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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-73984-1
Client Project/Site: RockGen Cambridge

For:
TRC Environmental Corporation
6737 W. Washington St., Suite 2100
West Allis, Wisconsin 53214

Attn: Jeff Ramey

Authorized for release by:
5/25/2021 10:11:42 AM

David Alltucker, Project Manager I
(916)374-4383
David.Alltucker@Eurofinset.com

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Definitions/Glossary

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Qualifiers

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 320-73984-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-73984-1

Receipt
The samples were received on 5/20/2021 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1º C.

LCMS
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.

Method 537 (modified): Results for samples MW-01-202105 (320-73984-1), MW-05-202105 (320-73984-8) and MW-04-202105 (320-73984-11) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-491698.

Method 3535: The following samples were observed to be light orange prior to extraction: IPW-01-202105 (320-73984-4) and IPW-02-202105 (320-73984-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: MW-01-202105 — Lab Sample ID: 320-73984-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	110		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	170		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	93		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	51		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.4		1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.33	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.53	J	1.8	0.52	ng/L	1		537 (modified)	Total/NA
6:2 FTS	340		4.6	2.3	ng/L	1		537 (modified)	Total/NA
8:2 FTS	2.8		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	410		9.2	2.3	ng/L	5		537 (modified)	Total/NA

Client Sample ID: MW-02-202105 — Lab Sample ID: 320-73984-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	20		4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	79		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	53		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	15		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	10		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.82	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
6:2 FTS	87		4.4	2.2	ng/L	1		537 (modified)	Total/NA
8:2 FTS	3.0		1.8	0.41	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-03-202105 — Lab Sample ID: 320-73984-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.8	J	4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.2	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.99	J	1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.69	J I	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.47	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA

Client Sample ID: IPW-01-202105 — Lab Sample ID: 320-73984-4

No Detections.

Client Sample ID: IPW-02-202105 — Lab Sample ID: 320-73984-5

No Detections.

Client Sample ID: MW-07-202105 — Lab Sample ID: 320-73984-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	3.0		1.8	0.18	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-03-202105 — Lab Sample ID: 320-73984-7

No Detections.

Client Sample ID: MW-05-202105 — Lab Sample ID: 320-73984-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	78		4.5	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	320		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	190		1.8	0.52	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample ID: MW-05-202105 (Continued) — Lab Sample ID: 320-73984-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	96		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	69		1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.28	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.44	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.69	J	1.8	0.51	ng/L	1		537 (modified)	Total/NA
8:2 FTS	1.0	J	1.8	0.41	ng/L	1		537 (modified)	Total/NA
6:2 FTS - DL	460		22	11	ng/L	5		537 (modified)	Total/NA

Client Sample ID: MW-06-202105 — Lab Sample ID: 320-73984-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.7	J	4.4	2.1	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EB-08-202105 — Lab Sample ID: 320-73984-10

No Detections.

Client Sample ID: MW-04-202105 — Lab Sample ID: 320-73984-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	300		4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	55		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	18		1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.2	J	1.8	0.97	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.49	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.29	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.8	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	1.0	J	1.8	0.87	ng/L	1		537 (modified)	Total/NA
4:2 FTS	34		1.8	0.21	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	1400		35	8.7	ng/L	20		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	930		35	10	ng/L	20		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	490		35	4.4	ng/L	20		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	630		35	15	ng/L	20		537 (modified)	Total/NA
6:2 FTS - DL	4100		89	44	ng/L	20		537 (modified)	Total/NA
8:2 FTS - DL	1700		35	8.2	ng/L	20		537 (modified)	Total/NA

Client Sample ID: DUP-01-202105 — Lab Sample ID: 320-73984-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.7	J	4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.89	J	1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.0	J	1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.58	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.45	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: MW-01-202105
Date Collected: 05/17/21 12:45
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**110**		4.6	2.2	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorohexanoic acid (PFHxA)	**170**		1.8	0.53	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluoroheptanoic acid (PFHpA)	**93**		1.8	0.23	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorooctanoic acid (PFOA)	**51**		1.8	0.78	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorononanoic acid (PFNA)	**2.4**		1.8	0.25	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.67	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorobutanesulfonic acid (PFBS)	**0.33**	**J**	1.8	0.18	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorohexanesulfonic acid (PFHxS)	**0.53**	**J**	1.8	0.52	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.50	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.34	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.89	ng/L		05/22/21 05:07	05/23/21 16:39	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.90	ng/L		05/22/21 05:07	05/23/21 16:39	1
NEtFOSA	ND		1.8	0.80	ng/L		05/22/21 05:07	05/23/21 16:39	1
NMeFOSA	ND		1.8	0.40	ng/L		05/22/21 05:07	05/23/21 16:39	1
NMeFOSAA	ND		4.6	1.1	ng/L		05/22/21 05:07	05/23/21 16:39	1
NEtFOSAA	ND		4.6	1.2	ng/L		05/22/21 05:07	05/23/21 16:39	1
NMeFOSE	ND		3.7	1.3	ng/L		05/22/21 05:07	05/23/21 16:39	1
NEtFOSE	ND		1.8	0.78	ng/L		05/22/21 05:07	05/23/21 16:39	1
4:2 FTS	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 16:39	1
6:2 FTS	**340**		4.6	2.3	ng/L		05/22/21 05:07	05/23/21 16:39	1
8:2 FTS	**2.8**		1.8	0.42	ng/L		05/22/21 05:07	05/23/21 16:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.37	ng/L		05/22/21 05:07	05/23/21 16:39	1
HFPO-DA (GenX)	ND		3.7	1.4	ng/L		05/22/21 05:07	05/23/21 16:39	1
9Cl-PF3ONS	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 16:39	1
11Cl-PF3OUdS	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 16:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C2 PFHxA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C4 PFHpA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C4 PFOA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C5 PFNA	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C2 PFUnA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C2 PFDoA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C2 PFTeDA	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C3 PFBS	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
18O2 PFHxS	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*
13C4 PFOS	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:39*	*1*

Client Sample ID: MW-01-202105

Lab Sample ID: 320-73984-1

Date Collected: 05/17/21 12:45

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	89		10 - 150	05/22/21 05:07	05/23/21 16:39	1
d3-NMeFOSAA	95		25 - 150	05/22/21 05:07	05/23/21 16:39	1
d5-NEtFOSAA	94		25 - 150	05/22/21 05:07	05/23/21 16:39	1
d-N-MeFOSA-M	80		10 - 150	05/22/21 05:07	05/23/21 16:39	1
d-N-EtFOSA-M	85		10 - 150	05/22/21 05:07	05/23/21 16:39	1
d7-N-MeFOSE-M	87		10 - 150	05/22/21 05:07	05/23/21 16:39	1
d9-N-EtFOSE-M	82		10 - 150	05/22/21 05:07	05/23/21 16:39	1
M2-4:2 FTS	94		25 - 150	05/22/21 05:07	05/23/21 16:39	1
M2-6:2 FTS	100		25 - 150	05/22/21 05:07	05/23/21 16:39	1
M2-8:2 FTS	106		25 - 150	05/22/21 05:07	05/23/21 16:39	1
13C3 HFPO-DA	86		25 - 150	05/22/21 05:07	05/23/21 16:39	1
13C2 10:2 FTS	96		25 - 150	05/22/21 05:07	05/23/21 16:39	1

