mg/kg	0.017	0.053	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Naphthalene	<0.019	mg/kg	0.019	0.062	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
o-Xylene	<0.0089	mg/kg	0.0089	0.028	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
p-Isopropyltoluene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
sec-Butylbenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Styrene	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
tert-Butylbenzene	<0.015	mg/kg	0.015	0.052	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Tetrachloroethene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Tetrahydrofuran	<0.32	mg/kg	0.32	1.1	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Toluene	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.018	mg/kg	0.018	0.060	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.051	mg/kg	0.051	0.15	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Trichloroethene	<0.024	mg/kg	0.024	0.079	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Trichlorofluoromethane	<0.051	mg/kg	0.051	0.15	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C
Vinyl chloride	<0.024	mg/kg	0.024	0.082	1		09/25/2020 14:15	09/27/2020 18:55	RLD	EPA 8260C

CT LAB Sample#: 475759 Sample Description: E3-20

Sampled: 09/16/2020 1505

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
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CT LAB Sample#: 475759 Sample Description: E3-20

Sampled: 09/16/2020 1505

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1		09/25/2020	18:11	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1		09/25/2020	18:11	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1		09/25/2020	18:11	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:11	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:11	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1		09/25/2020	18:11	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1		09/25/2020	18:11	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1		09/25/2020	18:11	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1		09/25/2020	18:11	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:11	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	18:11	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1		09/25/2020	18:11	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1		09/25/2020	18:11	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1		09/25/2020	18:11	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1		09/25/2020	18:11	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1		09/25/2020	18:11	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y	09/25/2020	18:11	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1		09/25/2020	18:11	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1		09/25/2020	18:11	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1		09/25/2020	18:11	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475759 Sample Description: E3-20

Sampled: 09/16/2020 1505

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
4-Methyl-2-pentanone	<b>2.9</b>	ug/L	2.2 *	7.4	1		09/25/2020	18:11	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z	09/25/2020	18:11	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1		09/25/2020	18:11	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:11	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:11	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1		09/25/2020	18:11	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:11	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1		09/25/2020	18:11	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1		09/25/2020	18:11	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/25/2020	18:11	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/25/2020	18:11	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/25/2020	18:11	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/25/2020	18:11	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/25/2020	18:11	RLD	EPA 8260C
Dichlorodifluoromethane	<b>2.0</b>	ug/L	0.40	1.3	1		09/25/2020	18:11	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:11	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:11	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/25/2020	18:11	RLD	EPA 8260C

CT LAB Sample#: 475759 Sample Description: E3-20

Sampled: 09/16/2020 1505

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	18:11	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/25/2020	18:11	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/25/2020	18:11	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:11	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/25/2020	18:11	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:11	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/25/2020	18:11	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:11	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1		09/25/2020	18:11	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1		09/25/2020	18:11	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1		09/25/2020	18:11	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1		09/25/2020	18:11	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q	09/25/2020	18:11	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:11	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1		09/25/2020	18:11	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1		09/25/2020	18:11	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>	N/A	N/A	1	10/16/2020	00:00	SUB
PFOS	<b>attached</b>	N/A	N/A	1	10/16/2020	00:00	SUB

CT LAB Sample#: 475760 Sample Description: E5-20,S1,1'

Sampled: 09/16/2020 1525

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	94.5	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.067	mg/kg	0.067	0.22	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.058	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.022	mg/kg	0.022	0.078	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.011	mg/kg	0.011	0.044	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,1-Dichloroethane	<0.0078	mg/kg	0.0078	0.026	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,1-Dichloroethene	<0.023	mg/kg	0.023	0.079	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,1-Dichloropropene	<0.033	mg/kg	0.033	0.10	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	mg/kg	0.012	0.041	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.044	mg/kg	0.044	0.16	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.019	mg/kg	0.019	0.064	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.078	mg/kg	0.078	0.27	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2-Dibromoethane	<0.011	mg/kg	0.011	0.044	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	mg/kg	0.024	0.082	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,2-Dichloropropane	<0.029	mg/kg	0.029	0.095	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.016	mg/kg	0.016	0.050	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,3-Dichloropropane	<0.016	mg/kg	0.016	0.053	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
2,2-Dichloropropane	<0.023	mg/kg	0.023	0.078	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis



CT LAB Sample#: 475760 Sample Description: E5-20,S1,1'

Sampled: 09/16/2020 1525

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Butanone	<0.44	mg/kg	0.44	1.3	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
2-Chlorotoluene	<0.020	mg/kg	0.020	0.065	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
2-Hexanone	<0.22	mg/kg	0.22	0.78	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
4-Chlorotoluene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.20	mg/kg	0.20	0.68	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Acetone	<0.44	mg/kg	0.44	1.4	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Benzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.058	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Bromochloromethane	<0.019	mg/kg	0.019	0.064	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Bromodichloromethane	<0.016	mg/kg	0.016	0.051	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Bromoform	<0.067	mg/kg	0.067	0.21	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Bromomethane	<0.10	mg/kg	0.10	0.33	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Carbon disulfide	<0.044	mg/kg	0.044	0.13	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Carbon tetrachloride	<0.016	mg/kg	0.016	0.050	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Chlorobenzene	<0.011	mg/kg	0.011	0.035	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Chloroethane	<0.033	mg/kg	0.033	0.13	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Chloromethane	<0.033	mg/kg	0.033	0.11	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.030	mg/kg	0.030	0.10	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Dibromochloromethane	<0.044	mg/kg	0.044	0.16	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Dibromomethane	<0.023	mg/kg	0.023	0.078	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Dichlorodifluoromethane	<0.055	mg/kg	0.055	0.19	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Diisopropyl ether	<0.020	mg/kg	0.020	0.068	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Ethylbenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475760 Sample Description: E5-20,S1,1'

Sampled: 09/16/2020 15:25

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.026	mg/kg	0.026	0.087	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Isopropylbenzene	<0.014	mg/kg	0.014	0.048	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
m & p-Xylene	<0.028	mg/kg	0.028	0.091	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Methylene chloride	<0.067	mg/kg	0.067	0.23	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
n-Butylbenzene	<0.019	mg/kg	0.019	0.061	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
n-Propylbenzene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Naphthalene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
o-Xylene	<0.0078	mg/kg	0.0078	0.024	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
p-Isopropyltoluene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
sec-Butylbenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Styrene	<0.018	mg/kg	0.018	0.058	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
tert-Butylbenzene	<0.013	mg/kg	0.013	0.045	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Tetrachloroethene	<0.012	mg/kg	0.012	0.041	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Tetrahydrofuran	<0.28	mg/kg	0.28	0.92	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.016	mg/kg	0.016	0.052	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.044	mg/kg	0.044	0.13	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Trichloroethene	<0.021	mg/kg	0.021	0.069	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Trichlorofluoromethane	<0.044	mg/kg	0.044	0.13	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C
Vinyl chloride	<0.021	mg/kg	0.021	0.071	1		09/25/2020 14:15	09/27/2020 19:24	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00	SUB
PFOS	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00	SUB

CT LAB Sample#: 475761 Sample Description: E5-20,S2,5'

Sampled: 09/16/2020 1530

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	76.0	%	0.1	0.1	1			09/30/2020 14:29	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.078	mg/kg	0.078	0.26	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.021	mg/kg	0.021	0.068	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.026	mg/kg	0.026	0.091	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.013	mg/kg	0.013	0.052	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,1-Dichloroethane	<0.0091	mg/kg	0.0091	0.030	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,1-Dichloroethene	<0.027	mg/kg	0.027	0.092	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,1-Dichloropropene	<0.039	mg/kg	0.039	0.12	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.014	mg/kg	0.014	0.048	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.052	mg/kg	0.052	0.18	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.022	mg/kg	0.022	0.075	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.091	mg/kg	0.091	0.31	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2-Dibromoethane	<0.013	mg/kg	0.013	0.052	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.020	mg/kg	0.020	0.064	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2-Dichloroethane	<0.029	mg/kg	0.029	0.096	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,2-Dichloropropane	<0.034	mg/kg	0.034	0.11	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,3-Dichloropropane	<0.018	mg/kg	0.018	0.062	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.020	mg/kg	0.020	0.066	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
2,2-Dichloropropane	<0.027	mg/kg	0.027	0.091	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475761 Sample Description: E5-20,S2,5'

Sampled: 09/16/2020 1530

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Butanone	<0.52	mg/kg	0.52	1.6	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
2-Chlorotoluene	<0.023	mg/kg	0.023	0.077	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
2-Hexanone	<0.26	mg/kg	0.26	0.91	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
4-Chlorotoluene	<0.020	mg/kg	0.020	0.064	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.23	mg/kg	0.23	0.79	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Acetone	<0.52	mg/kg	0.52	1.7	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Benzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Bromobenzene	<0.021	mg/kg	0.021	0.068	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Bromochloromethane	<0.022	mg/kg	0.022	0.075	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Bromodichloromethane	<0.018	mg/kg	0.018	0.060	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Bromoform	<0.078	mg/kg	0.078	0.25	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Bromomethane	<0.12	mg/kg	0.12	0.39	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Carbon disulfide	<0.052	mg/kg	0.052	0.16	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Carbon tetrachloride	<0.018	mg/kg	0.018	0.059	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Chlorobenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Chloroethane	<0.039	mg/kg	0.039	0.16	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Chloroform	<0.021	mg/kg	0.021	0.069	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Chloromethane	<0.039	mg/kg	0.039	0.13	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.035	mg/kg	0.035	0.12	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.018	mg/kg	0.018	0.062	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Dibromochloromethane	<0.052	mg/kg	0.052	0.18	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Dibromomethane	<0.027	mg/kg	0.027	0.091	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Dichlorodifluoromethane	<0.065	mg/kg	0.065	0.22	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Diisopropyl ether	<0.023	mg/kg	0.023	0.079	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Ethylbenzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475761 Sample Description: E5-20,S2,5'

Sampled: 09/16/2020 1530

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.030	mg/kg	0.030	0.10	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Isopropylbenzene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
m & p-Xylene	<0.033	mg/kg	0.033	0.11	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Methyl tert-butyl ether	<0.021	mg/kg	0.021	0.069	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Methylene chloride	<0.078	mg/kg	0.078	0.27	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
n-Butylbenzene	<0.022	mg/kg	0.022	0.072	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
n-Propylbenzene	<0.017	mg/kg	0.017	0.055	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Naphthalene	<0.020	mg/kg	0.020	0.064	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
o-Xylene	<0.0091	mg/kg	0.0091	0.029	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
p-Isopropyltoluene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
sec-Butylbenzene	<0.014	mg/kg	0.014	0.046	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Styrene	<0.021	mg/kg	0.021	0.068	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
tert-Butylbenzene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Tetrachloroethene	<0.014	mg/kg	0.014	0.048	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Tetrahydrofuran	<0.33	mg/kg	0.33	1.1	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Toluene	<0.021	mg/kg	0.021	0.069	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.018	mg/kg	0.018	0.061	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.052	mg/kg	0.052	0.16	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Trichloroethene	<0.025	mg/kg	0.025	0.081	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Trichlorofluoromethane	<0.052	mg/kg	0.052	0.16	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C
Vinyl chloride	<0.025	mg/kg	0.025	0.083	1		09/25/2020 14:15	09/27/2020 19:53	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00	SUB
PFOS	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00	SUB

CT LAB Sample#: 475762 Sample Description: E5-20

Sampled: 09/16/2020 1550

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1		09/25/2020	18:41	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1		09/25/2020	18:41	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1		09/25/2020	18:41	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:41	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:41	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1		09/25/2020	18:41	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1		09/25/2020	18:41	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1		09/25/2020	18:41	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1		09/25/2020	18:41	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:41	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	18:41	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1		09/25/2020	18:41	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1		09/25/2020	18:41	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1		09/25/2020	18:41	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1		09/25/2020	18:41	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1		09/25/2020	18:41	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y	09/25/2020	18:41	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1		09/25/2020	18:41	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1		09/25/2020	18:41	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1		09/25/2020	18:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475762 Sample Description: E5-20

Sampled: 09/16/2020 1550

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1		09/25/2020	18:41	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z	09/25/2020	18:41	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1		09/25/2020	18:41	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:41	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:41	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1		09/25/2020	18:41	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:41	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1		09/25/2020	18:41	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1		09/25/2020	18:41	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/25/2020	18:41	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/25/2020	18:41	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/25/2020	18:41	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/25/2020	18:41	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/25/2020	18:41	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:41	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/25/2020	18:41	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:41	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/25/2020	18:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475762 Sample Description: E5-20

Sampled: 09/16/2020 1550

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	18:41	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/25/2020	18:41	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/25/2020	18:41	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/25/2020	18:41	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/25/2020	18:41	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:41	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/25/2020	18:41	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	18:41	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1		09/25/2020	18:41	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1		09/25/2020	18:41	RLD	EPA 8260C
Toluene	<b>0.31</b>	ug/L	0.21 *	0.69	1		09/25/2020	18:41	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1		09/25/2020	18:41	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q	09/25/2020	18:41	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	18:41	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1		09/25/2020	18:41	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1		09/25/2020	18:41	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1		10/16/2020	00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1		10/16/2020	00:00	SUB	



CT LAB Sample#: 475763 Sample Description: PROBE BLANK

Sampled: 09/16/2020 1605

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1		09/25/2020	11:38	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1		09/25/2020	11:38	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1		09/25/2020	11:38	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:38	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1		09/25/2020	11:38	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1		09/25/2020	11:38	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1		09/25/2020	11:38	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1		09/25/2020	11:38	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1		09/25/2020	11:38	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	11:38	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	11:38	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1		09/25/2020	11:38	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1		09/25/2020	11:38	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1		09/25/2020	11:38	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1		09/25/2020	11:38	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1		09/25/2020	11:38	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y	09/25/2020	11:38	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1		09/25/2020	11:38	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1		09/25/2020	11:38	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1		09/25/2020	11:38	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475763 Sample Description: PROBE BLANK

Sampled: 09/16/2020 1605

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1		09/25/2020	11:38	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z	09/25/2020	11:38	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1		09/25/2020	11:38	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1		09/25/2020	11:38	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1		09/25/2020	11:38	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1		09/25/2020	11:38	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1		09/25/2020	11:38	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1		09/25/2020	11:38	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1		09/25/2020	11:38	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/25/2020	11:38	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/25/2020	11:38	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/25/2020	11:38	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/25/2020	11:38	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/25/2020	11:38	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/25/2020	11:38	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/25/2020	11:38	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:38	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/25/2020	11:38	RLD	EPA 8260C

CT LAB Sample#: 475763 Sample Description: PROBE BLANK

Sampled: 09/16/2020 1605

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	11:38	RLD	EPA 8260C
Methylene chloride	<b>2.0</b>	ug/L	0.40	1.5	1		09/25/2020	11:38	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/25/2020	11:38	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/25/2020	11:38	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/25/2020	11:38	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:38	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/25/2020	11:38	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:38	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1		09/25/2020	11:38	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1		09/25/2020	11:38	RLD	EPA 8260C
Toluene	<b>0.71</b>	ug/L	0.21	0.69	1		09/25/2020	11:38	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1		09/25/2020	11:38	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q	09/25/2020	11:38	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:38	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1		09/25/2020	11:38	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1		09/25/2020	11:38	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>	N/A	N/A	1	10/16/2020	00:00	SUB
PFOS	<b>attached</b>	N/A	N/A	1	10/16/2020	00:00	SUB

CT LAB Sample#: 475765 Sample Description: E6-20,S1,1'

Sampled: 09/17/2020 0955

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	94.2	%	0.1	0.1	1			09/30/2020 14:47	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.059	mg/kg	0.059	0.20	1	M	09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.020	mg/kg	0.020	0.069	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.0099	mg/kg	0.0099	0.040	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,1-Dichloroethane	<0.0069	mg/kg	0.0069	0.023	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,1-Dichloroethene	<0.021	mg/kg	0.021	0.070	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,1-Dichloropropene	<0.030	mg/kg	0.030	0.089	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.011	mg/kg	0.011	0.037	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.040	mg/kg	0.040	0.14	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.011	mg/kg	0.011	0.035	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.069	mg/kg	0.069	0.24	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2-Dibromoethane	<0.0099	mg/kg	0.0099	0.040	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.015	mg/kg	0.015	0.049	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2-Dichloroethane	<0.022	mg/kg	0.022	0.073	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,2-Dichloropropane	<0.026	mg/kg	0.026	0.085	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.013	mg/kg	0.013	0.044	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.014	mg/kg	0.014	0.045	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,3-Dichloropropane	<0.014	mg/kg	0.014	0.048	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.015	mg/kg	0.015	0.051	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
2,2-Dichloropropane	<0.021	mg/kg	0.021	0.069	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475765 Sample Description: E6-20,S1,1'

