

**DATA USABILITY SUMMARY REPORT
5 SCOBIE DRIVE, NEWBURGH, NEW YORK**

Client: C.T. Male Associates, Latham, New York
SDG: L2036016
Laboratory: Alpha Analytical, Westborough, Massachusetts
Site: 5 Scobie Drive, Newburgh, New York
Date: January 19, 2024

EDS ID	Client ID	Laboratory ID	Matrix
1	SW-1	L2036016-01	Water
1MS	SW-1MS	L2036016-01MS	Water
2	SW-2	L2036016-02	Water
3	SW-3	L2036016-03	Water
4	SW-4	L2036016-04	Water
5	LTB	L2036016-05	Water
6	FTB	L2036016-06	Water

A Data Usability Summary Review was performed on the analytical data for four water samples and two aqueous trip blank samples collected on September 1, 2020 by CT Male at the 5 Scobie Drive site in Newburgh, New York. The samples were analyzed under the USEPA Method Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS).

Specific method references are as follows:

Analysis
PFAS

Method References
USEPA Method 537

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the NYSDEC Data Review and Validation Guidelines as follows:

- New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), April 2023;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

PFAS

- Holding times and sample preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tuning
- Initial and continuing calibration summaries

- Method blank and field blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

Data Usability Assessment

There were minor rejections of data. This data cannot be used in the decision-making process for this project.

- PFOA was rejected in one sample due to severely low internal standards.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Perfluorinated Alkyl Substances (PFAS)

Holding Times

- All samples were extracted within 14 days for water samples and analyzed within 28 days.

LC/MS Tuning

- All criteria were met.

Initial Calibration

- All relative standard deviation (%RSD), %R and/or coefficient of determination criteria were met.

Continuing Calibration

- All percent recovery (%R) criteria were met.

Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
WG1405518-1	NEtFOSAA	1.20	U	1, 4
	PFTA	0.368	None	All Associated ND

Field QC Blank

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
LTB	PFHxA	0.300	None	All Associated >10X
FTB	None - ND	-	-	-

Surrogate Spike Recoveries

- The following table presents samples that exhibited surrogate percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

EDS Sample ID	Surrogate	%R	Qualifier
4	M2-8:2FTS	192%	None - Sample ND

Matrix Spike (MS) Recoveries

- The MS samples exhibited acceptable percent recoveries (%R).

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- The following table presents samples that exceeded the -25%/+150% area criteria for internal standard areas. Non-detected results for the associated compounds are considered estimated and qualified (UJ). Positive results for the associated compounds are considered estimated and qualified (J). Non-detected compounds that exceed the lower limit by -10% area criteria are considered rejected (R) and unusable for project objectives.

Sample ID	Internal Standard	Area Count	Qualifier
4	M3PFBA	Low	J - Associated Compound
	M2PFOA	Low	
	M4PFOS	Low	
6	M3PFBA	Low	UJ - Associated Compound
	M2PFOA	Severely Low	R - Associated Compound
	M4PFOS	Low	UJ - Associated Compound
	M2PFDA	Low	

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed:

Nancy Weaver
Nancy Weaver
Senior Chemist

Dated: 11/22/24

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Results Summary Form 1 Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
Project Name :
Lab ID : L2036016-01
Client ID : SW-1
Sample Location :
Sample Matrix : WATER
Analytical Method : 134,LCMSMS-ID
Lab File ID : I25832
Sample Amount : 278.78 g
Extraction Method : ALPHA 23528
Extract Volume : 1000 uL
GPC Cleanup : N

Lab Number : L2036016
Project Number : 19.9405
Date Collected : 09/01/20 10:30
Date Received : 09/01/20
Date Analyzed : 09/02/20 14:59
Date Extracted : 09/02/20
Dilution Factor : 1
Analyst : RS
Instrument ID : LCMS01
GC Column : Acquity UPLC BEH C18
%Solids : N/A
Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	7.92	1.79	0.366	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	4.73	1.79	0.355	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	4.83	1.79	0.213	
307-24-4	Perfluorohexanoic Acid (PFHxA)	4.28	1.79	0.294	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	2.97	1.79	0.202	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	4.77	1.79	0.337	
335-67-1	Perfluorooctanoic Acid (PFOA)	16.0	1.79	0.212	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.79	1.19	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.660	1.79	0.617	J
375-95-1	Perfluorononanoic Acid (PFNA)	1.68	1.79	0.280	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	20.7	1.79	0.452	
335-76-2	Perfluorodecanoic Acid (PFDA)	0.452	1.79	0.273	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.79	1.09	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.79	0.581	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.79	0.233	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.79	0.879	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.79	0.520	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.50	1.79	0.721	J U



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Results Summary Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-01
 Client ID : SW-1
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25832
 Sample Amount : 278.78 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 10:30
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 14:59
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.79	0.334	U
72629-94-8	Perfluorotridecanoic Acid (PFTTrDA)	ND	1.79	0.293	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.79	0.222	U
NONE	PFOA/PFOS, Total	36.7	1.79	0.212	