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	**410**		9.2	2.3	ng/L		05/22/21 05:07	05/24/21 14:35	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	91		25 - 150	05/22/21 05:07	05/24/21 14:35	5

Client Sample ID: MW-02-202105

Lab Sample ID: 320-73984-2

Date Collected: 05/17/21 15:12

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**20**		4.4	2.1	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluoropentanoic acid (PFPeA)	**79**		1.8	0.44	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorohexanoic acid (PFHxA)	**53**		1.8	0.52	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluoroheptanoic acid (PFHpA)	**15**		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorooctanoic acid (PFOA)	**10**		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorononanoic acid (PFNA)	**0.82**	**J**	1.8	0.24	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 16:48	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 16:48	1
NEtFOSA	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 16:48	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 16:48	1
NMeFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 16:48	1

Client Sample ID: MW-02-202105

Lab Sample ID: 320-73984-2

Date Collected: 05/17/21 15:12

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		4.4	1.2	ng/L		05/22/21 05:07	05/23/21 16:48	1
NMeFOSE	ND		3.6	1.2	ng/L		05/22/21 05:07	05/23/21 16:48	1
NEtFOSE	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 16:48	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 16:48	1
6:2 FTS	**87**		4.4	2.2	ng/L		05/22/21 05:07	05/23/21 16:48	1
8:2 FTS	**3.0**		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 16:48	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 16:48	1
HFPO-DA (GenX)	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 16:48	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 16:48	1
11Cl-PF3OUdS	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 16:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C5 PFPeA	*78*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C2 PFHxA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C4 PFHpA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C4 PFOA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C5 PFNA	*83*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C2 PFUnA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C2 PFDoA	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C2 PFTeDA	*84*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C3 PFBS	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
18O2 PFHxS	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C4 PFOS	*82*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C8 FOSA	*83*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
d3-NMeFOSAA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
d5-NEtFOSAA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
d-N-MeFOSA-M	*66*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
d-N-EtFOSA-M	*80*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
d7-N-MeFOSE-M	*54*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
d9-N-EtFOSE-M	*69*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
M2-4:2 FTS	*131*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
M2-6:2 FTS	*134*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
M2-8:2 FTS	*123*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C3 HFPO-DA	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*
13C2 10:2 FTS	*121*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:48*	*1*

Client Sample ID: MW-03-202105

Lab Sample ID: 320-73984-3

Date Collected: 05/17/21 16:35

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**3.8**	**J**	4.5	2.2	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluoropentanoic acid (PFPeA)	**1.2**	**J**	1.8	0.44	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorohexanoic acid (PFHxA)	**0.99**	**J**	1.8	0.52	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluoroheptanoic acid (PFHpA)	**0.69**	**J I**	1.8	0.23	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 16:58	1

Client Sample ID: MW-03-202105
Date Collected: 05/17/21 16:35
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-3
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.99	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.66	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorobutanesulfonic acid (PFBS)	**0.47**	**J**	1.8	0.18	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.88	ng/L		05/22/21 05:07	05/23/21 16:58	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.89	ng/L		05/22/21 05:07	05/23/21 16:58	1
NEtFOSA	ND		1.8	0.79	ng/L		05/22/21 05:07	05/23/21 16:58	1
NMeFOSA	ND		1.8	0.39	ng/L		05/22/21 05:07	05/23/21 16:58	1
NMeFOSAA	ND		4.5	1.1	ng/L		05/22/21 05:07	05/23/21 16:58	1
NEtFOSAA	ND		4.5	1.2	ng/L		05/22/21 05:07	05/23/21 16:58	1
NMeFOSE	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 16:58	1
NEtFOSE	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 16:58	1
4:2 FTS	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 16:58	1
6:2 FTS	ND		4.5	2.3	ng/L		05/22/21 05:07	05/23/21 16:58	1
8:2 FTS	ND		1.8	0.42	ng/L		05/22/21 05:07	05/23/21 16:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 16:58	1
HFPO-DA (GenX)	ND		3.6	1.4	ng/L		05/22/21 05:07	05/23/21 16:58	1
9Cl-PF3ONS	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 16:58	1
11Cl-PF3OUdS	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 16:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C5 PFPeA	*84*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C2 PFHxA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C4 PFHpA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C4 PFOA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C5 PFNA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C2 PFDA	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C2 PFUnA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C2 PFDoA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C2 PFTeDA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C3 PFBS	*84*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
18O2 PFHxS	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C4 PFOS	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
13C8 FOSA	*89*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
d3-NMeFOSAA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
d5-NEtFOSAA	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*
d-N-MeFOSA-M	*82*		*10 - 150*	*05/22/21 05:07*	*05/23/21 16:58*	*1*

Client Sample ID: MW-03-202105

Lab Sample ID: 320-73984-3

Date Collected: 05/17/21 16:35

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d-N-EtFOSA-M	84		10 - 150	05/22/21 05:07	05/23/21 16:58	1
d7-N-MeFOSE-M	80		10 - 150	05/22/21 05:07	05/23/21 16:58	1
d9-N-EtFOSE-M	79		10 - 150	05/22/21 05:07	05/23/21 16:58	1
M2-4:2 FTS	104		25 - 150	05/22/21 05:07	05/23/21 16:58	1
M2-6:2 FTS	95		25 - 150	05/22/21 05:07	05/23/21 16:58	1
M2-8:2 FTS	95		25 - 150	05/22/21 05:07	05/23/21 16:58	1
13C3 HFPO-DA	85		25 - 150	05/22/21 05:07	05/23/21 16:58	1
13C2 10:2 FTS	88		25 - 150	05/22/21 05:07	05/23/21 16:58	1

Client Sample ID: IPW-01-202105

Lab Sample ID: 320-73984-4

Date Collected: 05/17/21 16:10

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	2.1	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.50	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 17:07	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 17:07	1
NEtFOSA	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 17:07	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 17:07	1
NMeFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 17:07	1
NEtFOSAA	ND		4.4	1.2	ng/L		05/22/21 05:07	05/23/21 17:07	1
NMeFOSE	ND		3.5	1.2	ng/L		05/22/21 05:07	05/23/21 17:07	1
NEtFOSE	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 17:07	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 17:07	1
6:2 FTS	ND		4.4	2.2	ng/L		05/22/21 05:07	05/23/21 17:07	1
8:2 FTS	ND		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 17:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.35	ng/L		05/22/21 05:07	05/23/21 17:07	1
HFPO-DA (GenX)	ND		3.5	1.3	ng/L		05/22/21 05:07	05/23/21 17:07	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 17:07	1