Sampled: 09/17/2020 0955

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Butanone	<0.40	mg/kg	0.40	1.2	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
2-Chlorotoluene	<0.018	mg/kg	0.018	0.058	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
2-Hexanone	<0.20	mg/kg	0.20	0.69	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
4-Chlorotoluene	<0.015	mg/kg	0.015	0.049	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.18	mg/kg	0.18	0.60	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Acetone	<0.40	mg/kg	0.40	1.3	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Benzene	<0.011	mg/kg	0.011	0.035	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Bromobenzene	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Bromochloromethane	<0.017	mg/kg	0.017	0.057	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Bromodichloromethane	<0.014	mg/kg	0.014	0.046	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Bromoform	<0.059	mg/kg	0.059	0.19	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Bromomethane	<0.089	mg/kg	0.089	0.30	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Carbon disulfide	<0.040	mg/kg	0.040	0.12	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Carbon tetrachloride	<0.014	mg/kg	0.014	0.045	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Chlorobenzene	<0.0099	mg/kg	0.0099	0.032	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Chloroethane	<0.030	mg/kg	0.030	0.12	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Chloroform	<0.016	mg/kg	0.016	0.052	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Chloromethane	<0.030	mg/kg	0.030	0.099	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.027	mg/kg	0.027	0.089	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.014	mg/kg	0.014	0.048	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Dibromochloromethane	<0.040	mg/kg	0.040	0.14	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Dibromomethane	<0.021	mg/kg	0.021	0.069	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Dichlorodifluoromethane	<0.050	mg/kg	0.050	0.17	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Diisopropyl ether	<0.018	mg/kg	0.018	0.060	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Ethylbenzene	<0.011	mg/kg	0.011	0.035	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C

CT LAB Sample#: 475765 Sample Description: E6-20,S1,1'

Sampled: 09/17/2020 0955

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.023	mg/kg	0.023	0.077	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Isopropylbenzene	<0.013	mg/kg	0.013	0.043	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
m & p-Xylene	<0.025	mg/kg	0.025	0.081	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Methyl tert-butyl ether	<0.016	mg/kg	0.016	0.052	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Methylene chloride	<0.059	mg/kg	0.059	0.21	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
n-Butylbenzene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
n-Propylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Naphthalene	<0.015	mg/kg	0.015	0.049	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
o-Xylene	<0.0069	mg/kg	0.0069	0.022	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
p-Isopropyltoluene	<0.013	mg/kg	0.013	0.044	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
sec-Butylbenzene	<0.011	mg/kg	0.011	0.035	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Styrene	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
tert-Butylbenzene	<0.012	mg/kg	0.012	0.041	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Tetrachloroethene	<0.011	mg/kg	0.011	0.037	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Tetrahydrofuran	<0.25	mg/kg	0.25	0.82	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Toluene	<0.016	mg/kg	0.016	0.052	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.040	mg/kg	0.040	0.12	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Trichloroethene	<0.019	mg/kg	0.019	0.061	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Trichlorofluoromethane	<0.040	mg/kg	0.040	0.12	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
Vinyl chloride	<0.019	mg/kg	0.019	0.063	1		09/25/2020 12:15	09/25/2020 22:26	RLD	EPA 8260C
<b>Sub Lab Results</b>										
PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475766 Sample Description: E6-20,S2,5'

Sampled: 09/17/2020 1005

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	87.7	%	0.1	0.1	1			09/30/2020 14:47	TMG	EPA 8000C
Total Organic Carbon	10800	mg/kg	41	140	1			09/30/2020 13:55	KMT	L-Kahn/9060A
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.067	mg/kg	0.067	0.22	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.058	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.022	mg/kg	0.022	0.078	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.011	mg/kg	0.011	0.044	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,1-Dichloroethane	<0.0078	mg/kg	0.0078	0.026	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,1-Dichloroethene	<0.023	mg/kg	0.023	0.079	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,1-Dichloropropene	<0.033	mg/kg	0.033	0.10	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.012	mg/kg	0.012	0.041	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.044	mg/kg	0.044	0.16	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.019	mg/kg	0.019	0.064	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.078	mg/kg	0.078	0.27	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2-Dibromoethane	<0.011	mg/kg	0.011	0.044	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2-Dichloroethane	<0.024	mg/kg	0.024	0.082	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,2-Dichloropropane	<0.029	mg/kg	0.029	0.095	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.016	mg/kg	0.016	0.050	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,3-Dichloropropane	<0.016	mg/kg	0.016	0.053	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C

CT LAB Sample#: 475766 Sample Description: E6-20,S2,5'

Sampled: 09/17/2020 1005

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2,2-Dichloropropane	<0.023	mg/kg	0.023	0.078	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
2-Butanone	<0.44	mg/kg	0.44	1.3	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
2-Chlorotoluene	<0.020	mg/kg	0.020	0.065	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
2-Hexanone	<0.22	mg/kg	0.22	0.78	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
4-Chlorotoluene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.20	mg/kg	0.20	0.68	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Acetone	<0.44	mg/kg	0.44	1.4	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Benzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.058	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Bromochloromethane	<0.019	mg/kg	0.019	0.064	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Bromodichloromethane	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Bromoform	<0.067	mg/kg	0.067	0.21	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Bromomethane	<0.10	mg/kg	0.10	0.33	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Carbon disulfide	<0.044	mg/kg	0.044	0.13	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Carbon tetrachloride	<0.016	mg/kg	0.016	0.050	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Chlorobenzene	<0.011	mg/kg	0.011	0.035	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Chloroethane	<0.033	mg/kg	0.033	0.13	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Chloromethane	<0.033	mg/kg	0.033	0.11	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.030	mg/kg	0.030	0.10	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Dibromochloromethane	<0.044	mg/kg	0.044	0.16	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Dibromomethane	<0.023	mg/kg	0.023	0.078	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Dichlorodifluoromethane	<0.055	mg/kg	0.055	0.19	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Diisopropyl ether	<0.020	mg/kg	0.020	0.068	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis



CT LAB Sample#: 475766 Sample Description: E6-20,S2,5'

Sampled: 09/17/2020 1005

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Ethylbenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Hexachlorobutadiene	<0.026	mg/kg	0.026	0.087	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Isopropylbenzene	<0.014	mg/kg	0.014	0.048	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
m & p-Xylene	<0.028	mg/kg	0.028	0.091	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Methylene chloride	<0.067	mg/kg	0.067	0.23	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
n-Butylbenzene	<0.019	mg/kg	0.019	0.061	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
n-Propylbenzene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Naphthalene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
o-Xylene	<0.0078	mg/kg	0.0078	0.024	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
p-Isopropyltoluene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
sec-Butylbenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Styrene	<0.018	mg/kg	0.018	0.058	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
tert-Butylbenzene	<0.013	mg/kg	0.013	0.045	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Tetrachloroethene	<0.012	mg/kg	0.012	0.041	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Tetrahydrofuran	<0.28	mg/kg	0.28	0.92	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.016	mg/kg	0.016	0.052	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.044	mg/kg	0.044	0.13	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Trichloroethene	<0.021	mg/kg	0.021	0.069	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Trichlorofluoromethane	<0.044	mg/kg	0.044	0.13	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C
Vinyl chloride	<0.021	mg/kg	0.021	0.071	1		09/25/2020 12:15	09/25/2020 22:54	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1		10/16/2020 00:00		SUB
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CT LAB Sample#: 475766 Sample Description: E6-20,S2,5' Sampled: 09/17/2020 1005

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
PFOS	attached		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475767 Sample Description: E6-20 Sampled: 09/17/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
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**Organic Results**

1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 19:11	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/25/2020 19:11	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/25/2020 19:11	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/25/2020 19:11	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:11	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/25/2020 19:11	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			09/25/2020 19:11	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			09/25/2020 19:11	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			09/25/2020 19:11	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:11	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q		09/25/2020 19:11	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			09/25/2020 19:11	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			09/25/2020 19:11	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			09/25/2020 19:11	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			09/25/2020 19:11	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			09/25/2020 19:11	RLD	EPA 8260C

CT LAB Sample#: 475767 Sample Description: E6-20

Sampled: 09/17/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y		09/25/2020 19:11	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			09/25/2020 19:11	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			09/25/2020 19:11	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			09/25/2020 19:11	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			09/25/2020 19:11	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z		09/25/2020 19:11	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			09/25/2020 19:11	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			09/25/2020 19:11	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:11	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			09/25/2020 19:11	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			09/25/2020 19:11	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			09/25/2020 19:11	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			09/25/2020 19:11	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1			09/25/2020 19:11	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1			09/25/2020 19:11	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1			09/25/2020 19:11	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1			09/25/2020 19:11	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1			09/25/2020 19:11	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1			09/25/2020 19:11	RLD	EPA 8260C

CT LAB Sample#: 475767 Sample Description: E6-20

Sampled: 09/17/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1			09/25/2020 19:11	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1			09/25/2020 19:11	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1			09/25/2020 19:11	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q		09/25/2020 19:11	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1			09/25/2020 19:11	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1			09/25/2020 19:11	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:11	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1			09/25/2020 19:11	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1			09/25/2020 19:11	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1			09/25/2020 19:11	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1			09/25/2020 19:11	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			09/25/2020 19:11	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			09/25/2020 19:11	RLD	EPA 8260C
Toluene	<b>0.34</b>	ug/L	0.21 *	0.69	1			09/25/2020 19:11	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/25/2020 19:11	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q		09/25/2020 19:11	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:11	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 19:11	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/25/2020 19:11	RLD	EPA 8260C

**Sub Lab Results**

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475767 Sample Description: E6-20 Sampled: 09/17/2020 1020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
PFOA	attached		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	attached		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475768 Sample Description: E7-20,S1,1' Sampled: 09/17/2020 1050

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	94.4	%	0.1	0.1	1			09/30/2020 14:47	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.068	mg/kg	0.068	0.23	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.023	mg/kg	0.023	0.080	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.011	mg/kg	0.011	0.045	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,1-Dichloroethane	<0.0080	mg/kg	0.0080	0.026	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,1-Dichloroethene	<0.024	mg/kg	0.024	0.081	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,1-Dichloropropene	<0.034	mg/kg	0.034	0.10	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.045	mg/kg	0.045	0.16	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.019	mg/kg	0.019	0.066	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.040	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.080	mg/kg	0.080	0.27	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2-Dibromoethane	<0.011	mg/kg	0.011	0.045	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,2-Dichloroethane	<0.025	mg/kg	0.025	0.084	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C

CT LAB Sample#: 475768 Sample Description: E7-20,S1,1'

Sampled: 09/17/2020 1050

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloropropane	<0.030	mg/kg	0.030	0.098	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.015	mg/kg	0.015	0.050	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,3-Dichloropropane	<0.016	mg/kg	0.016	0.055	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.017	mg/kg	0.017	0.058	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
2,2-Dichloropropane	<0.024	mg/kg	0.024	0.080	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
2-Butanone	<0.45	mg/kg	0.45	1.4	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
2-Chlorotoluene	<0.020	mg/kg	0.020	0.067	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
2-Hexanone	<0.23	mg/kg	0.23	0.80	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
4-Chlorotoluene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.20	mg/kg	0.20	0.69	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Acetone	<0.45	mg/kg	0.45	1.5	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.040	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Bromobenzene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Bromochloromethane	<0.019	mg/kg	0.019	0.066	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Bromodichloromethane	<0.016	mg/kg	0.016	0.052	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Bromoform	<0.068	mg/kg	0.068	0.22	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Bromomethane	<0.10	mg/kg	0.10	0.34	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Carbon disulfide	<0.045	mg/kg	0.045	0.14	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Carbon tetrachloride	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Chlorobenzene	<0.011	mg/kg	0.011	0.036	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Chloroethane	<0.034	mg/kg	0.034	0.14	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Chloroform	<0.018	mg/kg	0.018	0.060	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Chloromethane	<0.034	mg/kg	0.034	0.11	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.031	mg/kg	0.031	0.10	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475768 Sample Description: E7-20,S1,1'

Sampled: 09/17/2020 1050

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
cis-1,3-Dichloropropene	<0.016	mg/kg	0.016	0.055	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Dibromochloromethane	<0.045	mg/kg	0.045	0.16	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Dibromomethane	<0.024	mg/kg	0.024	0.080	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Dichlorodifluoromethane	<0.057	mg/kg	0.057	0.19	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Diisopropyl ether	<0.020	mg/kg	0.020	0.069	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.040	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Hexachlorobutadiene	<0.026	mg/kg	0.026	0.089	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Isopropylbenzene	<0.015	mg/kg	0.015	0.049	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
m & p-Xylene	<0.028	mg/kg	0.028	0.093	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Methyl tert-butyl ether	<0.018	mg/kg	0.018	0.060	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Methylene chloride	<0.068	mg/kg	0.068	0.24	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
n-Butylbenzene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
n-Propylbenzene	<0.015	mg/kg	0.015	0.048	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Naphthalene	<0.017	mg/kg	0.017	0.056	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
o-Xylene	<0.0080	mg/kg	0.0080	0.025	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
p-Isopropyltoluene	<0.015	mg/kg	0.015	0.050	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.040	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Styrene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
tert-Butylbenzene	<0.014	mg/kg	0.014	0.047	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Tetrahydrofuran	<0.28	mg/kg	0.28	0.94	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Toluene	<0.018	mg/kg	0.018	0.060	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.045	mg/kg	0.045	0.14	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Trichloroethene	<0.022	mg/kg	0.022	0.070	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475768 Sample Description: E7-20,S1,1'

Sampled: 09/17/2020 1050

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Trichlorofluoromethane	<0.045	mg/kg	0.045	0.14	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C
Vinyl chloride	<0.022	mg/kg	0.022	0.073	1		09/25/2020 12:15	09/25/2020 23:23	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475769 Sample Description: E7-20,S2,4 1/2'

Sampled: 09/17/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	<b>82.6</b>	%	0.1	0.1	1			09/30/2020 14:47	TMG	EPA 8000C
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.072	mg/kg	0.072	0.24	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.019	mg/kg	0.019	0.063	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.024	mg/kg	0.024	0.084	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.012	mg/kg	0.012	0.048	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,1-Dichloroethane	<0.0084	mg/kg	0.0084	0.028	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,1-Dichloroethene	<0.025	mg/kg	0.025	0.085	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,1-Dichloropropene	<0.036	mg/kg	0.036	0.11	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.013	mg/kg	0.013	0.045	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.048	mg/kg	0.048	0.17	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.020	mg/kg	0.020	0.070	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.084	mg/kg	0.084	0.29	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis



CT LAB Sample#: 475769 Sample Description: E7-20,S2,4 1/2'

Sampled: 09/17/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dibromoethane	<0.012	mg/kg	0.012	0.048	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2-Dichloroethane	<0.026	mg/kg	0.026	0.089	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,2-Dichloropropane	<0.031	mg/kg	0.031	0.10	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.017	mg/kg	0.017	0.054	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,3-Dichloropropane	<0.017	mg/kg	0.017	0.058	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.018	mg/kg	0.018	0.061	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
2,2-Dichloropropane	<0.025	mg/kg	0.025	0.084	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
2-Butanone	<0.48	mg/kg	0.48	1.4	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
2-Chlorotoluene	<0.022	mg/kg	0.022	0.071	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
2-Hexanone	<0.24	mg/kg	0.24	0.84	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
4-Chlorotoluene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
4-Methyl-2-pentanone	<0.22	mg/kg	0.22	0.73	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Acetone	<0.48	mg/kg	0.48	1.6	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Benzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Bromobenzene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Bromochloromethane	<0.020	mg/kg	0.020	0.070	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Bromodichloromethane	<0.017	mg/kg	0.017	0.055	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Bromoform	<0.072	mg/kg	0.072	0.23	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Bromomethane	<0.11	mg/kg	0.11	0.36	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Carbon disulfide	<0.048	mg/kg	0.048	0.14	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Carbon tetrachloride	<0.017	mg/kg	0.017	0.054	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Chlorobenzene	<0.012	mg/kg	0.012	0.039	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Chloroethane	<0.036	mg/kg	0.036	0.14	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475769 Sample Description: E7-20,S2,4 1/2'

Sampled: 09/17/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloroform	<0.019	mg/kg	0.019	0.064	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Chloromethane	<0.036	mg/kg	0.036	0.12	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.032	mg/kg	0.032	0.11	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.017	mg/kg	0.017	0.058	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Dibromochloromethane	<0.048	mg/kg	0.048	0.17	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Dibromomethane	<0.025	mg/kg	0.025	0.084	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Dichlorodifluoromethane	<0.060	mg/kg	0.060	0.20	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Diisopropyl ether	<0.022	mg/kg	0.022	0.073	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Ethylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Hexachlorobutadiene	<0.028	mg/kg	0.028	0.094	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Isopropylbenzene	<0.016	mg/kg	0.016	0.052	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
m & p-Xylene	<0.030	mg/kg	0.030	0.099	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Methyl tert-butyl ether	<0.019	mg/kg	0.019	0.064	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Methylene chloride	<0.072	mg/kg	0.072	0.25	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
n-Butylbenzene	<0.020	mg/kg	0.020	0.066	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
n-Propylbenzene	<0.016	mg/kg	0.016	0.051	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Naphthalene	<0.018	mg/kg	0.018	0.059	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
o-Xylene	<0.0084	mg/kg	0.0084	0.026	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
p-Isopropyltoluene	<0.016	mg/kg	0.016	0.053	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
sec-Butylbenzene	<0.013	mg/kg	0.013	0.042	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Styrene	<0.019	mg/kg	0.019	0.063	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
tert-Butylbenzene	<0.014	mg/kg	0.014	0.049	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Tetrachloroethene	<0.013	mg/kg	0.013	0.045	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Tetrahydrofuran	<0.30	mg/kg	0.30	1.0	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Toluene	<0.019	mg/kg	0.019	0.064	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475769 Sample Description: E7-20,S2,4 1/2'

Sampled: 09/17/2020 1055

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,2-Dichloroethene	<0.017	mg/kg	0.017	0.057	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.048	mg/kg	0.048	0.14	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Trichloroethene	<0.023	mg/kg	0.023	0.075	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Trichlorofluoromethane	<0.048	mg/kg	0.048	0.14	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C
Vinyl chloride	<0.023	mg/kg	0.023	0.077	1		09/25/2020 12:15	09/25/2020 23:52	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475771 Sample Description: E7-20