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Results Summary Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
Project Name :
Lab ID : L2036016-02
Client ID : SW-2
Sample Location :
Sample Matrix : WATER
Analytical Method : 134,LCMSMS-ID
Lab File ID : I25834
Sample Amount : 50 g
Extraction Method : ALPHA 23528
Extract Volume : 1000 uL
GPC Cleanup : N

Lab Number : L2036016
Project Number : 19.9405
Date Collected : 09/01/20 10:50
Date Received : 09/01/20
Date Analyzed : 09/02/20 15:32
Date Extracted : 09/02/20
Dilution Factor : 1
Analyst : RS
Instrument ID : LCMS01
GC Column : Acquity UPLC BEH C18
%Solids : N/A
Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	10.7	10.0	2.04	
2706-90-3	Perfluoropentanoic Acid (PFPeA)	5.24	10.0	1.98	J
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	10.0	1.19	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	6.48	10.0	1.64	J
375-85-9	Perfluoroheptanoic Acid (PFHpA)	3.70	10.0	1.13	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	4.14	10.0	1.88	J
335-67-1	Perfluorooctanoic Acid (PFOA)	18.2	10.0	1.18	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	10.0	6.66	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	10.0	3.44	U
375-95-1	Perfluorononanoic Acid (PFNA)	1.82	10.0	1.56	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	30.6	10.0	2.52	
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	10.0	1.52	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	10.0	6.06	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	10.0	3.24	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	10.0	1.30	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	10.0	4.90	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	10.0	2.90	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	10.0	4.02	U

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Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-02
 Client ID : SW-2
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25834
 Sample Amount : 50 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 10:50
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 15:32
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	10.0	1.86	U
72629-94-8	Perfluorotridecanoic Acid (PFTTrDA)	ND	10.0	1.64	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	10.0	1.24	U
NONE	PFOA/PFOS, Total	48.8	10.0	1.18	

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Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-03
 Client ID : SW-3
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25835
 Sample Amount : 50 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 11:10
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 15:49
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	7.86	10.0	2.04	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	5.64	10.0	1.98	J
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	10.0	1.19	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	6.32	10.0	1.64	J
375-85-9	Perfluoroheptanoic Acid (PFHpA)	3.76	10.0	1.13	J
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	3.04	10.0	1.88	J
335-67-1	Perfluorooctanoic Acid (PFOA)	17.3	10.0	1.18	
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	10.0	6.66	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	10.0	3.44	U
375-95-1	Perfluorononanoic Acid (PFNA)	3.56	10.0	1.56	J
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	49.4	10.0	2.52	
335-76-2	Perfluorodecanoic Acid (PFDA)	2.00	10.0	1.52	J
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	10.0	6.06	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	10.0	3.24	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	10.0	1.30	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	10.0	4.90	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	10.0	2.90	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	10.0	4.02	U



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Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-03
 Client ID : SW-3
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25835
 Sample Amount : 50 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 11:10
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 15:49
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	10.0	1.86	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	10.0	1.64	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	10.0	1.24	U
NONE	PFOA/PFOS, Total	66.7	10.0	1.18	

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Results Summary Form 1 Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
Project Name :
Lab ID : L2036016-04
Client ID : SW-4
Sample Location :
Sample Matrix : WATER
Analytical Method : 134,LCMSMS-ID
Lab File ID : I25836
Sample Amount : 261.13 g
Extraction Method : ALPHA 23528
Extract Volume : 1000 uL
GPC Cleanup : N

Lab Number : L2036016
Project Number : 19.9405
Date Collected : 09/01/20 11:30
Date Received : 09/01/20
Date Analyzed : 09/02/20 16:05
Date Extracted : 09/02/20
Dilution Factor : 1
Analyst : RS
Instrument ID : LCMS01
GC Column : Acquity UPLC BEH C18
%Solids : N/A
Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	23.9	1.91	0.391	J
2706-90-3	Perfluoropentanoic Acid (PFPeA)	38.6	1.91	0.379	
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	13.2	1.91	0.228	
307-24-4	Perfluorohexanoic Acid (PFHxA)	46.1	1.91	0.314	
375-85-9	Perfluoroheptanoic Acid (PFHpA)	30.6	1.91	0.216	
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	15.6	1.91	0.360	
335-67-1	Perfluorooctanoic Acid (PFOA)	109	1.91	0.226	J
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.91	1.28	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.42	1.91	0.659	J
375-95-1	Perfluorononanoic Acid (PFNA)	11.3	1.91	0.299	
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	65.4	1.91	0.482	J
335-76-2	Perfluorodecanoic Acid (PFDA)	3.86	1.91	0.291	
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.91	1.16	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.91	0.620	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.91	0.249	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.91	0.938	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.91	0.555	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2.40	1.91	0.770	U

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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
Project Name :
Lab ID : L2036016-04
Client ID : SW-4
Sample Location :
Sample Matrix : WATER
Analytical Method : 134,LCMSMS-ID
Lab File ID : I25836
Sample Amount : 261.13 g
Extraction Method : ALPHA 23528
Extract Volume : 1000 uL
GPC Cleanup : N