Client Sample ID: IPW-01-202105

Lab Sample ID: 320-73984-4

Date Collected: 05/17/21 16:10

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11Cl-PF3OUdS	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 17:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C5 PFPeA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C4 PFHpA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C4 PFOA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C5 PFNA	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C2 PFUnA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C2 PFDoA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C3 PFBS	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
18O2 PFHxS	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C4 PFOS	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C8 FOSA	*85*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
d3-NMeFOSAA	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
d5-NEtFOSAA	*84*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
d-N-MeFOSA-M	*82*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
d-N-EtFOSA-M	*79*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
d7-N-MeFOSE-M	*76*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
d9-N-EtFOSE-M	*77*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
M2-4:2 FTS	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
M2-6:2 FTS	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
M2-8:2 FTS	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C3 HFPO-DA	*84*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*
13C2 10:2 FTS	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:07*	*1*

Client Sample ID: IPW-02-202105

Lab Sample ID: 320-73984-5

Date Collected: 05/17/21 16:03

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.5	2.1	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.52	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 17:17	1

Client Sample ID: IPW-02-202105
Date Collected: 05/17/21 16:03
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 17:17	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.88	ng/L		05/22/21 05:07	05/23/21 17:17	1
NEtFOSA	ND		1.8	0.78	ng/L		05/22/21 05:07	05/23/21 17:17	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 17:17	1
NMeFOSAA	ND		4.5	1.1	ng/L		05/22/21 05:07	05/23/21 17:17	1
NEtFOSAA	ND		4.5	1.2	ng/L		05/22/21 05:07	05/23/21 17:17	1
NMeFOSE	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 17:17	1
NEtFOSE	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 17:17	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 17:17	1
6:2 FTS	ND		4.5	2.2	ng/L		05/22/21 05:07	05/23/21 17:17	1
8:2 FTS	ND		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 17:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 17:17	1
HFPO-DA (GenX)	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 17:17	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 17:17	1
11Cl-PF3OUdS	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 17:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C5 PFPeA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C2 PFHxA	*102*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C4 PFHpA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C4 PFOA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C5 PFNA	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C2 PFDA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C2 PFUnA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C2 PFDoA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C2 PFTeDA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C3 PFBS	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
18O2 PFHxS	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C4 PFOS	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C8 FOSA	*90*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
d3-NMeFOSAA	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
d5-NEtFOSAA	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
d-N-MeFOSA-M	*79*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
d-N-EtFOSA-M	*84*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
d7-N-MeFOSE-M	*85*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
d9-N-EtFOSE-M	*82*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
M2-4:2 FTS	*79*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
M2-6:2 FTS	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
M2-8:2 FTS	*101*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C3 HFPO-DA	*100*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*
13C2 10:2 FTS	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:17*	*1*

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: MW-07-202105
Date Collected: 05/19/21 08:41
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-6
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	2.1	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.1	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.64	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorobutanesulfonic acid (PFBS)	**3.0**		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.26	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.50	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 17:26	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 17:26	1
NEtFOSA	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 17:26	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 17:26	1
NMeFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 17:26	1
NEtFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 17:26	1
NMeFOSE	ND		3.5	1.2	ng/L		05/22/21 05:07	05/23/21 17:26	1
NEtFOSE	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 17:26	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 17:26	1
6:2 FTS	ND		4.4	2.2	ng/L		05/22/21 05:07	05/23/21 17:26	1
8:2 FTS	ND		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 17:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.35	ng/L		05/22/21 05:07	05/23/21 17:26	1
HFPO-DA (GenX)	ND		3.5	1.3	ng/L		05/22/21 05:07	05/23/21 17:26	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 17:26	1
11Cl-PF3OUdS	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 17:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*106*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C5 PFPeA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C2 PFHxA	*102*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C4 PFHpA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C4 PFOA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C5 PFNA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C2 PFDA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C2 PFUnA	*105*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C2 PFDoA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C2 PFTeDA	*102*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*
13C3 PFBS	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:26*	*1*

Client Sample ID: MW-07-202105

Lab Sample ID: 320-73984-6

Date Collected: 05/19/21 08:41

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	111		25 - 150	05/22/21 05:07	05/23/21 17:26	1
13C4 PFOS	103		25 - 150	05/22/21 05:07	05/23/21 17:26	1
13C8 FOSA	101		10 - 150	05/22/21 05:07	05/23/21 17:26	1
d3-NMeFOSAA	95		25 - 150	05/22/21 05:07	05/23/21 17:26	1
d5-NEtFOSAA	97		25 - 150	05/22/21 05:07	05/23/21 17:26	1
d-N-MeFOSA-M	92		10 - 150	05/22/21 05:07	05/23/21 17:26	1
d-N-EtFOSA-M	94		10 - 150	05/22/21 05:07	05/23/21 17:26	1
d7-N-MeFOSE-M	88		10 - 150	05/22/21 05:07	05/23/21 17:26	1
d9-N-EtFOSE-M	83		10 - 150	05/22/21 05:07	05/23/21 17:26	1
M2-4:2 FTS	90		25 - 150	05/22/21 05:07	05/23/21 17:26	1
M2-6:2 FTS	99		25 - 150	05/22/21 05:07	05/23/21 17:26	1
M2-8:2 FTS	105		25 - 150	05/22/21 05:07	05/23/21 17:26	1
13C3 HFPO-DA	89		25 - 150	05/22/21 05:07	05/23/21 17:26	1
13C2 10:2 FTS	102		25 - 150	05/22/21 05:07	05/23/21 17:26	1

Client Sample ID: FB-03-202105

Lab Sample ID: 320-73984-7

Date Collected: 05/19/21 09:50

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.5	2.2	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.53	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.23	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.25	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.66	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.52	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.34	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.88	ng/L		05/22/21 05:07	05/23/21 17:35	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.89	ng/L		05/22/21 05:07	05/23/21 17:35	1
NEtFOSA	ND		1.8	0.79	ng/L		05/22/21 05:07	05/23/21 17:35	1
NMeFOSA	ND		1.8	0.39	ng/L		05/22/21 05:07	05/23/21 17:35	1
NMeFOSAA	ND		4.5	1.1	ng/L		05/22/21 05:07	05/23/21 17:35	1
NEtFOSAA	ND		4.5	1.2	ng/L		05/22/21 05:07	05/23/21 17:35	1
NMeFOSE	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 17:35	1
NEtFOSE	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 17:35	1
4:2 FTS	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 17:35	1

Client Sample ID: FB-03-202105

Lab Sample ID: 320-73984-7

Date Collected: 05/19/21 09:50

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	ND		4.5	2.3	ng/L		05/22/21 05:07	05/23/21 17:35	1
8:2 FTS	ND		1.8	0.42	ng/L		05/22/21 05:07	05/23/21 17:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 17:35	1
HFPO-DA (GenX)	ND		3.6	1.4	ng/L		05/22/21 05:07	05/23/21 17:35	1
9Cl-PF3ONS	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 17:35	1
11Cl-PF3OUdS	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 17:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*108*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C5 PFPeA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C2 PFHxA	*110*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C4 PFHpA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C4 PFOA	*101*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C5 PFNA	*101*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C2 PFDA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C2 PFUnA	*105*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C2 PFDoA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C2 PFTeDA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C3 PFBS	*104*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
18O2 PFHxS	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C4 PFOS	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C8 FOSA	*94*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
d3-NMeFOSAA	*100*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
d5-NEtFOSAA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
d-N-MeFOSA-M	*86*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
d-N-EtFOSA-M	*90*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
d7-N-MeFOSE-M	*89*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
d9-N-EtFOSE-M	*91*		*10 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
M2-4:2 FTS	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
M2-6:2 FTS	*104*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
M2-8:2 FTS	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C3 HFPO-DA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*
13C2 10:2 FTS	*104*		*25 - 150*	*05/22/21 05:07*	*05/23/21 17:35*	*1*