Sampled: 09/17/2020 1120

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 19:41	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/25/2020 19:41	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/25/2020 19:41	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/25/2020 19:41	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:41	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/25/2020 19:41	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			09/25/2020 19:41	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			09/25/2020 19:41	RLD	EPA 8260C

CT LAB Sample#: 475771 Sample Description: E7-20

Sampled: 09/17/2020 1120

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			09/25/2020 19:41	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:41	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q		09/25/2020 19:41	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			09/25/2020 19:41	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			09/25/2020 19:41	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			09/25/2020 19:41	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			09/25/2020 19:41	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			09/25/2020 19:41	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y		09/25/2020 19:41	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			09/25/2020 19:41	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			09/25/2020 19:41	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			09/25/2020 19:41	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			09/25/2020 19:41	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z		09/25/2020 19:41	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			09/25/2020 19:41	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			09/25/2020 19:41	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 19:41	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			09/25/2020 19:41	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			09/25/2020 19:41	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			09/25/2020 19:41	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			09/25/2020 19:41	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475771 Sample Description: E7-20

Sampled: 09/17/2020 1120

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/25/2020	19:41	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/25/2020	19:41	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/25/2020	19:41	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	19:41	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/25/2020	19:41	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	19:41	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/25/2020	19:41	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/25/2020	19:41	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/25/2020	19:41	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	19:41	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/25/2020	19:41	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	19:41	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/25/2020	19:41	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	19:41	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/25/2020	19:41	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/25/2020	19:41	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	19:41	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/25/2020	19:41	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/25/2020	19:41	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	19:41	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	19:41	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/25/2020	19:41	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	19:41	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1		09/25/2020	19:41	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1		09/25/2020	19:41	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475771 Sample Description: E7-20 Sampled: 09/17/2020 1120

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Toluene	0.38	ug/L	0.21 *	0.69	1			09/25/2020 19:41	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/25/2020 19:41	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q		09/25/2020 19:41	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 19:41	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 19:41	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/25/2020 19:41	RLD	EPA 8260C

**Sub Lab Results**

PFOA	attached		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	attached		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475772 Sample Description: PUMP BLANK Sampled: 09/17/2020 1500

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 12:09	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/25/2020 12:09	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/25/2020 12:09	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/25/2020 12:09	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/25/2020 12:09	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/25/2020 12:09	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			09/25/2020 12:09	RLD	EPA 8260C

CT LAB Sample#: 475772 Sample Description: PUMP BLANK

Sampled: 09/17/2020 1500

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			09/25/2020 12:09	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			09/25/2020 12:09	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 12:09	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q		09/25/2020 12:09	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			09/25/2020 12:09	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			09/25/2020 12:09	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			09/25/2020 12:09	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			09/25/2020 12:09	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			09/25/2020 12:09	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y		09/25/2020 12:09	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			09/25/2020 12:09	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			09/25/2020 12:09	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			09/25/2020 12:09	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			09/25/2020 12:09	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z		09/25/2020 12:09	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			09/25/2020 12:09	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			09/25/2020 12:09	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 12:09	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			09/25/2020 12:09	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			09/25/2020 12:09	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			09/25/2020 12:09	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			09/25/2020 12:09	RLD	EPA 8260C
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475772 Sample Description: PUMP BLANK

Sampled: 09/17/2020 1500

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/25/2020	12:09	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/25/2020	12:09	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/25/2020	12:09	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/25/2020	12:09	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/25/2020	12:09	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/25/2020	12:09	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/25/2020	12:09	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/25/2020	12:09	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/25/2020	12:09	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	12:09	RLD	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	1.5	1		09/25/2020	12:09	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/25/2020	12:09	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/25/2020	12:09	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/25/2020	12:09	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	12:09	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	12:09	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/25/2020	12:09	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	12:09	RLD	EPA 8260C
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1		09/25/2020	12:09	RLD	EPA 8260C



CT LAB Sample#: 475772 Sample Description: PUMP BLANK

Sampled: 09/17/2020 1500

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			09/25/2020 12:09	RLD	EPA 8260C
Toluene	<b>0.48</b>	ug/L	0.21 *	0.69	1			09/25/2020 12:09	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/25/2020 12:09	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q		09/25/2020 12:09	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 12:09	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 12:09	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/25/2020 12:09	RLD	EPA 8260C

**Sub Lab Results**

PFOA	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	
PFOS	<b>attached</b>		N/A	N/A	1			10/16/2020 00:00	SUB	

CT LAB Sample#: 475773 Sample Description: TRIP BLANK

Sampled: 09/17/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>										
1,1,1,2-Tetrachloroethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 11:08	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.29	ug/L	0.29	0.98	1			09/25/2020 11:08	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 11:08	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.30	ug/L	0.30	0.99	1			09/25/2020 11:08	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1			09/25/2020 11:08	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.2	1			09/25/2020 11:08	RLD	EPA 8260C
1,1-Dichloropropene	<0.30	ug/L	0.30	1.0	1			09/25/2020 11:08	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.23	ug/L	0.23	0.77	1			09/25/2020 11:08	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.30	ug/L	0.30	1.1	1			09/25/2020 11:08	RLD	EPA 8260C

CT LAB Sample#: 475773 Sample Description: TRIP BLANK

Sampled: 09/17/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.28	ug/L	0.28	0.93	1			09/25/2020 11:08	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.29	ug/L	0.29	0.96	1			09/25/2020 11:08	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.25	ug/L	0.25	0.82	1			09/25/2020 11:08	RLD	EPA 8260C
1,2-Dibromoethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 11:08	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1	Q		09/25/2020 11:08	RLD	EPA 8260C
1,2-Dichloroethane	<0.24	ug/L	0.24	0.81	1			09/25/2020 11:08	RLD	EPA 8260C
1,2-Dichloropropane	<0.18	ug/L	0.18	0.61	1			09/25/2020 11:08	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.27	ug/L	0.27	0.89	1			09/25/2020 11:08	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1			09/25/2020 11:08	RLD	EPA 8260C
1,3-Dichloropropane	<0.17	ug/L	0.17	0.57	1			09/25/2020 11:08	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.30	ug/L	0.30	1.1	1			09/25/2020 11:08	RLD	EPA 8260C
2,2-Dichloropropane	<0.30	ug/L	0.30	0.99	1	Q,Y		09/25/2020 11:08	RLD	EPA 8260C
2-Butanone	<2.6	ug/L	2.6	8.8	1			09/25/2020 11:08	RLD	EPA 8260C
2-Chlorotoluene	<0.25	ug/L	0.25	0.84	1			09/25/2020 11:08	RLD	EPA 8260C
2-Hexanone	<3.0	ug/L	3.0	10	1			09/25/2020 11:08	RLD	EPA 8260C
4-Chlorotoluene	<0.30	ug/L	0.30	1.1	1			09/25/2020 11:08	RLD	EPA 8260C
4-Methyl-2-pentanone	<2.2	ug/L	2.2	7.4	1			09/25/2020 11:08	RLD	EPA 8260C
Acetone	<4.0	ug/L	4.0	12	1	Z		09/25/2020 11:08	RLD	EPA 8260C
Benzene	<0.40	ug/L	0.40	1.4	1			09/25/2020 11:08	RLD	EPA 8260C
Bromobenzene	<0.40	ug/L	0.40	1.3	1			09/25/2020 11:08	RLD	EPA 8260C
Bromochloromethane	<0.30	ug/L	0.30	1.0	1			09/25/2020 11:08	RLD	EPA 8260C
Bromodichloromethane	<0.29	ug/L	0.29	0.95	1			09/25/2020 11:08	RLD	EPA 8260C
Bromoform	<0.40	ug/L	0.40	1.3	1			09/25/2020 11:08	RLD	EPA 8260C
Bromomethane	<0.90	ug/L	0.90	3.1	1			09/25/2020 11:08	RLD	EPA 8260C
Carbon disulfide	<0.60	ug/L	0.60	1.9	1			09/25/2020 11:08	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475773 Sample Description: TRIP BLANK

Sampled: 09/17/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Carbon tetrachloride	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
Chlorobenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1		09/25/2020	11:08	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	1.2	1		09/25/2020	11:08	RLD	EPA 8260C
Chloromethane	<0.60	ug/L	0.60	2.1	1		09/25/2020	11:08	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.16	ug/L	0.16	0.54	1		09/25/2020	11:08	RLD	EPA 8260C
Dibromochloromethane	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
Dibromomethane	<0.22	ug/L	0.22	0.73	1		09/25/2020	11:08	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.3	1		09/25/2020	11:08	RLD	EPA 8260C
Diisopropyl ether	<0.40	ug/L	0.40	1.3	1		09/25/2020	11:08	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
Hexachlorobutadiene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:08	RLD	EPA 8260C
Isopropylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
m & p-Xylene	<0.70	ug/L	0.70	2.4	1		09/25/2020	11:08	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	Q	09/25/2020	11:08	RLD	EPA 8260C
Methylene chloride	1.1	ug/L	0.40 *	1.5	1		09/25/2020	11:08	RLD	EPA 8260C
n-Butylbenzene	<0.29	ug/L	0.29	0.98	1		09/25/2020	11:08	RLD	EPA 8260C
n-Propylbenzene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
Naphthalene	<0.30	ug/L	0.30	1.0	1		09/25/2020	11:08	RLD	EPA 8260C
o-Xylene	<0.26	ug/L	0.26	0.88	1		09/25/2020	11:08	RLD	EPA 8260C
p-Isopropyltoluene	<0.30	ug/L	0.30	1.1	1		09/25/2020	11:08	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:08	RLD	EPA 8260C
Styrene	<0.29	ug/L	0.29	0.95	1		09/25/2020	11:08	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.2	1		09/25/2020	11:08	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 475773 Sample Description: TRIP BLANK

Sampled: 09/17/2020

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrachloroethene	<0.27	ug/L	0.27	0.89	1			09/25/2020 11:08	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1			09/25/2020 11:08	RLD	EPA 8260C
Toluene	<0.21	ug/L	0.21	0.69	1			09/25/2020 11:08	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.30	ug/L	0.30	1.2	1			09/25/2020 11:08	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.23	ug/L	0.23	0.77	1	Q		09/25/2020 11:08	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.1	1			09/25/2020 11:08	RLD	EPA 8260C
Trichlorofluoromethane	<0.40	ug/L	0.40	1.4	1			09/25/2020 11:08	RLD	EPA 8260C
Vinyl chloride	<0.14	ug/L	0.14	0.46	1			09/25/2020 11:08	RLD	EPA 8260C

**Notes regarding entire Chain of Custody:**

Notes: \* Indicates a value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution and also any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals  
 Project Manager  
 608-356-2760

**QC Qualifiers**

<u>Code</u>	<u>Description</u>
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

**Current CT Laboratories Certifications**

Wisconsin (WDNR) Chemistry ID# 157066030  
 Wisconsin (DATCP) Bacteriology ID# 289  
 Louisiana NELAP (primary) ID# ACC20190002  
 Illinois NELAP Lab ID# 200073  
 Kansas NELAP Lab ID# E-10368  
 Virginia NELAP Lab ID# 460203  
 ISO/IEC 17025-2005 A2LA Cert # 3806.01  
 DoD-ELAP A2LA 3806.01  
 GA EPD Stipulation ID ACC20190002

October 15, 2020

**Vista Work Order No. 2001989**

Mr. Dennis Linley  
C T Laboratories  
1230 Lange Court  
Baraboo, WI 53913-3109

Dear Mr. Linley,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on September 23, 2020 under your Project Name 'TRUAX FIELD'.

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](mailto:mmaier@vista-analytical.com).

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

Sincerely,

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 Work Order No. 2001989

### Case Narrative

#### Sample Condition on Receipt:

Ten soil samples and seven groundwater 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 - Solid

The soil samples were extracted and analyzed for a selected list of PFAS using Vista's Isotope Dilution Method. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

##### Holding Times

The samples were extracted and analyzed within the EPA-recommended 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 the Reporting Limit (RL). The OPR recoveries were within the method acceptance criteria.

The internal standard recoveries outside the acceptance criteria are listed in the table below.

##### PFAS Isotope Dilution Method - Aqueous

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

<u>Laboratory ID</u>	<u>Sample Name</u>
2001989-03	E4-20
2001989-06	E3-20
2001989-09	E5-20
2001989-13	E6-20
2001989-16	E7-20

The aqueous samples were extracted and analyzed for a selected list of PFAS using Vista's PFAS Isotope Dilution Method. The results for PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Results for all other analytes include the linear isomers only.

### Holding Times

The samples were extracted and analyzed within the EPA-recommended hold times.

### Quality Control

The Initial Calibration and Continuing Calibration Verifications met the 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 the Reporting Limit. The OPR recoveries were within the method acceptance criteria.

The internal standard recoveries outside the acceptance criteria are listed in the table below.

### QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
2001989-08	E5-20,S2,5'	PFAS Isotope Dilution Method	d5-EtFOSA	H	9.20
2001989-11	E6-20,S1,1'	PFAS Isotope Dilution Method	d5-EtFOSA	H	9.90
B0I0206-BLK1	B0I0206-BLK1	PFAS Isotope Dilution Method	d3-MeFOSA	H	8.40
B0I0206-BLK1	B0I0206-BLK1	PFAS Isotope Dilution Method	d5-EtFOSA	H	7.10
B0I0206-BS1	B0I0206-BS1	PFAS Isotope Dilution Method	d5-EtFOSA	H	8.80

H = Recovery was outside laboratory acceptance criteria.



## TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	4
Sample Inventory.....	5
Analytical Results.....	6
Qualifiers.....	49
Certifications.....	50
Sample Receipt.....	53

# Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2001989-01	E4-20,S1,1'	16-Sep-20 13:50	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-02	E4-20,S2,5'	16-Sep-20 13:55	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-03	E4-20	16-Sep-20 14:15	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001989-04	E3-20,S1,1'	16-Sep-20 14:35	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-05	E3-20,S2,5'	16-Sep-20 14:45	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-06	E3-20	16-Sep-20 15:05	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001989-07	E5-20,S1,1'	16-Sep-20 15:25	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-08	E5-20,S2,5'	16-Sep-20 15:30	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-09	E5-20	16-Sep-20 15:50	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001989-10	PROBE BLANK	16-Sep-20 16:05	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001989-11	E6-20,S1,1'	17-Sep-20 09:55	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-12	E6-20,S2,5'	17-Sep-20 10:05	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-13	E6-20	17-Sep-20 10:20	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001989-14	E7-20,S1,1'	17-Sep-20 10:50	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-15	E7-20,S2,4 1/2'	17-Sep-20 10:55	23-Sep-20 10:14	HDPE Jar, 6 oz
2001989-16	E7-20	17-Sep-20 11:20	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
2001989-17	PUMP BLANK	17-Sep-20 15:00	23-Sep-20 10:14	HDPE Bottle, 250 mL HDPE Bottle, 250 mL

## **ANALYTICAL RESULTS**

**Sample ID: Method Blank**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data						
Name:	C T Laboratories	Matrix:	Solid	Lab Sample:	B0I0206-BLK1	Column:	BEH C18			
Project:	TRUAX FIELD									

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.346	0.346	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFPeA	2706-90-3	<0.398	0.398	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFBS	375-73-5	<0.304	0.304	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
4:2 FTS	757124-72-4	<0.360	0.360	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFHxA	307-24-4	<0.216	0.216	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFPeS	2706-91-4	<0.658	0.658	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
HFPO-DA	13252-13-6	<1.18	1.18	1.50		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFHpA	375-85-9	<0.478	0.478	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
ADONA	919005-14-4	<0.340	0.340	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFHxS	355-46-4	<0.390	0.390	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
6:2 FTS	27619-97-2	<0.654	0.654	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFOA	335-67-1	<0.470	0.470	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFHpS	375-92-8	<0.738	0.738	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFNA	375-95-1	<0.312	0.312	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFOSA	754-91-6	<1.01	1.01	1.50		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFOS	1763-23-1	<0.430	0.430	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
9Cl-PF3ONS	756426-58-1	<0.370	0.370	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFDA	335-76-2	<0.452	0.452	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
8:2 FTS	39108-34-4	<0.722	0.722	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFNS	68259-12-1	<1.15	1.15	1.50		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
MeFOSAA	2355-31-9	<0.736	0.736	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
EtFOSAA	2991-50-6	<0.688	0.688	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFUnA	2058-94-8	<0.258	0.258	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFDS	335-77-3	<0.690	0.690	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
11Cl-PF3OUdS	763051-92-9	<0.722	0.722	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
10:2 FTS	120226-60-0	<1.02	1.02	1.50		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFDoA	307-55-1	<0.404	0.404	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
MeFOSA	31506-32-8	<5.78	5.78	10.0		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFTTrDA	72629-94-8	<0.402	0.402	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFDoS	79780-39-5	<0.600	0.600	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFTeDA	376-06-7	<0.264	0.264	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
EtFOSA	4151-50-2	<3.84	3.84	10.0		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFHxDA	67905-19-5	<0.170	0.170	0.500		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
PFODA	16517-11-6	<0.500	0.500	1.00		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
MeFOSE	24448-09-7	<4.96	4.96	10.0		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
EtFOSE	1691-99-2	<5.38	5.38	10.0		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	99.4	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1

**Sample ID: Method Blank** **PFAS Isotope Dilution Method**

<b>Client Data</b>	<b>Laboratory Data</b>
Name: C T Laboratories	Lab Sample: B0I0206-BLK1
Project: TRUAX FIELD	Column: BEH C18
Matrix: Solid	