Lab Number : L2036016
Project Number : 19.9405
Date Collected : 09/01/20 11:30
Date Received : 09/01/20
Date Analyzed : 09/02/20 16:05
Date Extracted : 09/02/20
Dilution Factor : 1
Analyst : RS
Instrument ID : LCMS01
GC Column : Acquity UPLC BEH C18
%Solids : N/A
Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.91	0.356	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.91	0.313	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.91	0.237	U
NONE	PFOA/PFOS, Total	174	1.91	0.226	

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Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-05
 Client ID : LTB
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25838
 Sample Amount : 273.51 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 00:00
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 16:38
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.83	0.373	U
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.83	0.362	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.83	0.218	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	0.300	1.83	0.300	J
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.83	0.206	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.83	0.344	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.83	0.216	U
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.83	1.22	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.83	0.629	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.83	0.285	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.83	0.461	U
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.83	0.278	U
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.83	1.11	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.83	0.592	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.83	0.238	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.83	0.896	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.83	0.530	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.83	0.735	U



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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
Project Name :
Lab ID : L2036016-05
Client ID : LTB
Sample Location :
Sample Matrix : WATER
Analytical Method : 134,LCMSMS-ID
Lab File ID : I25838
Sample Amount : 273.51 g
Extraction Method : ALPHA 23528
Extract Volume : 1000 uL
GPC Cleanup : N

Lab Number : L2036016
Project Number : 19.9405
Date Collected : 09/01/20 00:00
Date Received : 09/01/20
Date Analyzed : 09/02/20 16:38
Date Extracted : 09/02/20
Dilution Factor : 1
Analyst : RS
Instrument ID : LCMS01
GC Column : Acquity UPLC BEH C18
%Solids : N/A
Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.83	0.340	U
72629-94-8	Perfluorotridecanoic Acid (PFTrDA)	ND	1.83	0.299	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.83	0.227	U
NONE	PFOA/PFOS, Total	ND	1.83	0.216	U

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Results Summary

Form 1

Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-06
 Client ID : FTB
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25839
 Sample Amount : 261.63 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 12:00
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 16:58
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
375-22-4	Perfluorobutanoic Acid (PFBA)	ND	1.91	0.390	U <i>VS</i>
2706-90-3	Perfluoropentanoic Acid (PFPeA)	ND	1.91	0.378	U
375-73-5	Perfluorobutanesulfonic Acid (PFBS)	ND	1.91	0.227	U
307-24-4	Perfluorohexanoic Acid (PFHxA)	ND	1.91	0.313	U
375-85-9	Perfluoroheptanoic Acid (PFHpA)	ND	1.91	0.215	U
355-46-4	Perfluorohexanesulfonic Acid (PFHxS)	ND	1.91	0.359	U
335-67-1	Perfluorooctanoic Acid (PFOA)	ND	1.91	0.226	U <i>RS</i>
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.91	1.27	U
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.91	0.657	U
375-95-1	Perfluorononanoic Acid (PFNA)	ND	1.91	0.298	U
1763-23-1	Perfluorooctanesulfonic Acid (PFOS)	ND	1.91	0.482	U <i>VS</i>
335-76-2	Perfluorodecanoic Acid (PFDA)	ND	1.91	0.290	U <i>VS</i>
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.91	1.16	U
2355-31-9	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.91	0.619	U
2058-94-8	Perfluoroundecanoic Acid (PFUnA)	ND	1.91	0.248	U
335-77-3	Perfluorodecanesulfonic Acid (PFDS)	ND	1.91	0.936	U
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND	1.91	0.554	U
2991-50-6	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.91	0.768	U

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Results Summary
Form 1
Perfluorinated Alkyl Acids by Isotope Dilution

Client : C.T. Male Associates
 Project Name :
 Lab ID : L2036016-06
 Client ID : FTB
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 134,LCMSMS-ID
 Lab File ID : I25839
 Sample Amount : 261.63 g
 Extraction Method : ALPHA 23528
 Extract Volume : 1000 uL
 GPC Cleanup : N

Lab Number : L2036016
 Project Number : 19.9405
 Date Collected : 09/01/20 12:00
 Date Received : 09/01/20
 Date Analyzed : 09/02/20 16:58
 Date Extracted : 09/02/20
 Dilution Factor : 1
 Analyst : RS
 Instrument ID : LCMS01
 GC Column : Acquity UPLC BEH C18
 %Solids : N/A
 Injection Volume : 3 uL

CAS NO.	Parameter	ng/l			Qualifier
		Results	RL	MDL	
307-55-1	Perfluorododecanoic Acid (PFDoA)	ND	1.91	0.355	U
72629-94-8	Perfluorotridecanoic Acid (PFTTrDA)	ND	1.91	0.313	U
376-06-7	Perfluorotetradecanoic Acid (PFTA)	ND	1.91	0.237	U
NONE	PFOA/PFOS, Total	ND	1.91	0.226	U

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