Client Sample ID: MW-05-202105

Lab Sample ID: 320-73984-8

Date Collected: 05/19/21 10:43

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**78**		4.5	2.1	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluoropentanoic acid (PFPeA)	**320**		1.8	0.44	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorohexanoic acid (PFHxA)	**190**		1.8	0.52	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluoroheptanoic acid (PFHpA)	**96**		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorooctanoic acid (PFOA)	**69**		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorononanoic acid (PFNA)	**0.28**	**J**	1.8	0.24	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 18:04	1

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: MW-05-202105
Date Collected: 05/19/21 10:43
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-8
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorobutanesulfonic acid (PFBS)	**0.44**	**J**	1.8	0.18	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorohexanesulfonic acid (PFHxS)	**0.69**	**J**	1.8	0.51	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 18:04	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 18:04	1
NEtFOSA	ND		1.8	0.78	ng/L		05/22/21 05:07	05/23/21 18:04	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 18:04	1
NMeFOSAA	ND		4.5	1.1	ng/L		05/22/21 05:07	05/23/21 18:04	1
NEtFOSAA	ND		4.5	1.2	ng/L		05/22/21 05:07	05/23/21 18:04	1
NMeFOSE	ND		3.6	1.2	ng/L		05/22/21 05:07	05/23/21 18:04	1
NEtFOSE	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 18:04	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:04	1
8:2 FTS	**1.0**	**J**	1.8	0.41	ng/L		05/22/21 05:07	05/23/21 18:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 18:04	1
HFPO-DA (GenX)	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 18:04	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:04	1
11Cl-PF3OUdS	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 18:04	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C5 PFPeA	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C2 PFHxA	*105*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C4 PFHpA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C4 PFOA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C2 PFDA	*100*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C2 PFUnA	*106*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C2 PFDoA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C2 PFTeDA	*104*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C3 PFBS	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
18O2 PFHxS	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C4 PFOS	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C8 FOSA	*98*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
d3-NMeFOSAA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
d5-NEtFOSAA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
d-N-MeFOSA-M	*86*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
d-N-EtFOSA-M	*93*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
d7-N-MeFOSE-M	*93*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
d9-N-EtFOSE-M	*87*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
M2-4:2 FTS	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
M2-8:2 FTS	*113*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*

Client Sample ID: MW-05-202105

Lab Sample ID: 320-73984-8

Date Collected: 05/19/21 10:43

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*
13C2 10:2 FTS	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:04*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	**460**		22	11	ng/L		05/22/21 05:07	05/24/21 14:44	5

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-6:2 FTS	*95*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:44*	*5*

Client Sample ID: MW-06-202105

Lab Sample ID: 320-73984-9

Date Collected: 05/19/21 12:58

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.7**	**J**	4.4	2.1	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.52	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 18:13	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 18:13	1
NEtFOSA	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 18:13	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 18:13	1
NMeFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 18:13	1
NEtFOSAA	ND		4.4	1.2	ng/L		05/22/21 05:07	05/23/21 18:13	1
NMeFOSE	ND		3.6	1.2	ng/L		05/22/21 05:07	05/23/21 18:13	1
NEtFOSE	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 18:13	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:13	1
6:2 FTS	ND		4.4	2.2	ng/L		05/22/21 05:07	05/23/21 18:13	1
8:2 FTS	ND		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 18:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 18:13	1
HFPO-DA (GenX)	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 18:13	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:13	1

Client Sample ID: MW-06-202105

Lab Sample ID: 320-73984-9

Date Collected: 05/19/21 12:58

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11Cl-PF3OUdS	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C5 PFPeA	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C2 PFHxA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C4 PFHpA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C4 PFOA	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C5 PFNA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C2 PFDA	*83*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C2 PFUnA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C2 PFDoA	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C2 PFTeDA	*82*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C3 PFBS	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
18O2 PFHxS	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C4 PFOS	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C8 FOSA	*81*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
d3-NMeFOSAA	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
d5-NEtFOSAA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
d-N-MeFOSA-M	*77*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
d-N-EtFOSA-M	*80*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
d7-N-MeFOSE-M	*74*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
d9-N-EtFOSE-M	*72*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
M2-4:2 FTS	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
M2-6:2 FTS	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
M2-8:2 FTS	*103*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C3 HFPO-DA	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*
13C2 10:2 FTS	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:13*	*1*

Client Sample ID: EB-08-202105

Lab Sample ID: 320-73984-10

Date Collected: 05/19/21 13:45

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.5	2.1	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.44	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.52	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.98	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 18:22	1

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: EB-08-202105
Date Collected: 05/19/21 13:45
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-10
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 18:22	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.87	ng/L		05/22/21 05:07	05/23/21 18:22	1
NEtFOSA	ND		1.8	0.78	ng/L		05/22/21 05:07	05/23/21 18:22	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 18:22	1
NMeFOSAA	ND		4.5	1.1	ng/L		05/22/21 05:07	05/23/21 18:22	1
NEtFOSAA	ND		4.5	1.2	ng/L		05/22/21 05:07	05/23/21 18:22	1
NMeFOSE	ND		3.6	1.2	ng/L		05/22/21 05:07	05/23/21 18:22	1
NEtFOSE	ND		1.8	0.76	ng/L		05/22/21 05:07	05/23/21 18:22	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:22	1
6:2 FTS	ND		4.5	2.2	ng/L		05/22/21 05:07	05/23/21 18:22	1
8:2 FTS	ND		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 18:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.36	ng/L		05/22/21 05:07	05/23/21 18:22	1
HFPO-DA (GenX)	ND		3.6	1.3	ng/L		05/22/21 05:07	05/23/21 18:22	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:22	1
11Cl-PF3OUdS	ND		1.8	0.29	ng/L		05/22/21 05:07	05/23/21 18:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C5 PFPeA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C4 PFHpA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C4 PFOA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C5 PFNA	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C2 PFDA	*83*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C2 PFUnA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C2 PFDoA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C3 PFBS	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
18O2 PFHxS	*94*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C4 PFOS	*86*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C8 FOSA	*83*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
d3-NMeFOSAA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
d5-NEtFOSAA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
d-N-MeFOSA-M	*81*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
d-N-EtFOSA-M	*80*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
d7-N-MeFOSE-M	*80*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
d9-N-EtFOSE-M	*79*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
M2-4:2 FTS	*82*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
M2-6:2 FTS	*80*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
M2-8:2 FTS	*107*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C3 HFPO-DA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*
13C2 10:2 FTS	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:22*	*1*