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.2	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C3-PFBS	IS	88.1	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C3-HFPO-DA	IS	76.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-4:2 FTS	IS	88.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFHxA	IS	83.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C4-PFHpA	IS	84.1	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C3-PFHxS	IS	85.6	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-6:2 FTS	IS	84.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C5-PFNA	IS	76.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C8-PFOA	IS	40.0	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFOA	IS	82.4	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C8-PFOS	IS	95.9	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFDA	IS	65.5	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-8:2 FTS	IS	89.4	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
d3-MeFOSAA	IS	53.6	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFUnA	IS	54.2	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
d5-EtFOSAA	IS	49.7	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-10:2 FTS	IS	75.4	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFDoA	IS	51.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
d3-MeFOSA	IS	8.40	10 - 150	H	B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFTeDA	IS	71.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
d5-EtFOSA	IS	7.10	10 - 150	H	B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
13C2-PFHxDA	IS	78.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
d7-MeFOSE	IS	23.7	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1
d9-EtFOSE	IS	21.2	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:02	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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:	C T Laboratories	Matrix:	Solid		Lab Sample:	B0I0206-BS1	Column:	BEH C18				
Project:	TRUAX FIELD											

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	1.99	2.00	99.5	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFPeA	2706-90-3	2.05	2.00	102	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFBS	375-73-5	2.19	2.00	109	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
4:2 FTS	757124-72-4	2.03	2.00	102	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFHxA	307-24-4	2.01	2.00	101	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFPeS	2706-91-4	1.90	2.00	95.2	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
HFPO-DA	13252-13-6	1.97	2.00	98.5	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFHpA	375-85-9	1.87	2.00	93.3	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
ADONA	919005-14-4	1.91	2.00	95.4	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFHxS	355-46-4	2.11	2.00	105	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
6:2 FTS	27619-97-2	1.99	2.00	99.4	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFOA	335-67-1	2.01	2.00	100	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFHpS	375-92-8	2.11	2.00	106	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFNA	375-95-1	2.13	2.00	106	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFOSA	754-91-6	2.22	2.00	111	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFOS	1763-23-1	2.11	2.00	106	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
9Cl-PF3ONS	756426-58-1	1.80	2.00	89.9	50 - 150	Q	B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFDA	335-76-2	1.99	2.00	99.6	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
8:2 FTS	39108-34-4	2.36	2.00	118	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFNS	68259-12-1	2.11	2.00	105	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
MeFOSAA	2355-31-9	2.03	2.00	102	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
EtFOSAA	2991-50-6	1.89	2.00	94.7	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFUnA	2058-94-8	1.62	2.00	80.8	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFDS	335-77-3	1.76	2.00	87.9	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
11Cl-PF3OUdS	763051-92-9	2.56	2.00	128	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
10:2 FTS	120226-60-0	1.99	2.00	99.3	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFDaA	307-55-1	1.99	2.00	99.6	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
MeFOSA	31506-32-8	10.8	10.0	108	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFTTrDA	72629-94-8	2.12	2.00	106	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFDoS	79780-39-5	2.37	2.00	119	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFTeDA	376-06-7	2.08	2.00	104	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
EtFOSA	4151-50-2	10.4	10.0	104	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFHxDA	67905-19-5	2.13	2.00	106	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
PFODA	16517-11-6	1.11	2.00	55.5	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1

**Sample ID: OPR**

**PFAS Isotope Dilution Method**

Client Data					Laboratory Data						
Name:	C T Laboratories	Matrix:	Solid		Lab Sample:	B0I0206-BS1	Column:	BEH C18			
Project:	TRUAX FIELD										

Analyte	CAS Number	Amt Found (ng/g)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
MeFOSE	24448-09-7	9.45	10.0	94.5	50 - 150	J	B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
EtFOSE	1691-99-2	10.9	10.0	109	50 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
Labeled Standards		Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA		IS		100	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C3-PFPeA		IS		80.1	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C3-PFBS		IS		82.3	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C3-HFPO-DA		IS		79.4	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-4:2 FTS		IS		96.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFHxA		IS		85.4	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C4-PFHpA		IS		85.6	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C3-PFHxS		IS		92.6	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-6:2 FTS		IS		89.3	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C5-PFNA		IS		69.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C8-PFOSA		IS		40.3	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFOA		IS		80.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C8-PFOS		IS		86.6	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFDA		IS		67.1	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-8:2 FTS		IS		94.3	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
d3-MeFOSAA		IS		58.8	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFUnA		IS		59.9	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
d5-EtFOSAA		IS		56.3	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-10:2 FTS		IS		80.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFDoA		IS		55.7	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
d3-MeFOSA		IS		10.5	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFTeDA		IS		71.5	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
d5-EtFOSA		IS		8.80	10 - 150	H	B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
13C2-PFHxDA		IS		54.0	25 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
d7-MeFOSE		IS		26.4	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1
d9-EtFOSE		IS		21.0	10 - 150		B0I0206	28-Sep-20	1.00 g	05-Oct-20 17:13	1

Sample ID: E4-20,S1,1'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-01	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 13:50	Date Received:	23-Sep-20 10:14		
				% Solids:	79.2		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	0.409	0.341	0.493	J	B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFPeA	2706-90-3	<0.392	0.392	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFBS	375-73-5	<0.300	0.300	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
4:2 FTS	757124-72-4	<0.355	0.355	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFHxA	307-24-4	<0.213	0.213	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFPeS	2706-91-4	<0.649	0.649	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFHpA	375-85-9	<0.471	0.471	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
ADONA	919005-14-4	<0.335	0.335	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFHxS	355-46-4	<0.385	0.385	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
6:2 FTS	27619-97-2	<0.645	0.645	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFOA	335-67-1	<0.463	0.463	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFHpS	375-92-8	<0.728	0.728	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFNA	375-95-1	<0.308	0.308	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFOSA	754-91-6	<0.994	0.994	1.48		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFOS	1763-23-1	<0.424	0.424	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
9Cl-PF3ONS	756426-58-1	<0.365	0.365	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFDA	335-76-2	<0.446	0.446	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
8:2 FTS	39108-34-4	<0.712	0.712	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
MeFOSAA	2355-31-9	<0.726	0.726	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
EtFOSAA	2991-50-6	<0.678	0.678	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFUnA	2058-94-8	<0.254	0.254	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFDS	335-77-3	<0.680	0.680	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
11Cl-PF3OUdS	763051-92-9	<0.712	0.712	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
10:2 FTS	120226-60-0	<1.00	1.00	1.48		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFDoA	307-55-1	<0.398	0.398	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
MeFOSA	31506-32-8	<5.70	5.70	9.86		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFTrDA	72629-94-8	<0.396	0.396	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFDoS	79780-39-5	<0.592	0.592	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFTeDA	376-06-7	<0.260	0.260	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
EtFOSA	4151-50-2	<3.79	3.79	9.86		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFHxDA	67905-19-5	<0.168	0.168	0.493		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
PFODA	16517-11-6	<0.493	0.493	0.986		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
MeFOSE	24448-09-7	<4.89	4.89	9.86		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
EtFOSE	1691-99-2	<5.30	5.30	9.86		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	81.2	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1



**Sample ID: E4-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-01	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 13:50	Date Received:	23-Sep-20 10:14		
				% Solids:	79.2		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.4	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C3-PFBS	IS	94.2	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C3-HFPO-DA	IS	99.5	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-4:2 FTS	IS	112	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFHxA	IS	86.7	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C4-PFHpA	IS	86.0	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C3-PFHxS	IS	92.6	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-6:2 FTS	IS	90.9	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C5-PFNA	IS	79.0	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C8-PFOA	IS	49.9	10 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFOA	IS	84.3	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C8-PFOS	IS	95.9	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFDA	IS	69.4	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-8:2 FTS	IS	84.2	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
d3-MeFOSAA	IS	67.9	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFUnA	IS	67.2	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
d5-EtFOSAA	IS	70.7	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-10:2 FTS	IS	89.5	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFDoA	IS	71.7	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
d3-MeFOSA	IS	25.4	10 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFTeDA	IS	75.5	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
d5-EtFOSA	IS	26.2	10 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
13C2-PFHxDA	IS	78.7	25 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
d7-MeFOSE	IS	43.8	10 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1
d9-EtFOSE	IS	42.6	10 - 150		B0I0206	28-Sep-20	1.28 g	05-Oct-20 01:53	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E4-20,S2,5'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-02	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 13:55	Date Received:	23-Sep-20 10:14		
				% Solids:	85.2		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.341	0.341	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFPeA	2706-90-3	<0.393	0.393	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFBS	375-73-5	<0.300	0.300	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
4:2 FTS	757124-72-4	<0.355	0.355	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFHxA	307-24-4	<0.213	0.213	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFPeS	2706-91-4	<0.649	0.649	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFHpA	375-85-9	<0.472	0.472	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
ADONA	919005-14-4	<0.335	0.335	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFHxS	355-46-4	<0.385	0.385	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
6:2 FTS	27619-97-2	<0.645	0.645	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFOA	335-67-1	<0.464	0.464	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFHpS	375-92-8	<0.728	0.728	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFNA	375-95-1	<0.308	0.308	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFOSA	754-91-6	<0.994	0.994	1.48		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFOS	1763-23-1	<0.424	0.424	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
9Cl-PF3ONS	756426-58-1	<0.365	0.365	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFDA	335-76-2	<0.446	0.446	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
8:2 FTS	39108-34-4	<0.712	0.712	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
MeFOSAA	2355-31-9	<0.726	0.726	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
EtFOSAA	2991-50-6	<0.679	0.679	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFUnA	2058-94-8	<0.255	0.255	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFDS	335-77-3	<0.681	0.681	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
11Cl-PF3OUdS	763051-92-9	<0.712	0.712	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
10:2 FTS	120226-60-0	<1.00	1.00	1.48		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFDoA	307-55-1	<0.399	0.399	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
MeFOSA	31506-32-8	<5.70	5.70	9.86		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFTrDA	72629-94-8	<0.397	0.397	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFDoS	79780-39-5	<0.592	0.592	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFTeDA	376-06-7	<0.260	0.260	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
EtFOSA	4151-50-2	<3.79	3.79	9.86		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFHxDA	67905-19-5	<0.168	0.168	0.493		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
PFODA	16517-11-6	<0.493	0.493	0.986		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
MeFOSE	24448-09-7	<4.89	4.89	9.86		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
EtFOSE	1691-99-2	<5.31	5.31	9.86		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	87.9	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1

**Sample ID: E4-20,S2,5'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-02	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 13:55	Date Received:	23-Sep-20 10:14		
				% Solids:	85.2		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	87.0	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C3-PFBS	IS	102	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C3-HFPO-DA	IS	99.1	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-4:2 FTS	IS	102	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFHxA	IS	85.7	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C4-PFHpA	IS	89.0	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C3-PFHxS	IS	94.6	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-6:2 FTS	IS	94.2	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C5-PFNA	IS	84.5	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C8-PFOA	IS	45.0	10 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFOA	IS	85.1	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C8-PFOS	IS	98.2	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFDA	IS	73.3	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-8:2 FTS	IS	97.7	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
d3-MeFOSAA	IS	67.9	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFUnA	IS	69.7	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
d5-EtFOSAA	IS	70.3	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-10:2 FTS	IS	79.3	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFDoA	IS	69.9	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
d3-MeFOSA	IS	15.8	10 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFTeDA	IS	70.0	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
d5-EtFOSA	IS	13.4	10 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
13C2-PFHxDA	IS	75.9	25 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
d7-MeFOSE	IS	42.7	10 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1
d9-EtFOSE	IS	45.2	10 - 150		B0I0206	28-Sep-20	1.19 g	05-Oct-20 02:04	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E3-20,S1,1'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-04	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 14:35	Date Received:	23-Sep-20 10:14		
				% Solids:	90.5		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.333	0.333	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFPeA	2706-90-3	<0.383	0.383	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFBS	375-73-5	<0.292	0.292	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
4:2 FTS	757124-72-4	<0.346	0.346	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFHxA	307-24-4	<0.208	0.208	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFPeS	2706-91-4	<0.632	0.632	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
HFPO-DA	13252-13-6	<1.13	1.13	1.44		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFHpA	375-85-9	<0.459	0.459	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
ADONA	919005-14-4	<0.327	0.327	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFHxS	355-46-4	<0.375	0.375	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
6:2 FTS	27619-97-2	<0.629	0.629	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFOA	335-67-1	<0.452	0.452	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFHpS	375-92-8	<0.709	0.709	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFNA	375-95-1	<0.300	0.300	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFOSA	754-91-6	<0.969	0.969	1.44		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFOS	1763-23-1	<0.413	0.413	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
9Cl-PF3ONS	756426-58-1	<0.356	0.356	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFDA	335-76-2	<0.434	0.434	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
8:2 FTS	39108-34-4	<0.694	0.694	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFNS	68259-12-1	<1.11	1.11	1.44		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
MeFOSAA	2355-31-9	<0.707	0.707	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
EtFOSAA	2991-50-6	<0.661	0.661	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFUnA	2058-94-8	<0.248	0.248	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFDS	335-77-3	<0.663	0.663	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
11Cl-PF3OUdS	763051-92-9	<0.694	0.694	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
10:2 FTS	120226-60-0	<0.976	0.976	1.44		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFDoA	307-55-1	<0.388	0.388	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
MeFOSA	31506-32-8	<5.56	5.56	9.61		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFTTrDA	72629-94-8	<0.386	0.386	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFDoS	79780-39-5	<0.577	0.577	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFTeDA	376-06-7	<0.254	0.254	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
EtFOSA	4151-50-2	<3.69	3.69	9.61		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFHxDA	67905-19-5	<0.163	0.163	0.481		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
PFODA	16517-11-6	<0.481	0.481	0.961		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
MeFOSE	24448-09-7	<4.77	4.77	9.61		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
EtFOSE	1691-99-2	<5.17	5.17	9.61		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	92.0	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1

**Sample ID: E3-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-04	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 14:35	Date Received:	23-Sep-20 10:14		
				% Solids:	90.5		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	91.2	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C3-PFBS	IS	105	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C3-HFPO-DA	IS	101	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-4:2 FTS	IS	106	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFHxA	IS	94.4	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C4-PFHpA	IS	91.9	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C3-PFHxS	IS	96.1	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-6:2 FTS	IS	106	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C5-PFNA	IS	82.6	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C8-PFOA	IS	39.2	10 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFOA	IS	94.6	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C8-PFOS	IS	105	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFDA	IS	69.6	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-8:2 FTS	IS	82.8	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
d3-MeFOSAA	IS	63.7	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFUnA	IS	57.5	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
d5-EtFOSAA	IS	60.3	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-10:2 FTS	IS	75.7	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFDoA	IS	59.6	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
d3-MeFOSA	IS	15.9	10 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFTeDA	IS	60.4	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
d5-EtFOSA	IS	12.2	10 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
13C2-PFHxDA	IS	64.1	25 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
d7-MeFOSE	IS	28.0	10 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1
d9-EtFOSE	IS	26.0	10 - 150		B0I0206	28-Sep-20	1.15 g	05-Oct-20 02:14	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E3-20,S2,5'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-05	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 14:45	Date Received:	23-Sep-20 10:14		
				% Solids:	78.8		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.340	0.340	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFPeA	2706-90-3	<0.392	0.392	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFBS	375-73-5	<0.299	0.299	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
4:2 FTS	757124-72-4	<0.354	0.354	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFHxA	307-24-4	<0.212	0.212	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFPeS	2706-91-4	<0.647	0.647	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFHpA	375-85-9	<0.470	0.470	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
ADONA	919005-14-4	<0.334	0.334	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFHxS	355-46-4	<0.384	0.384	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
6:2 FTS	27619-97-2	<0.643	0.643	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFOA	335-67-1	0.953	0.462	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFHpS	375-92-8	<0.726	0.726	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFNA	375-95-1	<0.307	0.307	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFOSA	754-91-6	<0.992	0.992	1.48		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFOS	1763-23-1	3.31	0.423	0.492	Q	B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
9Cl-PF3ONS	756426-58-1	<0.364	0.364	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFDA	335-76-2	<0.445	0.445	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
8:2 FTS	39108-34-4	<0.710	0.710	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
MeFOSAA	2355-31-9	<0.724	0.724	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
EtFOSAA	2991-50-6	<0.677	0.677	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFUnA	2058-94-8	<0.254	0.254	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFDS	335-77-3	<0.679	0.679	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
11Cl-PF3OUdS	763051-92-9	<0.710	0.710	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
10:2 FTS	120226-60-0	<0.999	0.999	1.48		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFDoA	307-55-1	<0.397	0.397	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
MeFOSA	31506-32-8	<5.69	5.69	9.84		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFTrDA	72629-94-8	<0.395	0.395	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFDoS	79780-39-5	<0.590	0.590	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFTeDA	376-06-7	<0.260	0.260	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
EtFOSA	4151-50-2	<3.78	3.78	9.84		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFHxDA	67905-19-5	<0.167	0.167	0.492		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
PFODA	16517-11-6	<0.492	0.492	0.984		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
MeFOSE	24448-09-7	<4.88	4.88	9.84		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
EtFOSE	1691-99-2	<5.29	5.29	9.84		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	77.5	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1

**Sample ID: E3-20,S2,5'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-05	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 14:45	Date Received:	23-Sep-20 10:14		
				% Solids:	78.8		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	78.3	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C3-PFBS	IS	102	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C3-HFPO-DA	IS	86.0	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-4:2 FTS	IS	99.0	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFHxA	IS	79.2	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C4-PFHpA	IS	78.4	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C3-PFHxS	IS	91.3	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-6:2 FTS	IS	96.8	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C5-PFNA	IS	78.1	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C8-PFOA	IS	40.4	10 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFOA	IS	81.4	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C8-PFOS	IS	95.9	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFDA	IS	66.5	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-8:2 FTS	IS	94.8	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
d3-MeFOSAA	IS	73.6	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFUnA	IS	67.2	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
d5-EtFOSAA	IS	66.3	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-10:2 FTS	IS	78.3	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFDoA	IS	70.9	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
d3-MeFOSA	IS	16.8	10 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFTeDA	IS	75.7	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
d5-EtFOSA	IS	16.5	10 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
13C2-PFHxDA	IS	75.2	25 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
d7-MeFOSE	IS	33.9	10 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1
d9-EtFOSE	IS	32.3	10 - 150		B0I0206	28-Sep-20	1.29 g	05-Oct-20 02:25	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E5-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-07	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:25	Date Received:	23-Sep-20 10:14		
				% Solids:	94.8		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.341	0.341	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFPeA	2706-90-3	<0.392	0.392	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFBS	375-73-5	<0.300	0.300	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
4:2 FTS	757124-72-4	<0.355	0.355	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFHxA	307-24-4	<0.213	0.213	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFPeS	2706-91-4	<0.649	0.649	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFHpA	375-85-9	<0.471	0.471	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
ADONA	919005-14-4	<0.335	0.335	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFHxS	355-46-4	<0.384	0.384	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
6:2 FTS	27619-97-2	<0.645	0.645	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFOA	335-67-1	<0.463	0.463	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFHpS	375-92-8	<0.727	0.727	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFNA	375-95-1	<0.308	0.308	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFOSA	754-91-6	<0.994	0.994	1.48		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFOS	1763-23-1	0.816	0.424	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
9Cl-PF3ONS	756426-58-1	<0.365	0.365	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFDA	335-76-2	<0.446	0.446	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
8:2 FTS	39108-34-4	<0.712	0.712	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
MeFOSAA	2355-31-9	<0.725	0.725	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
EtFOSAA	2991-50-6	<0.678	0.678	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFUnA	2058-94-8	<0.254	0.254	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFDS	335-77-3	<0.680	0.680	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
11Cl-PF3OUdS	763051-92-9	<0.712	0.712	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
10:2 FTS	120226-60-0	<1.00	1.00	1.48		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFDoA	307-55-1	<0.398	0.398	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
MeFOSA	31506-32-8	<5.70	5.70	9.86		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFTTrDA	72629-94-8	<0.396	0.396	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFDoS	79780-39-5	<0.591	0.591	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFTeDA	376-06-7	<0.260	0.260	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
EtFOSA	4151-50-2	<3.79	3.79	9.86		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFHxDA	67905-19-5	<0.168	0.168	0.493		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
PFODA	16517-11-6	<0.493	0.493	0.986		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
MeFOSE	24448-09-7	<4.89	4.89	9.86		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
EtFOSE	1691-99-2	<5.30	5.30	9.86		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	86.5	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1



**Sample ID: E5-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-07	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:25	Date Received:	23-Sep-20 10:14		
				% Solids:	94.8		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	84.6	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C3-PFBS	IS	103	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C3-HFPO-DA	IS	108	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-4:2 FTS	IS	103	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFHxA	IS	88.0	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C4-PFHpA	IS	88.6	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C3-PFHxS	IS	96.7	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-6:2 FTS	IS	97.1	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C5-PFNA	IS	80.8	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C8-PFOA	IS	43.3	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFOA	IS	91.2	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C8-PFOS	IS	98.5	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFDA	IS	70.1	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-8:2 FTS	IS	79.4	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
d3-MeFOSAA	IS	62.9	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFUnA	IS	63.3	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
d5-EtFOSAA	IS	64.1	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-10:2 FTS	IS	82.8	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFDoA	IS	66.4	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
d3-MeFOSA	IS	12.7	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFTeDA	IS	60.7	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
d5-EtFOSA	IS	10.6	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
13C2-PFHxDA	IS	45.1	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
d7-MeFOSE	IS	31.6	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1
d9-EtFOSE	IS	28.8	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 02:35	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E5-20,S2,5'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-08	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:30	Date Received:	23-Sep-20 10:14		
				% Solids:	77.7		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.337	0.337	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFPeA	2706-90-3	<0.388	0.388	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFBS	375-73-5	<0.297	0.297	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
4:2 FTS	757124-72-4	<0.351	0.351	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFHxA	307-24-4	<0.211	0.211	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFPeS	2706-91-4	<0.642	0.642	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
HFPO-DA	13252-13-6	<1.15	1.15	1.46		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFHpA	375-85-9	<0.466	0.466	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
ADONA	919005-14-4	<0.332	0.332	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFHxS	355-46-4	0.560	0.380	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
6:2 FTS	27619-97-2	<0.638	0.638	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFOA	335-67-1	<0.458	0.458	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFHpS	375-92-8	<0.720	0.720	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFNA	375-95-1	0.602	0.304	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFOSA	754-91-6	<0.983	0.983	1.46		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFOS	1763-23-1	11.5	0.419	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
9Cl-PF3ONS	756426-58-1	<0.361	0.361	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFDA	335-76-2	<0.441	0.441	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
8:2 FTS	39108-34-4	<0.704	0.704	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFNS	68259-12-1	<1.12	1.12	1.46		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
MeFOSAA	2355-31-9	<0.718	0.718	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
EtFOSAA	2991-50-6	<0.671	0.671	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFUnA	2058-94-8	<0.252	0.252	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFDS	335-77-3	<0.673	0.673	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
11Cl-PF3OUdS	763051-92-9	<0.704	0.704	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
10:2 FTS	120226-60-0	<0.991	0.991	1.46		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFDoA	307-55-1	<0.394	0.394	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
MeFOSA	31506-32-8	<5.64	5.64	9.75		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFTrDA	72629-94-8	<0.392	0.392	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFDoS	79780-39-5	<0.585	0.585	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFTeDA	376-06-7	<0.258	0.258	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
EtFOSA	4151-50-2	<3.75	3.75	9.75		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFHxDA	67905-19-5	<0.166	0.166	0.488		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
PFODA	16517-11-6	<0.488	0.488	0.975		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
MeFOSE	24448-09-7	<4.84	4.84	9.75		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
EtFOSE	1691-99-2	<5.25	5.25	9.75		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	106	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1

**Sample ID: E5-20,S2,5'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-08	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:30	Date Received:	23-Sep-20 10:14		
				% Solids:	77.7		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	85.3	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C3-PFBS	IS	86.7	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C3-HFPO-DA	IS	78.2	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-4:2 FTS	IS	78.3	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFHxA	IS	87.2	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C4-PFHpA	IS	82.3	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C3-PFHxS	IS	90.1	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-6:2 FTS	IS	92.4	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C5-PFNA	IS	71.6	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C8-PFOA	IS	43.4	10 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFOA	IS	82.5	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C8-PFOS	IS	92.3	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFDA	IS	56.7	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-8:2 FTS	IS	93.0	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
d3-MeFOSAA	IS	68.6	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFUnA	IS	53.8	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
d5-EtFOSAA	IS	62.1	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-10:2 FTS	IS	89.3	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFDoA	IS	58.8	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
d3-MeFOSA	IS	11.5	10 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFTeDA	IS	82.0	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
d5-EtFOSA	IS	9.20	10 - 150	H	B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
13C2-PFHxDA	IS	79.8	25 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
d7-MeFOSE	IS	29.2	10 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1
d9-EtFOSE	IS	29.3	10 - 150		B0I0206	28-Sep-20	1.32 g	05-Oct-20 17:23	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E6-20,S1,1'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-11	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 09:55	Date Received:	23-Sep-20 10:14		
				% Solids:	94.0		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.344	0.344	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFPeA	2706-90-3	<0.396	0.396	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFBS	375-73-5	<0.302	0.302	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
4:2 FTS	757124-72-4	<0.358	0.358	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFHxA	307-24-4	<0.215	0.215	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFPeS	2706-91-4	<0.654	0.654	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
HFPO-DA	13252-13-6	<1.17	1.17	1.49		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFHpA	375-85-9	<0.475	0.475	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
ADONA	919005-14-4	<0.338	0.338	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFHxS	355-46-4	<0.388	0.388	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
6:2 FTS	27619-97-2	<0.650	0.650	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFOA	335-67-1	<0.467	0.467	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFHpS	375-92-8	<0.734	0.734	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFNA	375-95-1	<0.310	0.310	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFOSA	754-91-6	<1.00	1.00	1.49		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFOS	1763-23-1	1.48	0.428	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
9Cl-PF3ONS	756426-58-1	<0.368	0.368	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFDA	335-76-2	<0.450	0.450	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
8:2 FTS	39108-34-4	<0.718	0.718	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFNS	68259-12-1	<1.14	1.14	1.49		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
MeFOSAA	2355-31-9	<0.732	0.732	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
EtFOSAA	2991-50-6	<0.684	0.684	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFUnA	2058-94-8	<0.257	0.257	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFDS	335-77-3	<0.686	0.686	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
11Cl-PF3OUdS	763051-92-9	<0.718	0.718	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
10:2 FTS	120226-60-0	<1.01	1.01	1.49		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFDoA	307-55-1	<0.402	0.402	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
MeFOSA	31506-32-8	<5.75	5.75	9.95		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFTTrDA	72629-94-8	<0.400	0.400	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFDoS	79780-39-5	<0.597	0.597	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFTeDA	376-06-7	<0.263	0.263	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
EtFOSA	4151-50-2	<3.82	3.82	9.95		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFHxDA	67905-19-5	<0.169	0.169	0.497		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
PFODA	16517-11-6	<0.497	0.497	0.995		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
MeFOSE	24448-09-7	<4.93	4.93	9.95		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
EtFOSE	1691-99-2	<5.35	5.35	9.95		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	108	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1

**Sample ID: E6-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-11	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 09:55	Date Received:	23-Sep-20 10:14		
				% Solids:	94.0		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	85.1	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C3-PFBS	IS	87.0	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C3-HFPO-DA	IS	88.1	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-4:2 FTS	IS	80.7	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFHxA	IS	87.6	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C4-PFHpA	IS	88.4	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C3-PFHxS	IS	90.8	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-6:2 FTS	IS	91.4	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C5-PFNA	IS	71.3	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C8-PFOA	IS	43.3	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFOA	IS	83.3	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C8-PFOS	IS	92.3	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFDA	IS	70.9	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-8:2 FTS	IS	92.9	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
d3-MeFOSAA	IS	61.6	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFUnA	IS	54.8	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
d5-EtFOSAA	IS	60.3	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-10:2 FTS	IS	76.6	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFDoA	IS	57.5	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
d3-MeFOSA	IS	13.1	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFTeDA	IS	73.5	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
d5-EtFOSA	IS	9.90	10 - 150	H	B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
13C2-PFHxDA	IS	54.2	25 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
d7-MeFOSE	IS	27.0	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1
d9-EtFOSE	IS	24.1	10 - 150		B0I0206	28-Sep-20	1.07 g	05-Oct-20 17:33	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E6-20,S2,5'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-12	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:05	Date Received:	23-Sep-20 10:14		
				% Solids:	90.7		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.341	0.341	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFPeA	2706-90-3	<0.392	0.392	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFBS	375-73-5	<0.299	0.299	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
4:2 FTS	757124-72-4	<0.354	0.354	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFHxA	307-24-4	<0.213	0.213	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFPeS	2706-91-4	<0.648	0.648	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
HFPO-DA	13252-13-6	<1.16	1.16	1.48		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFHpA	375-85-9	<0.471	0.471	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
ADONA	919005-14-4	<0.335	0.335	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFHxS	355-46-4	0.934	0.384	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
6:2 FTS	27619-97-2	<0.644	0.644	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFOA	335-67-1	<0.463	0.463	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFHpS	375-92-8	<0.727	0.727	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFNA	375-95-1	0.602	0.307	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFOSA	754-91-6	<0.992	0.992	1.48		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFOS	1763-23-1	7.49	0.423	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
9Cl-PF3ONS	756426-58-1	<0.364	0.364	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFDA	335-76-2	<0.445	0.445	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
8:2 FTS	39108-34-4	<0.711	0.711	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFNS	68259-12-1	<1.13	1.13	1.48		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
MeFOSAA	2355-31-9	<0.725	0.725	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
EtFOSAA	2991-50-6	<0.677	0.677	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFUnA	2058-94-8	<0.254	0.254	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFDS	335-77-3	<0.679	0.679	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
11Cl-PF3OUdS	763051-92-9	<0.711	0.711	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
10:2 FTS	120226-60-0	<1.00	1.00	1.48		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFDoA	307-55-1	<0.398	0.398	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
MeFOSA	31506-32-8	<5.69	5.69	9.85		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFTTrDA	72629-94-8	<0.396	0.396	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFDoS	79780-39-5	<0.591	0.591	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFTeDA	376-06-7	<0.260	0.260	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
EtFOSA	4151-50-2	<3.78	3.78	9.85		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFHxDA	67905-19-5	<0.167	0.167	0.492		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
PFODA	16517-11-6	<0.492	0.492	0.985		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
MeFOSE	24448-09-7	<4.88	4.88	9.85		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
EtFOSE	1691-99-2	<5.30	5.30	9.85		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	83.5	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1

**Sample ID: E6-20,S2,5'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-12	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:05	Date Received:	23-Sep-20 10:14		
				% Solids:	90.7		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.7	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C3-PFBS	IS	97.2	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C3-HFPO-DA	IS	98.9	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-4:2 FTS	IS	95.0	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFHxA	IS	86.3	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C4-PFHpA	IS	82.9	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C3-PFHxS	IS	89.8	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-6:2 FTS	IS	95.7	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C5-PFNA	IS	81.7	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C8-PFOA	IS	45.1	10 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFOA	IS	88.5	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C8-PFOS	IS	93.8	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFDA	IS	67.4	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-8:2 FTS	IS	85.4	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
d3-MeFOSAA	IS	57.7	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFUnA	IS	59.3	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
d5-EtFOSAA	IS	57.7	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-10:2 FTS	IS	73.4	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFDoA	IS	65.6	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
d3-MeFOSA	IS	13.7	10 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFTeDA	IS	61.2	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
d5-EtFOSA	IS	11.0	10 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
13C2-PFHxDA	IS	65.4	25 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
d7-MeFOSE	IS	29.1	10 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1
d9-EtFOSE	IS	24.7	10 - 150		B0I0206	28-Sep-20	1.12 g	05-Oct-20 03:06	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E7-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-14	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:50	Date Received:	23-Sep-20 10:14		
				% Solids:	94.3		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.346	0.346	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFPeA	2706-90-3	<0.398	0.398	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFBS	375-73-5	<0.304	0.304	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
4:2 FTS	757124-72-4	<0.360	0.360	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFHxA	307-24-4	<0.216	0.216	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFPeS	2706-91-4	<0.658	0.658	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
HFPO-DA	13252-13-6	<1.18	1.18	1.50		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFHpA	375-85-9	<0.478	0.478	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
ADONA	919005-14-4	<0.340	0.340	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFHxS	355-46-4	<0.390	0.390	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
6:2 FTS	27619-97-2	<0.654	0.654	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFOA	335-67-1	<0.470	0.470	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFHpS	375-92-8	<0.738	0.738	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFNA	375-95-1	<0.312	0.312	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFOSA	754-91-6	<1.01	1.01	1.50		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFOS	1763-23-1	<0.430	0.430	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
9Cl-PF3ONS	756426-58-1	<0.370	0.370	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFDA	335-76-2	<0.452	0.452	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
8:2 FTS	39108-34-4	<0.722	0.722	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFNS	68259-12-1	<1.15	1.15	1.50		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
MeFOSAA	2355-31-9	<0.736	0.736	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
EtFOSAA	2991-50-6	<0.688	0.688	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFUnA	2058-94-8	<0.258	0.258	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFDS	335-77-3	<0.690	0.690	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
11Cl-PF3OUdS	763051-92-9	<0.722	0.722	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
10:2 FTS	120226-60-0	<1.02	1.02	1.50		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFDoA	307-55-1	<0.404	0.404	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
MeFOSA	31506-32-8	<5.78	5.78	10.0		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFTrDA	72629-94-8	<0.402	0.402	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFDoS	79780-39-5	<0.600	0.600	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFTeDA	376-06-7	<0.264	0.264	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
EtFOSA	4151-50-2	<3.84	3.84	10.0		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFHxDA	67905-19-5	<0.170	0.170	0.500		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
PFODA	16517-11-6	<0.500	0.500	1.00		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
MeFOSE	24448-09-7	<4.96	4.96	10.0		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
EtFOSE	1691-99-2	<5.38	5.38	10.0		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	86.1	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1



**Sample ID: E7-20,S1,1'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-14	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:50	Date Received:	23-Sep-20 10:14		
				% Solids:	94.3		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	85.3	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C3-PFBS	IS	113	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C3-HFPO-DA	IS	89.7	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-4:2 FTS	IS	100	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFHxA	IS	84.8	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C4-PFHpA	IS	85.7	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C3-PFHxS	IS	95.9	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-6:2 FTS	IS	90.0	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C5-PFNA	IS	78.7	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C8-PFOA	IS	42.3	10 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFOA	IS	88.8	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C8-PFOS	IS	94.2	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFDA	IS	71.9	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-8:2 FTS	IS	89.8	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
d3-MeFOSAA	IS	70.4	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFUnA	IS	63.6	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
d5-EtFOSAA	IS	64.4	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-10:2 FTS	IS	88.3	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFDoA	IS	71.5	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
d3-MeFOSA	IS	18.9	10 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFTeDA	IS	67.1	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
d5-EtFOSA	IS	15.9	10 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
13C2-PFHxDA	IS	57.6	25 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
d7-MeFOSE	IS	33.8	10 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1
d9-EtFOSE	IS	30.2	10 - 150		B0I0206	28-Sep-20	1.06 g	05-Oct-20 03:16	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: E7-20,S2,4 1/2'