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: MW-04-202105
Date Collected: 05/19/21 14:29
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-11
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**300**		4.4	2.1	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorononanoic acid (PFNA)	**55**		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorodecanoic acid (PFDA)	**18**		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluoroundecanoic acid (PFUnA)	**1.2**	**J**	1.8	0.97	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.2	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.65	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorobutanesulfonic acid (PFBS)	**0.49**	**J**	1.8	0.18	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluoropentanesulfonic acid (PFPeS)	**0.29**	**J**	1.8	0.27	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorohexanesulfonic acid (PFHxS)	**2.5**		1.8	0.51	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorooctanesulfonic acid (PFOS)	**14**		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 18:32	1
Perfluorooctanesulfonamide (FOSA)	**1.0**	**J**	1.8	0.87	ng/L		05/22/21 05:07	05/23/21 18:32	1
NEtFOSA	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 18:32	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 18:32	1
NMeFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 18:32	1
NEtFOSAA	ND		4.4	1.2	ng/L		05/22/21 05:07	05/23/21 18:32	1
NMeFOSE	ND		3.5	1.2	ng/L		05/22/21 05:07	05/23/21 18:32	1
NEtFOSE	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 18:32	1
4:2 FTS	**34**		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.35	ng/L		05/22/21 05:07	05/23/21 18:32	1
HFPO-DA (GenX)	ND		3.5	1.3	ng/L		05/22/21 05:07	05/23/21 18:32	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:32	1
11Cl-PF3OUdS	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*130*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C5 PFNA	*112*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C2 PFDA	*107*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C2 PFUnA	*125*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C2 PFDoA	*118*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C2 PFTeDA	*114*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C3 PFBS	*132*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
18O2 PFHxS	*135*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C4 PFOS	*121*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C8 FOSA	*109*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
d3-NMeFOSAA	*115*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
d5-NEtFOSAA	*111*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
d-N-MeFOSA-M	*106*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
d-N-EtFOSA-M	*108*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*

Client Sample ID: MW-04-202105

Lab Sample ID: 320-73984-11

Date Collected: 05/19/21 14:29

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d7-N-MeFOSE-M	*100*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
d9-N-EtFOSE-M	*99*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
M2-4:2 FTS	*99*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C3 HFPO-DA	*122*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*
13C2 10:2 FTS	*118*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:32*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	**1400**		35	8.7	ng/L		05/22/21 05:07	05/24/21 14:54	20
Perfluorohexanoic acid (PFHxA)	**930**		35	10	ng/L		05/22/21 05:07	05/24/21 14:54	20
Perfluoroheptanoic acid (PFHpA)	**490**		35	4.4	ng/L		05/22/21 05:07	05/24/21 14:54	20
Perfluorooctanoic acid (PFOA)	**630**		35	15	ng/L		05/22/21 05:07	05/24/21 14:54	20
6:2 FTS	**4100**		89	44	ng/L		05/22/21 05:07	05/24/21 14:54	20
8:2 FTS	**1700**		35	8.2	ng/L		05/22/21 05:07	05/24/21 14:54	20

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFPeA	*91*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:54*	*20*
13C2 PFHxA	*104*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:54*	*20*
13C4 PFHpA	*102*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:54*	*20*
13C4 PFOA	*99*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:54*	*20*
M2-6:2 FTS	*147*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:54*	*20*
M2-8:2 FTS	*149*		*25 - 150*	*05/22/21 05:07*	*05/24/21 14:54*	*20*

Client Sample ID: DUP-01-202105

Lab Sample ID: 320-73984-12

Date Collected: 05/17/21 00:00

Matrix: Water

Date Received: 05/20/21 09:40

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**3.7**	**J**	4.4	2.1	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluoropentanoic acid (PFPeA)	**0.89**	**J**	1.8	0.43	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorohexanoic acid (PFHxA)	**1.0**	**J**	1.8	0.51	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluoroheptanoic acid (PFHpA)	**0.58**	**J**	1.8	0.22	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	1.1	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.64	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorobutanesulfonic acid (PFBS)	**0.45**	**J**	1.8	0.18	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.8	0.26	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.50	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorononanesulfonic acid (PFNS)	ND		1.8	0.33	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:41	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 18:41	1

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Client Sample ID: DUP-01-202105
Date Collected: 05/17/21 00:00
Date Received: 05/20/21 09:40

Lab Sample ID: 320-73984-12
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.86	ng/L		05/22/21 05:07	05/23/21 18:41	1
NEtFOSA	ND		1.8	0.77	ng/L		05/22/21 05:07	05/23/21 18:41	1
NMeFOSA	ND		1.8	0.38	ng/L		05/22/21 05:07	05/23/21 18:41	1
NMeFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 18:41	1
NEtFOSAA	ND		4.4	1.1	ng/L		05/22/21 05:07	05/23/21 18:41	1
NMeFOSE	ND		3.5	1.2	ng/L		05/22/21 05:07	05/23/21 18:41	1
NEtFOSE	ND		1.8	0.75	ng/L		05/22/21 05:07	05/23/21 18:41	1
4:2 FTS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:41	1
6:2 FTS	ND		4.4	2.2	ng/L		05/22/21 05:07	05/23/21 18:41	1
8:2 FTS	ND		1.8	0.41	ng/L		05/22/21 05:07	05/23/21 18:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.35	ng/L		05/22/21 05:07	05/23/21 18:41	1
HFPO-DA (GenX)	ND		3.5	1.3	ng/L		05/22/21 05:07	05/23/21 18:41	1
9Cl-PF3ONS	ND		1.8	0.21	ng/L		05/22/21 05:07	05/23/21 18:41	1
11Cl-PF3OUdS	ND		1.8	0.28	ng/L		05/22/21 05:07	05/23/21 18:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C5 PFPeA	*82*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C2 PFHxA	*101*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C4 PFHpA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C4 PFOA	*100*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C5 PFNA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C2 PFDA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C2 PFUnA	*90*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C2 PFDoA	*88*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C2 PFTeDA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C3 PFBS	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
18O2 PFHxS	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C4 PFOS	*87*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C8 FOSA	*90*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
d3-NMeFOSAA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
d5-NEtFOSAA	*89*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
d-N-MeFOSA-M	*79*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
d-N-EtFOSA-M	*79*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
d7-N-MeFOSE-M	*79*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
d9-N-EtFOSE-M	*80*		*10 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
M2-4:2 FTS	*101*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
M2-6:2 FTS	*102*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
M2-8:2 FTS	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C3 HFPO-DA	*85*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*
13C2 10:2 FTS	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 18:41*	*1*