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-15	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:55	Date Received:	23-Sep-20 10:14		
				% Solids:	79.7		

Analyte	CAS Number	Conc. (ng/g)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.347	0.347	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFPeA	2706-90-3	<0.399	0.399	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFBS	375-73-5	<0.305	0.305	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
4:2 FTS	757124-72-4	<0.361	0.361	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFHxA	307-24-4	0.253	0.217	0.502	J, Q	B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFPeS	2706-91-4	<0.660	0.660	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
HFPO-DA	13252-13-6	<1.18	1.18	1.51		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFHpA	375-85-9	<0.480	0.480	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
ADONA	919005-14-4	<0.341	0.341	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFHxS	355-46-4	<0.391	0.391	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
6:2 FTS	27619-97-2	<0.656	0.656	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFOA	335-67-1	<0.472	0.472	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFHpS	375-92-8	<0.741	0.741	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFNA	375-95-1	<0.313	0.313	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFOSA	754-91-6	<1.01	1.01	1.51		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFOS	1763-23-1	<0.431	0.431	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
9Cl-PF3ONS	756426-58-1	<0.371	0.371	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFDA	335-76-2	<0.454	0.454	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
8:2 FTS	39108-34-4	<0.724	0.724	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFNS	68259-12-1	<1.15	1.15	1.51		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
MeFOSAA	2355-31-9	<0.739	0.739	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
EtFOSAA	2991-50-6	<0.690	0.690	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFUnA	2058-94-8	<0.259	0.259	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFDS	335-77-3	<0.692	0.692	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
11Cl-PF3OUdS	763051-92-9	<0.724	0.724	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
10:2 FTS	120226-60-0	<1.02	1.02	1.51		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFDoA	307-55-1	<0.405	0.405	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
MeFOSA	31506-32-8	<5.80	5.80	10.0		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFTrDA	72629-94-8	<0.403	0.403	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFDoS	79780-39-5	<0.602	0.602	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFTeDA	376-06-7	<0.265	0.265	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
EtFOSA	4151-50-2	<3.85	3.85	10.0		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFHxDA	67905-19-5	<0.171	0.171	0.502		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
PFODA	16517-11-6	<0.502	0.502	1.00		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
MeFOSE	24448-09-7	<4.98	4.98	10.0		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
EtFOSE	1691-99-2	<5.40	5.40	10.0		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	82.1	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1

**Sample ID: E7-20,S2,4 1/2'**

**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Soil	Lab Sample:	2001989-15	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:55	Date Received:	23-Sep-20 10:14		
				% Solids:	79.7		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.2	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C3-PFBS	IS	106	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C3-HFPO-DA	IS	90.8	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-4:2 FTS	IS	97.5	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFHxA	IS	83.9	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C4-PFHpA	IS	84.9	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C3-PFHxS	IS	90.1	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-6:2 FTS	IS	94.7	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C5-PFNA	IS	81.2	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C8-PFOA	IS	33.6	10 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFOA	IS	84.8	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C8-PFOS	IS	107	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFDA	IS	62.3	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-8:2 FTS	IS	78.2	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
d3-MeFOSAA	IS	70.5	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFUnA	IS	61.6	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
d5-EtFOSAA	IS	61.1	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-10:2 FTS	IS	78.3	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFDoA	IS	62.8	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
d3-MeFOSA	IS	12.7	10 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFTeDA	IS	71.5	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
d5-EtFOSA	IS	10.6	10 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
13C2-PFHxDA	IS	71.9	25 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
d7-MeFOSE	IS	25.5	10 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1
d9-EtFOSE	IS	22.7	10 - 150		B0I0206	28-Sep-20	1.25 g	05-Oct-20 03:27	1

MDL - Method Detection Limit

RL - Reporting limit

The results are reported in dry weight.  
The sample size is reported in wet weight.  
Results reported to MDL.

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: Method Blank					PFAS Isotope Dilution Method					
Client Data				Laboratory Data						
Name:	C T Laboratories	Matrix:	Aqueous	Lab Sample:	B0J0079-BLK1	Column:	BEH C18			
Project:	TRUAX FIELD									
Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.365	0.365	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFPeA	2706-90-3	<0.640	0.640	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFBS	375-73-5	<0.895	0.895	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
4:2 FTS	757124-72-4	<0.695	0.695	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFHxA	307-24-4	<1.09	1.09	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFPeS	2706-91-4	<1.21	1.21	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
HFPO-DA	13252-13-6	<2.41	2.41	2.50		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFHpA	375-85-9	<0.296	0.296	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
ADONA	919005-14-4	<0.361	0.361	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFHxS	355-46-4	<0.474	0.474	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
6:2 FTS	27619-97-2	<1.00	1.00	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFOA	335-67-1	<0.326	0.326	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFHpS	375-92-8	<0.469	0.469	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFNA	375-95-1	<0.405	0.405	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFOSA	754-91-6	<0.885	0.885	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFOS	1763-23-1	<0.404	0.404	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
9Cl-PF3ONS	756426-58-1	<0.725	0.725	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFDA	335-76-2	<0.745	0.745	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
8:2 FTS	39108-34-4	<1.03	1.03	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFNS	68259-12-1	<1.94	1.94	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
MeFOSAA	2355-31-9	<0.825	0.825	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
EtFOSAA	2991-50-6	<0.685	0.685	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFUnA	2058-94-8	<0.525	0.525	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFDS	335-77-3	<0.615	0.615	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
11Cl-PF3OUdS	763051-92-9	<1.21	1.21	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
10:2 FTS	120226-60-0	<1.57	1.57	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFDoA	307-55-1	<0.396	0.396	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
MeFOSA	31506-32-8	<1.92	1.92	10.0		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFTrDA	72629-94-8	<0.247	0.247	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFDoS	79780-39-5	<2.09	2.09	2.50		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFTeDA	376-06-7	<0.378	0.378	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
EtFOSA	4151-50-2	<2.56	2.56	10.0		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFHxDA	67905-19-5	<0.147	0.147	2.00		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
PFODA	16517-11-6	<3.07	3.07	3.50		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
MeFOSE	24448-09-7	<3.04	3.04	10.0		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
EtFOSE	1691-99-2	<4.72	4.72	10.0		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBA	IS	88.4	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1	

**Sample ID: Method Blank** **PFAS Isotope Dilution Method**

<b>Client Data</b>				<b>Laboratory Data</b>			
Name:	C T Laboratories	Matrix:	Aqueous	Lab Sample:	B0J0079-BLK1	Column:	BEH C18
Project:	TRUAX FIELD						

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	86.4	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C3-PFBS	IS	101	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C3-HFPO-DA	IS	87.9	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-4:2 FTS	IS	101	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFHxA	IS	90.9	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C4-PFHpA	IS	88.5	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C3-PFHxS	IS	88.5	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-6:2 FTS	IS	75.1	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C5-PFNA	IS	82.4	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C8-PFOA	IS	69.5	10 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFOA	IS	93.6	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C8-PFOS	IS	92.1	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFDA	IS	84.8	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-8:2 FTS	IS	91.3	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
d3-MeFOSAA	IS	86.3	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFUnA	IS	91.4	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
d5-EtFOSAA	IS	86.5	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-10:2 FTS	IS	80.9	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFDoA	IS	76.5	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
d3-MeFOSA	IS	24.3	10 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFTeDA	IS	76.6	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
d5-EtFOSA	IS	22.7	10 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
13C2-PFHxDA	IS	74.6	25 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
d7-MeFOSE	IS	49.3	10 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1
d9-EtFOSE	IS	51.9	10 - 150		B0J0079	08-Oct-20	0.250 L	11-Oct-20 23:18	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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:	C T Laboratories		Matrix:	Aqueous		Lab Sample:	B0J0079-BS1		Column:	BEH C18	
Project:	TRUAX FIELD										
Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	7.99	8.00	99.8	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFPeA	2706-90-3	8.19	8.00	102	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFBS	375-73-5	7.75	8.00	96.9	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
4:2 FTS	757124-72-4	6.90	8.00	86.3	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFHxA	307-24-4	8.34	8.00	104	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFPeS	2706-91-4	6.66	8.00	83.3	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
HFPO-DA	13252-13-6	7.91	8.00	98.9	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFHpA	375-85-9	7.80	8.00	97.5	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
ADONA	919005-14-4	8.03	8.00	100	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFHxS	355-46-4	7.03	8.00	87.9	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
6:2 FTS	27619-97-2	7.98	8.00	99.8	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFOA	335-67-1	8.34	8.00	104	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFHpS	375-92-8	7.95	8.00	99.4	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFNA	375-95-1	6.81	8.00	85.2	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFOSA	754-91-6	8.83	8.00	110	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFOS	1763-23-1	7.24	8.00	90.5	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
9Cl-PF3ONS	756426-58-1	7.27	8.00	90.9	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFDA	335-76-2	7.72	8.00	96.5	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
8:2 FTS	39108-34-4	6.78	8.00	84.7	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFNS	68259-12-1	7.99	8.00	99.9	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
MeFOSAA	2355-31-9	6.85	8.00	85.6	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
EtFOSAA	2991-50-6	7.86	8.00	98.3	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFUnA	2058-94-8	8.49	8.00	106	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFDS	335-77-3	5.24	8.00	65.5	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
11Cl-PF3OUdS	763051-92-9	6.62	8.00	82.7	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
10:2 FTS	120226-60-0	7.68	8.00	96.0	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFDoA	307-55-1	7.51	8.00	93.9	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
MeFOSA	31506-32-8	42.5	40.0	106	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFTTrDA	72629-94-8	7.42	8.00	92.8	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFDoS	79780-39-5	7.57	8.00	94.6	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFTeDA	376-06-7	8.20	8.00	103	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
EtFOSA	4151-50-2	36.3	40.0	90.6	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFHxDA	67905-19-5	7.80	8.00	97.5	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
PFODA	16517-11-6	6.66	8.00	83.3	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1

Sample ID: OPR						PFAS Isotope Dilution Method					
Client Data					Laboratory Data						
Name:	C T Laboratories		Matrix:	Aqueous		Lab Sample:	B0J0079-BS1		Column:	BEH C18	
Project:	TRUAX FIELD										
Analyte	CAS Number	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
MeFOSE	24448-09-7	38.7	40.0	96.7	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
EtFOSE	1691-99-2	39.3	40.0	98.3	50 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
Labeled Standards			Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA			IS	99.3	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C3-PFPeA			IS	83.9	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C3-PFBS			IS	87.1	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C3-HFPO-DA			IS	81.5	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-4:2 FTS			IS	89.6	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFHxA			IS	86.1	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C4-PFHpA			IS	87.3	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C3-PFHxS			IS	92.9	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-6:2 FTS			IS	83.5	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C5-PFNA			IS	83.9	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C8-PFOSA			IS	69.9	10 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFOA			IS	89.6	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C8-PFOS			IS	83.5	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFDA			IS	85.4	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-8:2 FTS			IS	113	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
d3-MeFOSAA			IS	69.9	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFUnA			IS	76.8	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
d5-EtFOSAA			IS	73.2	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-10:2 FTS			IS	70.2	40 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFDoA			IS	69.0	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
d3-MeFOSA			IS	17.4	10 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFTeDA			IS	66.9	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
d5-EtFOSA			IS	15.7	10 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
13C2-PFHxDA			IS	73.2	25 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
d7-MeFOSE			IS	54.7	10 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1
d9-EtFOSE			IS	53.8	10 - 150		B0J0079	08-Oct-20	0.250 L	12-Oct-20 18:44	1



**Sample ID: E4-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-03	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 14:15	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	34.1	0.366	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFPeA	2706-90-3	46.4	0.643	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFBS	375-73-5	11.6	0.900	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
4:2 FTS	757124-72-4	<0.699	0.699	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFHxA	307-24-4	53.4	1.10	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFPeS	2706-91-4	5.40	1.22	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
HFPO-DA	13252-13-6	<2.42	2.42	2.51		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFHpA	375-85-9	34.7	0.297	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
ADONA	919005-14-4	<0.363	0.363	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFHxS	355-46-4	41.8	0.476	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
6:2 FTS	27619-97-2	<1.01	1.01	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFOA	335-67-1	50.5	0.327	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFHpS	375-92-8	<0.471	0.471	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFNA	375-95-1	0.913	0.407	2.01	J	B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFOSA	754-91-6	2.03	0.890	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFOS	1763-23-1	6.69	0.406	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
9Cl-PF3ONS	756426-58-1	<0.729	0.729	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFDA	335-76-2	<0.749	0.749	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
8:2 FTS	39108-34-4	<1.04	1.04	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFNS	68259-12-1	<1.95	1.95	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
MeFOSAA	2355-31-9	<0.829	0.829	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
EtFOSAA	2991-50-6	<0.689	0.689	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFUnA	2058-94-8	<0.528	0.528	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFDS	335-77-3	<0.618	0.618	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
11Cl-PF3OUdS	763051-92-9	<1.21	1.21	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
10:2 FTS	120226-60-0	<1.57	1.57	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFDoA	307-55-1	<0.398	0.398	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
MeFOSA	31506-32-8	<1.93	1.93	10.1		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFTrDA	72629-94-8	<0.248	0.248	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFDoS	79780-39-5	<2.10	2.10	2.51		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFTeDA	376-06-7	<0.379	0.379	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
EtFOSA	4151-50-2	<2.57	2.57	10.1		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFHxDA	67905-19-5	<0.148	0.148	2.01		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
PFODA	16517-11-6	<3.09	3.09	3.52		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
MeFOSE	24448-09-7	<3.05	3.05	10.1		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
EtFOSE	1691-99-2	<4.74	4.74	10.1		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	48.4	25 - 150			B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1



**Sample ID: E4-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-03	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 14:15	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	81.7	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C3-PFBS	IS	87.9	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C3-HFPO-DA	IS	81.6	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-4:2 FTS	IS	92.3	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFHxA	IS	82.5	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C4-PFHpA	IS	80.2	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C3-PFHxS	IS	79.9	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-6:2 FTS	IS	70.1	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C5-PFNA	IS	77.6	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C8-PFOA	IS	69.5	10 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFOA	IS	85.3	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C8-PFOS	IS	78.8	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFDA	IS	82.8	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-8:2 FTS	IS	90.8	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
d3-MeFOSAA	IS	83.4	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFUnA	IS	87.1	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
d5-EtFOSAA	IS	81.3	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-10:2 FTS	IS	72.3	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFDoA	IS	78.4	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
d3-MeFOSA	IS	25.3	10 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFTeDA	IS	64.1	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
d5-EtFOSA	IS	22.6	10 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
13C2-PFHxDA	IS	58.6	25 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
d7-MeFOSE	IS	55.5	10 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1
d9-EtFOSE	IS	59.2	10 - 150		B0J0079	08-Oct-20	0.249 L	11-Oct-20 23:39	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: E3-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-06	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:05	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	43.4	0.382	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFPeA	2706-90-3	52.7	0.670	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFBS	375-73-5	7.92	0.937	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
4:2 FTS	757124-72-4	<0.728	0.728	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFHxA	307-24-4	56.3	1.14	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFPeS	2706-91-4	5.13	1.27	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
HFPO-DA	13252-13-6	<2.52	2.52	2.62		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFHpA	375-85-9	26.1	0.309	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
ADONA	919005-14-4	<0.378	0.378	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFHxS	355-46-4	38.3	0.496	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
6:2 FTS	27619-97-2	<1.05	1.05	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFOA	335-67-1	55.6	0.341	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFHpS	375-92-8	<0.490	0.490	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFNA	375-95-1	4.07	0.424	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFOSA	754-91-6	4.00	0.926	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFOS	1763-23-1	32.0	0.422	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
9Cl-PF3ONS	756426-58-1	<0.759	0.759	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFDA	335-76-2	2.59	0.780	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
8:2 FTS	39108-34-4	<1.08	1.08	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFNS	68259-12-1	<2.03	2.03	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
MeFOSAA	2355-31-9	<0.864	0.864	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
EtFOSAA	2991-50-6	<0.717	0.717	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFUnA	2058-94-8	<0.550	0.550	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFDS	335-77-3	<0.644	0.644	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
11Cl-PF3OUdS	763051-92-9	<1.26	1.26	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
10:2 FTS	120226-60-0	<1.64	1.64	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFDoA	307-55-1	<0.415	0.415	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
MeFOSA	31506-32-8	<2.00	2.00	10.5		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFTrDA	72629-94-8	<0.259	0.259	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFDoS	79780-39-5	<2.18	2.18	2.62		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFTeDA	376-06-7	<0.395	0.395	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
EtFOSA	4151-50-2	<2.67	2.67	10.5		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFHxDA	67905-19-5	<0.154	0.154	2.09		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
PFODA	16517-11-6	<3.21	3.21	3.66		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
MeFOSE	24448-09-7	<3.18	3.18	10.5		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
EtFOSE	1691-99-2	<4.94	4.94	10.5		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	32.8	25 - 150			B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1

**Sample ID: E3-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-06	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:05	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	81.2	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C3-PFBS	IS	88.7	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C3-HFPO-DA	IS	93.0	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-4:2 FTS	IS	86.2	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFHxA	IS	80.6	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C4-PFHpA	IS	79.1	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C3-PFHxS	IS	79.9	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-6:2 FTS	IS	73.9	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C5-PFNA	IS	81.9	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C8-PFOA	IS	62.2	10 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFOA	IS	84.3	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C8-PFOS	IS	81.7	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFDA	IS	83.0	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-8:2 FTS	IS	91.4	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
d3-MeFOSAA	IS	76.9	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFUnA	IS	88.8	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
d5-EtFOSAA	IS	81.4	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-10:2 FTS	IS	77.4	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFDoA	IS	78.3	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
d3-MeFOSA	IS	17.5	10 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFTeDA	IS	69.6	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
d5-EtFOSA	IS	16.9	10 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
13C2-PFHxDA	IS	59.5	25 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
d7-MeFOSE	IS	55.3	10 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1
d9-EtFOSE	IS	63.0	10 - 150		B0J0079	08-Oct-20	0.239 L	11-Oct-20 23:49	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: E5-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-09	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:50	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	33.3	0.380	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFPeA	2706-90-3	55.9	0.668	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFBS	375-73-5	11.6	0.934	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
4:2 FTS	757124-72-4	<0.725	0.725	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFHxA	307-24-4	60.8	1.14	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFPeS	2706-91-4	22.6	1.26	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
HFPO-DA	13252-13-6	<2.52	2.52	2.61		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFHpA	375-85-9	55.0	0.308	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
ADONA	919005-14-4	<0.377	0.377	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFHxS	355-46-4	385	0.494	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
6:2 FTS	27619-97-2	<1.04	1.04	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFOA	335-67-1	103	0.340	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFHpS	375-92-8	47.4	0.489	2.09	Q	B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFNA	375-95-1	8.42	0.423	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFOSA	754-91-6	3.37	0.924	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFOS	1763-23-1	205	0.421	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
9Cl-PF3ONS	756426-58-1	<0.757	0.757	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFDA	335-76-2	<0.777	0.777	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
8:2 FTS	39108-34-4	<1.07	1.07	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFNS	68259-12-1	<2.02	2.02	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
MeFOSAA	2355-31-9	<0.861	0.861	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
EtFOSAA	2991-50-6	<0.715	0.715	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFUnA	2058-94-8	<0.548	0.548	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFDS	335-77-3	<0.642	0.642	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
11Cl-PF3OUdS	763051-92-9	<1.26	1.26	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
10:2 FTS	120226-60-0	<1.63	1.63	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFDoA	307-55-1	<0.413	0.413	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
MeFOSA	31506-32-8	<2.00	2.00	10.4		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFTrDA	72629-94-8	<0.258	0.258	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFDoS	79780-39-5	<2.18	2.18	2.61		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFTeDA	376-06-7	<0.394	0.394	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
EtFOSA	4151-50-2	<2.67	2.67	10.4		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFHxDA	67905-19-5	<0.153	0.153	2.09		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
PFODA	16517-11-6	<3.20	3.20	3.65		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
MeFOSE	24448-09-7	<3.17	3.17	10.4		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
EtFOSE	1691-99-2	<4.93	4.93	10.4		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C3-PFBA	IS	44.8	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1	

**Sample ID: E5-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-09	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 15:50	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	87.3	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C3-PFBS	IS	89.6	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C3-HFPO-DA	IS	95.4	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-4:2 FTS	IS	99.2	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFHxA	IS	87.7	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C4-PFHpA	IS	85.4	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C3-PFHxS	IS	82.0	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-6:2 FTS	IS	83.7	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C5-PFNA	IS	88.2	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C8-PFOA	IS	71.3	10 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFOA	IS	91.4	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C8-PFOS	IS	92.0	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFDA	IS	95.3	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-8:2 FTS	IS	99.8	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
d3-MeFOSAA	IS	92.1	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFUnA	IS	97.6	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
d5-EtFOSAA	IS	91.5	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-10:2 FTS	IS	85.0	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFDoA	IS	85.7	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
d3-MeFOSA	IS	36.6	10 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFTeDA	IS	71.5	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
d5-EtFOSA	IS	35.3	10 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
13C2-PFHxDA	IS	72.8	25 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
d7-MeFOSE	IS	55.9	10 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1
d9-EtFOSE	IS	62.7	10 - 150		B0J0079	08-Oct-20	0.240 L	11-Oct-20 23:59	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: PROBE BLANK**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-10	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 16:05	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.371	0.371	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFPeA	2706-90-3	<0.652	0.652	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFBS	375-73-5	2.18	0.912	2.04	Q	B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
4:2 FTS	757124-72-4	<0.708	0.708	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFHxA	307-24-4	<1.11	1.11	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFPeS	2706-91-4	<1.23	1.23	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
HFPO-DA	13252-13-6	<2.46	2.46	2.55		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFHpA	375-85-9	<0.301	0.301	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
ADONA	919005-14-4	<0.368	0.368	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFHxS	355-46-4	<0.482	0.482	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
6:2 FTS	27619-97-2	<1.02	1.02	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFOA	335-67-1	<0.332	0.332	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFHpS	375-92-8	<0.477	0.477	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFNA	375-95-1	<0.413	0.413	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFOSA	754-91-6	<0.902	0.902	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFOS	1763-23-1	<0.411	0.411	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
9Cl-PF3ONS	756426-58-1	<0.739	0.739	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFDA	335-76-2	<0.759	0.759	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
8:2 FTS	39108-34-4	<1.05	1.05	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFNS	68259-12-1	<1.97	1.97	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
MeFOSAA	2355-31-9	<0.841	0.841	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
EtFOSAA	2991-50-6	<0.698	0.698	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFUnA	2058-94-8	<0.535	0.535	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFDS	335-77-3	<0.627	0.627	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
11Cl-PF3OUdS	763051-92-9	<1.23	1.23	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
10:2 FTS	120226-60-0	<1.59	1.59	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFDoA	307-55-1	<0.403	0.403	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
MeFOSA	31506-32-8	<1.95	1.95	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFTrDA	72629-94-8	<0.252	0.252	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFDoS	79780-39-5	<2.12	2.12	2.55		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFTeDA	376-06-7	<0.385	0.385	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
EtFOSA	4151-50-2	<2.60	2.60	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFHxDA	67905-19-5	<0.150	0.150	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
PFODA	16517-11-6	<3.13	3.13	3.57		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
MeFOSE	24448-09-7	<3.09	3.09	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
EtFOSE	1691-99-2	<4.81	4.81	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	87.8	25 - 150			B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1

**Sample ID: PROBE BLANK**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-10	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	16-Sep-20 16:05	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	89.7	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C3-PFBS	IS	98.8	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C3-HFPO-DA	IS	90.8	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-4:2 FTS	IS	103	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFHxA	IS	89.5	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C4-PFHpA	IS	86.2	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C3-PFHxS	IS	86.3	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-6:2 FTS	IS	88.0	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C5-PFNA	IS	80.4	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C8-PFOA	IS	62.4	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFOA	IS	93.6	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C8-PFOS	IS	94.1	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFDA	IS	89.7	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-8:2 FTS	IS	117	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
d3-MeFOSAA	IS	61.3	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFUnA	IS	71.0	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
d5-EtFOSAA	IS	65.4	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-10:2 FTS	IS	67.3	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFDoA	IS	60.0	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
d3-MeFOSA	IS	27.9	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFTeDA	IS	73.9	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
d5-EtFOSA	IS	33.7	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
13C2-PFHxDA	IS	74.5	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
d7-MeFOSE	IS	58.5	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1
d9-EtFOSE	IS	60.2	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 00:10	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: E6-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-13	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:20	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	11.0	0.358	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFPeA	2706-90-3	14.9	0.629	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFBS	375-73-5	6.40	0.879	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
4:2 FTS	757124-72-4	<0.683	0.683	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFHxA	307-24-4	12.8	1.07	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFPeS	2706-91-4	6.43	1.19	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
HFPO-DA	13252-13-6	<2.37	2.37	2.46		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFHpA	375-85-9	5.77	0.290	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
ADONA	919005-14-4	<0.355	0.355	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFHxS	355-46-4	57.1	0.465	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
6:2 FTS	27619-97-2	<0.982	0.982	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFOA	335-67-1	7.56	0.320	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFHpS	375-92-8	0.939	0.460	1.96	J	B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFNA	375-95-1	1.53	0.398	1.96	J	B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFOSA	754-91-6	1.10	0.869	1.96	J, Q	B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFOS	1763-23-1	50.4	0.396	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
9Cl-PF3ONS	756426-58-1	<0.712	0.712	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFDA	335-76-2	1.30	0.732	1.96	J	B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
8:2 FTS	39108-34-4	<1.01	1.01	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFNS	68259-12-1	<1.90	1.90	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
MeFOSAA	2355-31-9	<0.810	0.810	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
EtFOSAA	2991-50-6	<0.673	0.673	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFUnA	2058-94-8	2.42	0.516	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFDS	335-77-3	<0.604	0.604	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
11Cl-PF3OUdS	763051-92-9	<1.18	1.18	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
10:2 FTS	120226-60-0	<1.54	1.54	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFDoA	307-55-1	<0.389	0.389	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
MeFOSA	31506-32-8	<1.88	1.88	9.82		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFTrDA	72629-94-8	<0.243	0.243	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFDoS	79780-39-5	<2.05	2.05	2.46		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFTeDA	376-06-7	<0.371	0.371	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
EtFOSA	4151-50-2	<2.51	2.51	9.82		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFHxDA	67905-19-5	<0.144	0.144	1.96		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
PFODA	16517-11-6	<3.02	3.02	3.44		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
MeFOSE	24448-09-7	<2.98	2.98	9.82		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
EtFOSE	1691-99-2	<4.64	4.64	9.82		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	60.8	25 - 150			B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1



**Sample ID: E6-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-13	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 10:20	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	84.1	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C3-PFBS	IS	89.1	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C3-HFPO-DA	IS	84.2	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-4:2 FTS	IS	91.8	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFHxA	IS	84.6	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C4-PFHpA	IS	80.6	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C3-PFHxS	IS	79.5	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-6:2 FTS	IS	69.8	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C5-PFNA	IS	80.0	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C8-PFOA	IS	57.8	10 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFOA	IS	87.8	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C8-PFOS	IS	84.9	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFDA	IS	85.8	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-8:2 FTS	IS	86.7	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
d3-MeFOSAA	IS	64.1	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFUnA	IS	72.0	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
d5-EtFOSAA	IS	56.9	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-10:2 FTS	IS	62.5	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFDoA	IS	54.7	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
d3-MeFOSA	IS	20.9	10 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFTeDA	IS	45.4	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
d5-EtFOSA	IS	19.8	10 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
13C2-PFHxDA	IS	43.2	25 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
d7-MeFOSE	IS	32.6	10 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1
d9-EtFOSE	IS	35.5	10 - 150		B0J0079	08-Oct-20	0.254 L	12-Oct-20 00:20	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: E7-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-16	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 11:20	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	11.7	0.376	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFPeA	2706-90-3	17.1	0.660	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFBS	375-73-5	7.64	0.923	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
4:2 FTS	757124-72-4	<0.716	0.716	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFHxA	307-24-4	14.0	1.12	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFPeS	2706-91-4	4.30	1.25	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
HFPO-DA	13252-13-6	<2.48	2.48	2.58		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFHpA	375-85-9	6.71	0.305	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
ADONA	919005-14-4	<0.372	0.372	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFHxS	355-46-4	46.4	0.488	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
6:2 FTS	27619-97-2	<1.03	1.03	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFOA	335-67-1	7.45	0.336	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFHpS	375-92-8	0.671	0.483	2.06	J	B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFNA	375-95-1	1.17	0.417	2.06	J	B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFOSA	754-91-6	<0.912	0.912	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFOS	1763-23-1	19.7	0.416	2.06	Q	B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
9Cl-PF3ONS	756426-58-1	<0.747	0.747	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFDA	335-76-2	<0.768	0.768	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
8:2 FTS	39108-34-4	<1.06	1.06	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFNS	68259-12-1	<1.99	1.99	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
MeFOSAA	2355-31-9	<0.850	0.850	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
EtFOSAA	2991-50-6	<0.706	0.706	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFUnA	2058-94-8	<0.541	0.541	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFDS	335-77-3	<0.634	0.634	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
11Cl-PF3OUdS	763051-92-9	<1.24	1.24	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
10:2 FTS	120226-60-0	<1.61	1.61	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFDoA	307-55-1	<0.408	0.408	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
MeFOSA	31506-32-8	<1.97	1.97	10.3		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFTrDA	72629-94-8	<0.255	0.255	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFDoS	79780-39-5	<2.15	2.15	2.58		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFTeDA	376-06-7	<0.389	0.389	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
EtFOSA	4151-50-2	<2.63	2.63	10.3		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFHxDA	67905-19-5	<0.152	0.152	2.06		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
PFODA	16517-11-6	<3.16	3.16	3.61		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
MeFOSE	24448-09-7	<3.13	3.13	10.3		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
EtFOSE	1691-99-2	<4.87	4.87	10.3		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	59.8	25 - 150			B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1

**Sample ID: E7-20**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-16	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 11:20	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	83.9	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C3-PFBS	IS	92.3	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C3-HFPO-DA	IS	89.8	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-4:2 FTS	IS	90.7	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFHxA	IS	86.4	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C4-PFHpA	IS	83.3	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C3-PFHxS	IS	85.4	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-6:2 FTS	IS	80.4	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C5-PFNA	IS	76.8	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C8-PFOA	IS	69.4	10 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFOA	IS	93.2	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C8-PFOS	IS	86.7	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFDA	IS	89.4	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-8:2 FTS	IS	92.0	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
d3-MeFOSAA	IS	79.7	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFUnA	IS	88.7	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
d5-EtFOSAA	IS	75.3	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-10:2 FTS	IS	76.6	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFDoA	IS	77.3	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
d3-MeFOSA	IS	16.9	10 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFTeDA	IS	56.4	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
d5-EtFOSA	IS	16.1	10 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
13C2-PFHxDA	IS	37.9	25 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
d7-MeFOSE	IS	54.4	10 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1
d9-EtFOSE	IS	54.4	10 - 150		B0J0079	08-Oct-20	0.243 L	12-Oct-20 01:02	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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: PUMP BLANK**
**PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-17	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 15:00	Date Received:	23-Sep-20 10:14		

Analyte	CAS Number	Conc. (ng/L)	MDL	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	<0.371	0.371	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFPeA	2706-90-3	<0.652	0.652	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFBS	375-73-5	<0.912	0.912	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
4:2 FTS	757124-72-4	<0.708	0.708	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFHxA	307-24-4	<1.11	1.11	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFPeS	2706-91-4	<1.23	1.23	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
HFPO-DA	13252-13-6	<2.46	2.46	2.55		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFHpA	375-85-9	<0.301	0.301	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
ADONA	919005-14-4	<0.368	0.368	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFHxS	355-46-4	<0.482	0.482	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
6:2 FTS	27619-97-2	<1.02	1.02	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFOA	335-67-1	<0.332	0.332	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFHpS	375-92-8	<0.477	0.477	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFNA	375-95-1	<0.413	0.413	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFOSA	754-91-6	<0.902	0.902	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFOS	1763-23-1	<0.411	0.411	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
9Cl-PF3ONS	756426-58-1	<0.739	0.739	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFDA	335-76-2	<0.759	0.759	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
8:2 FTS	39108-34-4	<1.05	1.05	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFNS	68259-12-1	<1.97	1.97	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
MeFOSAA	2355-31-9	<0.841	0.841	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
EtFOSAA	2991-50-6	<0.698	0.698	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFUnA	2058-94-8	<0.535	0.535	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFDS	335-77-3	<0.627	0.627	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
11Cl-PF3OUdS	763051-92-9	<1.23	1.23	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
10:2 FTS	120226-60-0	<1.59	1.59	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFDoA	307-55-1	<0.404	0.404	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
MeFOSA	31506-32-8	<1.95	1.95	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFTTrDA	72629-94-8	<0.252	0.252	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFDoS	79780-39-5	<2.12	2.12	2.55		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFTeDA	376-06-7	<0.385	0.385	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
EtFOSA	4151-50-2	<2.60	2.60	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFHxDA	67905-19-5	<0.150	0.150	2.04		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
PFODA	16517-11-6	<3.13	3.13	3.57		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
MeFOSE	24448-09-7	<3.09	3.09	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
EtFOSE	1691-99-2	<4.81	4.81	10.2		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	81.7	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1

**Sample ID: PUMP BLANK** **PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	C T Laboratories	Matrix:	Groundwater	Lab Sample:	2001989-17	Column:	BEH C18
Project:	TRUAX FIELD	Date Collected:	17-Sep-20 15:00	Date Received:	23-Sep-20 10:14		

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFPeA	IS	81.9	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C3-PFBS	IS	90.0	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C3-HFPO-DA	IS	89.2	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-4:2 FTS	IS	93.6	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFHxA	IS	82.5	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C4-PFHpA	IS	78.6	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C3-PFHxS	IS	79.8	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-6:2 FTS	IS	78.0	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C5-PFNA	IS	82.5	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C8-PFOA	IS	58.4	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFOA	IS	84.7	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C8-PFOS	IS	84.4	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFDA	IS	91.5	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-8:2 FTS	IS	89.2	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
d3-MeFOSAA	IS	78.6	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFUnA	IS	96.5	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
d5-EtFOSAA	IS	77.4	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-10:2 FTS	IS	74.2	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFDoA	IS	80.3	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
d3-MeFOSA	IS	19.4	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFTeDA	IS	68.7	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
d5-EtFOSA	IS	19.5	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
13C2-PFHxDA	IS	62.6	25 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
d7-MeFOSE	IS	48.3	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1
d9-EtFOSE	IS	50.0	10 - 150		B0J0079	08-Oct-20	0.245 L	12-Oct-20 01:12	1

MDL - Method Detection Limit

RL - Reporting limit

Results reported to MDL.