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-73984-1	MW-01-202105	97		98	95	99	94	93	96
320-73984-1 - DL	MW-01-202105		91						
320-73984-2	MW-02-202105	92	78	93	89	96	83	89	99
320-73984-3	MW-03-202105	95	84	97	91	95	95	87	92
320-73984-4	IPW-01-202105	102	91	94	95	97	87	89	95
320-73984-5	IPW-02-202105	97	93	102	92	92	87	88	95
320-73984-6	MW-07-202105	106	96	102	98	96	93	96	105
320-73984-7	FB-03-202105	108	98	110	96	101	101	97	105
320-73984-8	MW-05-202105	99	85	105	96	98	97	100	106
320-73984-8 - DL	MW-05-202105								
320-73984-9	MW-06-202105	93	85	91	95	99	88	83	91
320-73984-10	EB-08-202105	87	91	94	88	95	86	83	91
320-73984-11	MW-04-202105	130					112	107	125
320-73984-11 - DL	MW-04-202105		91	104	102	99			
320-73984-12	DUP-01-202105	97	82	101	96	100	93	88	90
LCS 320-491698/2-A	Lab Control Sample	102	96	96	103	99	97	96	103
LCSD 320-491698/3-A	Lab Control Sample Dup	96	97	106	92	106	96	97	95
MB 320-491698/1-A	Method Blank	95	91	96	97	98	92	93	95

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
320-73984-1	MW-01-202105	97	90	89	93	95	89	95	94
320-73984-1 - DL	MW-01-202105								
320-73984-2	MW-02-202105	85	84	85	87	82	83	99	98
320-73984-3	MW-03-202105	88	89	84	95	95	89	88	87
320-73984-4	IPW-01-202105	88	86	86	88	89	85	90	84
320-73984-5	IPW-02-202105	88	88	90	95	86	90	86	94
320-73984-6	MW-07-202105	99	102	97	111	103	101	95	97
320-73984-7	FB-03-202105	96	99	104	99	89	94	100	99
320-73984-8	MW-05-202105	98	104	91	95	95	98	98	96
320-73984-8 - DL	MW-05-202105								
320-73984-9	MW-06-202105	86	82	87	87	88	81	87	88
320-73984-10	EB-08-202105	88	86	88	94	86	83	89	92
320-73984-11	MW-04-202105	118	114	132	135	121	109	115	111
320-73984-11 - DL	MW-04-202105								
320-73984-12	DUP-01-202105	88	89	93	96	87	90	89	89
LCS 320-491698/2-A	Lab Control Sample	93	99	93	98	99	88	102	96
LCSD 320-491698/3-A	Lab Control Sample Dup	95	95	90	102	89	91	101	85
MB 320-491698/1-A	Method Blank	92	92	89	97	90	86	95	90

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
320-73984-1	MW-01-202105	80	85	87	82	94	100	106	86
320-73984-1 - DL	MW-01-202105								
320-73984-2	MW-02-202105	66	80	54	69	131	134	123	85
320-73984-3	MW-03-202105	82	84	80	79	104	95	95	85
320-73984-4	IPW-01-202105	82	79	76	77	94	86	94	84
320-73984-5	IPW-02-202105	79	84	85	82	79	92	101	100
320-73984-6	MW-07-202105	92	94	88	83	90	99	105	89

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-73984-1
Project/Site: RockGen Cambridge

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
320-73984-7	FB-03-202105	86	90	89	91	91	104	96	93
320-73984-8	MW-05-202105	86	93	93	87	90		113	93
320-73984-8 - DL	MW-05-202105						95		
320-73984-9	MW-06-202105	77	80	74	72	94	96	103	86
320-73984-10	EB-08-202105	81	80	80	79	82	80	107	88
320-73984-11	MW-04-202105	106	108	100	99	99			122
320-73984-11 - DL	MW-04-202105						147	149	
320-73984-12	DUP-01-202105	79	79	79	80	101	102	96	85
LCS 320-491698/2-A	Lab Control Sample	78	89	84	88	83	94	96	93
LCSD 320-491698/3-A	Lab Control Sample Dup	72	79	84	80	89	94	89	92
MB 320-491698/1-A	Method Blank	80	82	86	81	78	95	90	89

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	M102FTS (25-150)
320-73984-1	MW-01-202105	96
320-73984-1 - DL	MW-01-202105	
320-73984-2	MW-02-202105	121
320-73984-3	MW-03-202105	88
320-73984-4	IPW-01-202105	90
320-73984-5	IPW-02-202105	89
320-73984-6	MW-07-202105	102
320-73984-7	FB-03-202105	104
320-73984-8	MW-05-202105	97
320-73984-8 - DL	MW-05-202105	
320-73984-9	MW-06-202105	85
320-73984-10	EB-08-202105	90
320-73984-11	MW-04-202105	118
320-73984-11 - DL	MW-04-202105	
320-73984-12	DUP-01-202105	97
LCS 320-491698/2-A	Lab Control Sample	93
LCSD 320-491698/3-A	Lab Control Sample Dup	93
MB 320-491698/1-A	Method Blank	100

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA

Isotope Dilution Summary

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-491698/1-A
Matrix: Water
Analysis Batch: 491818

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491698

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	2.4	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	1.3	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.73	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.30	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.57	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.37	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.97	ng/L		05/22/21 05:07	05/23/21 16:11	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.98	ng/L		05/22/21 05:07	05/23/21 16:11	1
NEtFOSA	ND		2.0	0.87	ng/L		05/22/21 05:07	05/23/21 16:11	1
NMeFOSA	ND		2.0	0.43	ng/L		05/22/21 05:07	05/23/21 16:11	1
NMeFOSAA	ND		5.0	1.2	ng/L		05/22/21 05:07	05/23/21 16:11	1
NEtFOSAA	ND		5.0	1.3	ng/L		05/22/21 05:07	05/23/21 16:11	1
NMeFOSE	ND		4.0	1.4	ng/L		05/22/21 05:07	05/23/21 16:11	1
NEtFOSE	ND		2.0	0.85	ng/L		05/22/21 05:07	05/23/21 16:11	1
4:2 FTS	ND		2.0	0.24	ng/L		05/22/21 05:07	05/23/21 16:11	1
6:2 FTS	ND		5.0	2.5	ng/L		05/22/21 05:07	05/23/21 16:11	1
8:2 FTS	ND		2.0	0.46	ng/L		05/22/21 05:07	05/23/21 16:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.40	ng/L		05/22/21 05:07	05/23/21 16:11	1
HFPO-DA (GenX)	ND		4.0	1.5	ng/L		05/22/21 05:07	05/23/21 16:11	1
9Cl-PF3ONS	ND		2.0	0.24	ng/L		05/22/21 05:07	05/23/21 16:11	1
11Cl-PF3OUdS	ND		2.0	0.32	ng/L		05/22/21 05:07	05/23/21 16:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C5 PFPeA	*91*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C2 PFHxA	*96*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C4 PFHpA	*97*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C4 PFOA	*98*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C5 PFNA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C2 PFUnA	*95*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C2 PFDoA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*
13C2 PFTeDA	*92*		*25 - 150*	*05/22/21 05:07*	*05/23/21 16:11*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-491698/1-A
Matrix: Water
Analysis Batch: 491818

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491698

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	89		25 - 150	05/22/21 05:07	05/23/21 16:11	1
18O2 PFHxS	97		25 - 150	05/22/21 05:07	05/23/21 16:11	1
13C4 PFOS	90		25 - 150	05/22/21 05:07	05/23/21 16:11	1
13C8 FOSA	86		10 - 150	05/22/21 05:07	05/23/21 16:11	1
d3-NMeFOSAA	95		25 - 150	05/22/21 05:07	05/23/21 16:11	1
d5-NEtFOSAA	90		25 - 150	05/22/21 05:07	05/23/21 16:11	1
d-N-MeFOSA-M	80		10 - 150	05/22/21 05:07	05/23/21 16:11	1
d-N-EtFOSA-M	82		10 - 150	05/22/21 05:07	05/23/21 16:11	1
d7-N-MeFOSE-M	86		10 - 150	05/22/21 05:07	05/23/21 16:11	1
d9-N-EtFOSE-M	81		10 - 150	05/22/21 05:07	05/23/21 16:11	1
M2-4:2 FTS	78		25 - 150	05/22/21 05:07	05/23/21 16:11	1
M2-6:2 FTS	95		25 - 150	05/22/21 05:07	05/23/21 16:11	1
M2-8:2 FTS	90		25 - 150	05/22/21 05:07	05/23/21 16:11	1
13C3 HFPO-DA	89		25 - 150	05/22/21 05:07	05/23/21 16:11	1
13C2 10:2 FTS	100		25 - 150	05/22/21 05:07	05/23/21 16:11	1

Lab Sample ID: LCS 320-491698/2-A
Matrix: Water
Analysis Batch: 491818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	38.4		ng/L		96	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	40.9		ng/L		102	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	42.9		ng/L		107	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	38.5		ng/L		96	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	42.3		ng/L		106	60 - 135
Perfluorononanoic acid (PFNA)	40.0	42.5		ng/L		106	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	37.7		ng/L		94	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	36.8		ng/L		92	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	41.4		ng/L		103	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	44.7		ng/L		112	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	42.8		ng/L		107	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	38.2		ng/L		108	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	38.5		ng/L		103	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.8		ng/L		104	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.6		ng/L		101	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	36.9		ng/L		99	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	39.7		ng/L		103	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	38.1		ng/L		99	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	40.5		ng/L		104	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-491698/2-A
Matrix: Water
Analysis Batch: 491818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonamide (FOSA)	40.0	44.5		ng/L		111	60 - 135
NEtFOSA	40.0	39.4		ng/L		99	60 - 135
NMeFOSA	40.0	45.8		ng/L		115	60 - 135
NMeFOSAA	40.0	41.2		ng/L		103	60 - 135
NEtFOSAA	40.0	43.6		ng/L		109	60 - 135
NMeFOSE	40.0	41.8		ng/L		104	60 - 135
NEtFOSE	40.0	40.0		ng/L		100	60 - 135
4:2 FTS	37.4	39.6		ng/L		106	60 - 135
6:2 FTS	37.9	39.3		ng/L		104	60 - 135
8:2 FTS	38.3	43.3		ng/L		113	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	40.5		ng/L		108	60 - 135
HFPO-DA (GenX)	40.0	45.0		ng/L		112	60 - 135
9Cl-PF3ONS	37.3	38.5		ng/L		103	60 - 135
11Cl-PF3OUdS	37.7	38.0		ng/L		101	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*102*		*25 - 150*
13C5 PFPeA	*96*		*25 - 150*
13C2 PFHxA	*96*		*25 - 150*
13C4 PFHpA	*103*		*25 - 150*
13C4 PFOA	*99*		*25 - 150*
13C5 PFNA	*97*		*25 - 150*
13C2 PFDA	*96*		*25 - 150*
13C2 PFUnA	*103*		*25 - 150*
13C2 PFDoA	*93*		*25 - 150*
13C2 PFTeDA	*99*		*25 - 150*
13C3 PFBS	*93*		*25 - 150*
18O2 PFHxS	*98*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C8 FOSA	*88*		*10 - 150*
d3-NMeFOSAA	*102*		*25 - 150*
d5-NEtFOSAA	*96*		*25 - 150*
d-N-MeFOSA-M	*78*		*10 - 150*
d-N-EtFOSA-M	*89*		*10 - 150*
d7-N-MeFOSE-M	*84*		*10 - 150*
d9-N-EtFOSE-M	*88*		*10 - 150*
M2-4:2 FTS	*83*		*25 - 150*
M2-6:2 FTS	*94*		*25 - 150*
M2-8:2 FTS	*96*		*25 - 150*
13C3 HFPO-DA	*93*		*25 - 150*
13C2 10:2 FTS	*93*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-491698/3-A
Matrix: Water
Analysis Batch: 491818

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 491698

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	41.8		ng/L		104	60 - 135	8	30
Perfluoropentanoic acid (PFPeA)			40.0	39.6		ng/L		99	60 - 135	3	30
Perfluorohexanoic acid (PFHxA)			40.0	39.8		ng/L		99	60 - 135	8	30
Perfluoroheptanoic acid (PFHpA)			40.0	45.1		ng/L		113	60 - 135	16	30
Perfluorooctanoic acid (PFOA)			40.0	40.4		ng/L		101	60 - 135	4	30
Perfluorononanoic acid (PFNA)			40.0	41.4		ng/L		104	60 - 135	2	30
Perfluorodecanoic acid (PFDA)			40.0	39.8		ng/L		99	60 - 135	5	30
Perfluoroundecanoic acid (PFUnA)			40.0	37.1		ng/L		93	60 - 135	1	30
Perfluorododecanoic acid (PFDoA)			40.0	39.0		ng/L		98	60 - 135	6	30
Perfluorotridecanoic acid (PFTrDA)			40.0	42.6		ng/L		107	60 - 135	5	30
Perfluorotetradecanoic acid (PFTeA)			40.0	42.9		ng/L		107	60 - 135	0	30
Perfluorobutanesulfonic acid (PFBS)			35.4	39.7		ng/L		112	60 - 135	4	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	43.6		ng/L		116	60 - 135	13	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	34.7		ng/L		95	60 - 135	8	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	43.2		ng/L		114	60 - 135	11	30
Perfluorooctanesulfonic acid (PFOS)			37.1	38.8		ng/L		104	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)			38.4	41.5		ng/L		108	60 - 135	4	30
Perfluorodecanesulfonic acid (PFDS)			38.6	38.4		ng/L		99	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	39.4		ng/L		102	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)			40.0	40.8		ng/L		102	60 - 135	9	30
NEtFOSA			40.0	43.2		ng/L		108	60 - 135	9	30
NMeFOSA			40.0	45.9		ng/L		115	60 - 135	0	30
NMeFOSAA			40.0	40.3		ng/L		101	60 - 135	2	30
NEtFOSAA			40.0	43.9		ng/L		110	60 - 135	1	30
NMeFOSE			40.0	40.1		ng/L		100	60 - 135	4	30
NEtFOSE			40.0	43.0		ng/L		108	60 - 135	7	30
4:2 FTS			37.4	43.2		ng/L		116	60 - 135	9	30
6:2 FTS			37.9	40.0		ng/L		106	60 - 135	2	30
8:2 FTS			38.3	40.8		ng/L		106	60 - 135	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.7	45.8		ng/L		122	60 - 135	12	30
HFPO-DA (GenX)			40.0	45.5		ng/L		114	60 - 135	1	30
9Cl-PF3ONS			37.3	43.3		ng/L		116	60 - 135	12	30
11Cl-PF3OUdS			37.7	40.3		ng/L		107	60 - 135	6	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*96*		*25 - 150*
13C5 PFPeA	*97*		*25 - 150*
13C2 PFHxA	*106*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-491698/3-A
Matrix: Water
Analysis Batch: 491818