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
K	EMPC (specific projects only)
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
TEQ	Toxic Equivalency
U	Not Detected (specific projects only)

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	E87777-23
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2018017
Massachusetts Department of Environmental Protection	N/A
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	1521520
New Hampshire Environmental Accreditation Program	207718-B
New Jersey Department of Environmental Protection	190001
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-010
Pennsylvania Department of Environmental Protection	016
Texas Commission on Environmental Quality	T104704189-19-10
Vermont Department of Health	VT-4042
Virginia Department of General Services	10272
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

**Sub-Contract Laboratory Chain-of-Custody and Purchase Order**

**PURCHASE ORDER #** 156580 VISTA

*The PO# must appear on all invoice and reports!*

*Upon Receipt of Samples, please verify that samples were received in acceptable condition then sign this form and fax to (608)356-2766 or email to the project manager. Sample temperature, upon receipt, must be recorded on this document unless thermal preservation is not a method requirement.*

**Ship to:** Vista Analytical  
1104 Winfield Way  
El Dorado Hills, CA

Return Invoice and Results to: **ekorthals@ctlaboratories.com**

**Government UPS Shipping Acct?**  Y  N

**CTLaboratories**  
Eric Korthals  
1230 Lange Court  
Baraboo WI 53913

**Ship by:** Speedee  UPS Grnd  UPS 2nd  UPS NDA

**Date Due:** STD **RUSH TURNAROUND NEEDED?** Y or  N (Circle One)

**Project Name:** TRUAX FIELD **Project State:** \_\_\_\_\_

**Analytical/QC Criteria:** NONE INDICATED  STATE  DOD QSM  NELAP (Circle one)  OTHER \_\_\_\_\_

Report results as EDD? N  Y (Circle one and indicate type: Excel EDD) Data Deliverable Package LEVEL: results report only

CTLabs ID#	Sample Date/Time	Matrix	Sample Description	Analyses / Method	Cost
475753	09/16/2020 1350	SOIL	E4-20,S1,1'	PFOS/PFOA	_____
475754	09/16/2020 1355	SOIL	E4-20,S2,5'	PFOS/PFOA	_____
475755	09/16/2020 1415	GROUND WATER	E4-20	PFOS/PFOA	_____
475756	09/16/2020 1435	SOIL	E3-20,S1,1'	PFOS/PFOA	_____
475757	09/16/2020 1445	SOIL	E3-20,S2,5'	PFOS/PFOA	_____
475759	09/16/2020 1505	GROUND WATER	E3-20	PFOS/PFOA	_____
475760	09/16/2020 1525	SOIL	E5-20,S1,1'	PFOS/PFOA	_____
475761	09/16/2020 1530	SOIL	E5-20,S2,5'	PFOS/PFOA	_____
475762	09/16/2020 1550	GROUND WATER	E5-20	PFOS/PFOA	_____
475763	09/16/2020 1605	GROUND WATER	PROBE BLANK	PFOS/PFOA	_____
475765	09/17/2020 0955	SOIL	E6-20,S1,1'	PFOS/PFOA	_____
475766	09/17/2020 1005	SOIL	E6-20,S2,5'	PFOS/PFOA	_____
475767	09/17/2020 1020	GROUND WATER	E6-20	PFOS/PFOA	_____
475768	09/17/2020 1050	SOIL	E7-20,S1,1'	PFOS/PFOA	_____
475769	09/17/2020 1055	SOIL	E7-20,S2,4 1/2'	PFOS/PFOA	_____
475771	09/17/2020 1120	GROUND WATER	E7-20	PFOS/PFOA	_____
475772	09/17/2020 1500	GROUND WATER	PUMP BLANK	PFOS/PFOA	_____

Relinquished by: [Signature] Date/Time: 9-22-2020/1450L  
Received by: William Knight Date/Time: 9/23/20 10:14 Receipt Temperature (C) 1.5

COMMENTS: see attached information / quote.

REPORT ALL SOLIDS ON A DRY WEIGHT BASIS UNLESS OTHERWISE INDICATED

## Sample Log-In Checklist

Page # 1 of 2

Vista Work Order #: 2001989

TAT Std

Samples Arrival:	Date/Time <u>09/23/20 10:14</u>	Initials: <u>WRW</u>	Location: <u>WR-2</u>				
Delivered By:	FedEx	<input checked="" type="checkbox"/> UPS	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	<input checked="" type="checkbox"/> Ice	Blue Ice		Techni Ice	Dry Ice	None	
Temp °C: <u>1.5</u> (uncorrected)	Probe used: Y <input checked="" type="checkbox"/> N			Thermometer ID: <u>IR-4</u>			
Temp °C: <u>1.5</u> (corrected)							

	YES	NO	NA		
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>				
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>				
Airbill <u>—</u> Trk # <u>1Z1A4A850141286781</u>	<input checked="" type="checkbox"/>				
Shipping Documentation Present?	<input checked="" type="checkbox"/>				
Shipping Container	Vista	<input checked="" type="checkbox"/> Client	Retain	<input checked="" type="checkbox"/> Return	Dispose
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>				
Chain of Custody / Sample Documentation Complete?	<input checked="" type="checkbox"/>				
Holding Time Acceptable?	<input checked="" type="checkbox"/>				

Logged In:	Date/Time <u>09/23/20 1033</u>	Initials: <u>KS</u>	Location: <u>R-13   WR-2</u>		
			Shelf/Rack: <u>A-2   A-3</u>		
COC Anomaly/Sample Acceptance Form completed?				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

## Sample Log-In Checklist

Page # 2 of 2

Vista Work Order #: 2001989 TAT std

Samples Arrival:	Date/Time <u>09/23/20 10:14</u>	Initials: <u>WVW</u>	Location: <u>WR-2</u> Shelf/Rack: <u>NA</u>				
Delivered By:	FedEx	<input checked="" type="checkbox"/> UPS	On Trac	GLS	DHL	Hand Delivered	Other
Preservation:	<input checked="" type="checkbox"/> Ice	Blue Ice	Techni Ice	Dry Ice	None		
Temp °C: <u>1.3</u> (uncorrected)	Probe used: Y <input checked="" type="checkbox"/> N			Thermometer ID: <u>IR-3</u>			
Temp °C: <u>1.3</u> (corrected)							

	YES	NO	NA		
Shipping Container(s) Intact?	✓				
Shipping Custody Seals Intact?	✓				
Airbill <u>-</u> Trk # <u>1Z 1A4A 85014046 7779</u>	✓				
Shipping Documentation Present?	✓				
Shipping Container	Vista	<input checked="" type="checkbox"/> Client	Retain	<input checked="" type="checkbox"/> Return	Dispose
Chain of Custody / Sample Documentation Present?	✓				
Chain of Custody / Sample Documentation Complete?	✓				
Holding Time Acceptable?	✓				
Logged In:	Date/Time <u>09/23/20 1033</u>	Initials: <u>KS</u>	Location: <u>R-13   WR-2</u> Shelf/Rack: <u>A-2   A-3</u>		
COC Anomaly/Sample Acceptance Form completed?			✓	✓	

Comments:

# CoC/Label Reconciliation Report WO# 2001989

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2001989-01	A E4-20,S1,1'	C1 ✓	16-Sep-20 13:50	HDPE Jar, 6 oz	Solid	
2001989-02	A E4-20,S2,5'	↓ ✓	16-Sep-20 13:55	HDPE Jar, 6 oz	Solid	
2001989-03	A E4-20	C2 ✓	16-Sep-20 14:15	HDPE Bottle, 250 mL	Aqueous	
2001989-03	B E4-20	↓ ✓	16-Sep-20 14:15	HDPE Bottle, 250 mL	Aqueous	
2001989-04	A E3-20,S1,1'	C1 ✓	16-Sep-20 14:35	HDPE Jar, 6 oz	Solid	
2001989-05	A E3-20,S2,5'	↓ ✓	16-Sep-20 14:45	HDPE Jar, 6 oz	Solid	
2001989-06	A E3-20	C2 ✓	16-Sep-20 15:05	HDPE Bottle, 250 mL	Aqueous	
2001989-06	B E3-20	↓ ✓	16-Sep-20 15:05	HDPE Bottle, 250 mL	Aqueous	
2001989-07	A E5-20,S1,1'	C1 ✓	16-Sep-20 15:25	HDPE Jar, 6 oz	Solid	
2001989-08	A E5-20,S2,5'	↓ ✓	16-Sep-20 15:30	HDPE Jar, 6 oz	Solid	
2001989-09	A E5-20	C2 ✓	16-Sep-20 15:50	HDPE Bottle, 250 mL	Aqueous	
2001989-09	B E5-20	↓ ✓	16-Sep-20 15:50	HDPE Bottle, 250 mL	Aqueous	
2001989-10	A PROBE BLANK	C2 ✓	16-Sep-20 16:05	HDPE Bottle, 250 mL	Aqueous	
2001989-10	B PROBE BLANK	↓ ✓	16-Sep-20 16:05	HDPE Bottle, 250 mL	Aqueous	
2001989-11	A E6-20,S1,1'	C1 ✓	17-Sep-20 09:55	HDPE Jar, 6 oz	Solid	
2001989-12	A E6-20,S2,5'	↓ ✓	17-Sep-20 10:05	HDPE Jar, 6 oz	Solid	
2001989-13	A E6-20	C2 ✓	17-Sep-20 10:20	HDPE Bottle, 250 mL	Aqueous	
2001989-13	B E6-20	↓ ✓ (A)	17-Sep-20 10:20	HDPE Bottle, 250 mL	Aqueous	
2001989-14	A E7-20,S1,1'	C1 ✓	17-Sep-20 10:50	HDPE Jar, 6 oz	Solid	
2001989-15	A E7-20,S2,4 1/2'	↓ ✓	17-Sep-20 10:55	HDPE Jar, 6 oz	Solid	
2001989-16	A E7-20	C2 ✓	17-Sep-20 11:20	HDPE Bottle, 250 mL	Aqueous	
2001989-16	B E7-20	↓ ✓ (A)	17-Sep-20 11:20	HDPE Bottle, 250 mL	Aqueous	
2001989-17	A PUMP BLANK	↓ ✓	17-Sep-20 15:00	HDPE Bottle, 250 mL	Aqueous	
2001989-17	B PUMP BLANK	↓ ✓	17-Sep-20 15:00	HDPE Bottle, 250 mL	Aqueous	

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

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)	✓		
Preservation Documented: Na2S2O3 Trizma <u>None</u> Other		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Comments:

C1: Cooler 1 of 2  
 C2: Cooler 2 of 2  
 A) Contain Trizma Preservation  
 Aqueous samples contain particulate

A)

Verified by/Date: kg 09/23/20



Company: **SES**

Project Contact: **DUANE REICHEL**

Telephone: **608-274-7600**

Project Name: **TRUAX FIELD**

Project #: **507.98**

Location: **BLDG #404**

Sampled By: **GEOFF PRIOR**

CT LABORATORIES

Folder #: **156580**

Company: **SOILS & ENGINEERING**

Project: **TRUAX FIELD**

Logged By: **EKB PM: ET**

1230 Lange Court, Baraboo, WI 53913  
608-356-2760 Fax 608-356-2766  
www.ctlaboratories.com

Program:  
QSM RCRA SDWA NPDES  
Solid Waste Other

PO #

Report To: **DUANE REICHEL**  
EMAIL: **SES**  
Company: **1102 STEWART ST**  
Address: **MADISON WI 53713**

Invoice To:\*  
EMAIL: **- SAME -**  
Company:  
Address:

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

**PROBE BLANK HAS ONLY 1 VOC VIAL.**

ANALYSES REQUESTED

Filtered? Y/N	Soil PFOs	Water PFOs	Soil 8260 VOC	Water 8260 VOC																	Total # Containers	Designated MS/MSD

Turnaround Time  
Normal RUSH\*  
Date Needed: \_\_\_\_\_  
Rush analysis requires prior  
CT Laboratories' approval  
Surcharges:  
24 hr 200%  
2-3 days 100%  
4-9 days 50%

Matrix:  
GW - groundwater SW - surface water WW - wastewater DW - drinking water  
S - soil/sediment SL - sludge A - air M - misc/waste

Collection		Matrix	Grab/Comp	Sample #	Sample ID Description	Filtered?	Fill in Spaces with Bottles per Test																CT Lab ID # Lab use only
Date	Time																						
9-16-20	1350	S	G		E4-20, S1, 1'	N	X	X														475 753	
	1355	S			E4-20, S2, 5'		X	X														475 754	
	1415	GW			E4-20			X	X													475 755	
	1435	S			E3-20, S1, 1'		X	X														475 756	
	1445	S			E3-20, S2, 5'		X	X														475 757	
	1435	S			E3-20, S1A, 1 1/2'			X														475 758	
	1505	GW			E3-20			X	X													475 759	
	1525	S			E5-20, S1, 1'		X	X														475 760	
	1530	S			E5-20, S2, 5'		X	X														475 761	
	1550	GW			E5-20			X	X													475 762	
	1605	GW			PROBE BLANK			X	X													475 763	

Relinquished By: **WFR**

Date/Time: **1**

Received By: **ellb**

Date/Time: **10:45 9-18-2000**

Lab Use Only  
Ice Present Yes No  
Temp **3.3** IR Gun **27**

Received by:

Date/Time:

Received for Laboratory by: **ellb**

Date/Time: **13:15 9-18-2000**

Cooler # **XXXXX**



Company: **SES**  
 Project Contact: **DUANE REICHEL**  
 Telephone: **608-274-7600**  
 Project Name: **TRUAX FIELD**  
 Project #: **507-98**  
 Location: **BUILDING #404**  
 Sampled By: **GEOFF PRIOR**

**CT LABORATORIES**

1230 Lange Court, Baraboo, WI 53913  
 608-356-2760 Fax 608-356-2766  
 www.ctlaboratories.com

Report To: **DUANE REICHEL**  
 EMAIL: **DUANE REICHEL**  
 Company: **SES**  
 Address: **1102 STEWART ST  
 MADISON WI**  
 Invoice To:\*  
 EMAIL: **- SAME -**  
 Company:  
 Address:

Lab Use Only  
 Place Header Sticker Here:

**156580**

Program:  
 QSM RCRA SDWA NPDES  
 Solid Waste Other  
 PO #

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

ANALYSES REQUESTED

Turnaround Time  
 Normal RUSH\*  
 Date Needed: \_\_\_\_\_  
 Rush analysis requires prior  
 CT Laboratories' approval  
 Surcharges:  
 24 hr 200%  
 2-3 days 100%  
 4-9 days 50%

Matrix:  
 GW - groundwater SW - surface water WW - wastewater DW - drinking water  
 S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N	Soil PFOS	Soil 8260 VOC	Water PFOS	Water 8260 VOC																	Total # Containers	Designated MS/MSD
	X	X																				
	X	X																				
			X	X																		
	X	X																				
	X	X																				
			X	X																		
			X	X																		

Collection		Matrix	Grab/Comp	Sample #	Sample ID Description	Fill in Spaces with Bottles per Test																CT Lab ID # Lab use only
Date	Time																					
9-17-20	0955	SOIL	G		E6-20, S1, 1'	X	X															475 765
	1005	S	G		E6-20, S2, 1.5'	X	X															475 766
	1020	GW	G		E6-20			X	X													475 767
	1050	S	G		E7-20, S1, 1'	X	X															475 768
	1055	S	G		E7-20, S2, 4 1/2'	X	X															475 769
	1120	GW	G		E7-20			X	X													475 771
	1500	GW	G		PUMP BLANK			X	X													475 772
	-	-	-		TRIP BLANK				X													475 773

Relinquished By: **[Signature]** Date/Time: \_\_\_\_\_ Received By: **ells** Date/Time: **10:45**  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Received for Laboratory by: **ells** Date/Time: **13:15**  
 Lab Use Only  
 Ice Present  Yes  No  
 Temp **3.3** IR Gun **27**  
 Cooler # **XXXXX**

# APPENDIX C

## Appendix C Contents

- *Important Information about This Geotechnical-Engineering Report advisory*



# Important Information about This

# Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

## **Beware of Change; Keep Your Geoenvironmental Professional Advised**

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,

- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

## **Recognize the Impact of Time**

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

## **Prepare To Deal with Unanticipated Conditions**

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental

professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change, sometimes suddenly, due to any number of events, not the least of which include occurrences at adjacent sites.* Recognize, too, that *even some conditions in tested areas may go undiscovered,* because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

### **Do Not Permit Any Other Party To Rely on the Report**

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

### **Avoid Misinterpretation of the Report**

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

### **Give Contractors Access to the Report**

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

### **Do Not Separate Documentation from the Report**

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

### **Understand the Role of Standards**

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care. Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

### **Realize That Recommendations May Not Be Final**

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

### **Understand That Geotechnical Issues Have Not Been Addressed**

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

### Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for “exculpatory clauses,” that is, provisions whose purpose is to transfer one party’s rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not “boilerplate.”* They are important.

### Rely on Your Geoenvironmental Professional for Additional Assistance

Membership in the Geoprofessional Business Association exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your GBA-member geoenvironmental professional for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910  
Telephone: 301/565-2733 Facsimile: 301/589-2017  
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