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 491698

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFHpA	92		25 - 150
13C4 PFOA	106		25 - 150
13C5 PFNA	96		25 - 150
13C2 PFDA	97		25 - 150
13C2 PFUnA	95		25 - 150
13C2 PFDoA	95		25 - 150
13C2 PFTeDA	95		25 - 150
13C3 PFBS	90		25 - 150
18O2 PFHxS	102		25 - 150
13C4 PFOS	89		25 - 150
13C8 FOSA	91		10 - 150
d3-NMeFOSAA	101		25 - 150
d5-NEtFOSAA	85		25 - 150
d-N-MeFOSA-M	72		10 - 150
d-N-EtFOSA-M	79		10 - 150
d7-N-MeFOSE-M	84		10 - 150
d9-N-EtFOSE-M	80		10 - 150
M2-4:2 FTS	89		25 - 150
M2-6:2 FTS	94		25 - 150
M2-8:2 FTS	89		25 - 150
13C3 HFPO-DA	92		25 - 150
13C2 10:2 FTS	93		25 - 150

LCMS

Prep Batch: 491698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-73984-1	MW-01-202105	Total/NA	Water	3535	
320-73984-1 - DL	MW-01-202105	Total/NA	Water	3535	
320-73984-2	MW-02-202105	Total/NA	Water	3535	
320-73984-3	MW-03-202105	Total/NA	Water	3535	
320-73984-4	IPW-01-202105	Total/NA	Water	3535	
320-73984-5	IPW-02-202105	Total/NA	Water	3535	
320-73984-6	MW-07-202105	Total/NA	Water	3535	
320-73984-7	FB-03-202105	Total/NA	Water	3535	
320-73984-8	MW-05-202105	Total/NA	Water	3535	
320-73984-8 - DL	MW-05-202105	Total/NA	Water	3535	
320-73984-9	MW-06-202105	Total/NA	Water	3535	
320-73984-10	EB-08-202105	Total/NA	Water	3535	
320-73984-11 - DL	MW-04-202105	Total/NA	Water	3535	
320-73984-11	MW-04-202105	Total/NA	Water	3535	
320-73984-12	DUP-01-202105	Total/NA	Water	3535	
MB 320-491698/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-491698/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-491698/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 491818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-73984-1	MW-01-202105	Total/NA	Water	537 (modified)	491698
320-73984-2	MW-02-202105	Total/NA	Water	537 (modified)	491698
320-73984-3	MW-03-202105	Total/NA	Water	537 (modified)	491698
320-73984-4	IPW-01-202105	Total/NA	Water	537 (modified)	491698
320-73984-5	IPW-02-202105	Total/NA	Water	537 (modified)	491698
320-73984-6	MW-07-202105	Total/NA	Water	537 (modified)	491698
320-73984-7	FB-03-202105	Total/NA	Water	537 (modified)	491698
320-73984-8	MW-05-202105	Total/NA	Water	537 (modified)	491698
320-73984-9	MW-06-202105	Total/NA	Water	537 (modified)	491698
320-73984-10	EB-08-202105	Total/NA	Water	537 (modified)	491698
320-73984-11	MW-04-202105	Total/NA	Water	537 (modified)	491698
320-73984-12	DUP-01-202105	Total/NA	Water	537 (modified)	491698
MB 320-491698/1-A	Method Blank	Total/NA	Water	537 (modified)	491698
LCS 320-491698/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	491698
LCSD 320-491698/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	491698

Analysis Batch: 492171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-73984-1 - DL	MW-01-202105	Total/NA	Water	537 (modified)	491698
320-73984-8 - DL	MW-05-202105	Total/NA	Water	537 (modified)	491698
320-73984-11 - DL	MW-04-202105	Total/NA	Water	537 (modified)	491698

Client Sample ID: MW-01-202105
Lab Sample ID: 320-73984-1
Date Collected: 05/17/21 12:45
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			271.8 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 16:39	K1S	TAL SAC
Total/NA	Prep	3535	DL		271.8 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)	DL	5			492171	05/24/21 14:35	S1M	TAL SAC

Client Sample ID: MW-02-202105
Lab Sample ID: 320-73984-2
Date Collected: 05/17/21 15:12
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.5 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 16:48	K1S	TAL SAC

Client Sample ID: MW-03-202105
Lab Sample ID: 320-73984-3
Date Collected: 05/17/21 16:35
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.8 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 16:58	K1S	TAL SAC

Client Sample ID: IPW-01-202105
Lab Sample ID: 320-73984-4
Date Collected: 05/17/21 16:10
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			282.2 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 17:07	K1S	TAL SAC

Client Sample ID: IPW-02-202105
Lab Sample ID: 320-73984-5
Date Collected: 05/17/21 16:03
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			279.9 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 17:17	K1S	TAL SAC

Client Sample ID: MW-07-202105
Lab Sample ID: 320-73984-6
Date Collected: 05/19/21 08:41
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			283.2 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 17:26	K1S	TAL SAC

Client Sample ID: FB-03-202105
Lab Sample ID: 320-73984-7

Date Collected: 05/19/21 09:50
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			275.4 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 17:35	K1S	TAL SAC

Client Sample ID: MW-05-202105
Lab Sample ID: 320-73984-8

Date Collected: 05/19/21 10:43
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			280.4 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 18:04	K1S	TAL SAC
Total/NA	Prep	3535	DL		280.4 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)	DL	5			492171	05/24/21 14:44	S1M	TAL SAC

Client Sample ID: MW-06-202105
Lab Sample ID: 320-73984-9

Date Collected: 05/19/21 12:58
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.1 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 18:13	K1S	TAL SAC

Client Sample ID: EB-08-202105
Lab Sample ID: 320-73984-10

Date Collected: 05/19/21 13:45
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			280.3 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 18:22	K1S	TAL SAC

Client Sample ID: MW-04-202105
Lab Sample ID: 320-73984-11

Date Collected: 05/19/21 14:29
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			282.1 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 18:32	K1S	TAL SAC
Total/NA	Prep	3535	DL		282.1 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)	DL	20			492171	05/24/21 14:54	S1M	TAL SAC

Client Sample ID: DUP-01-202105
Lab Sample ID: 320-73984-12

Date Collected: 05/17/21 00:00
Matrix: Water
Date Received: 05/20/21 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			283.4 mL	10.00 mL	491698	05/22/21 05:07	NSS	TAL SAC
Total/NA	Analysis	537 (modified)		1			491818	05/23/21 18:41	K1S	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Job ID: 320-73984-1
Project/Site: RockGen Cambridge

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Kansas	NELAP	E-10375	10-31-21
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-22
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-22
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-30-23
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442021-12	03-01-22
Virginia	NELAP	460278	03-14-22
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: TRC Environmental Corporation
Project/Site: RockGen Cambridge

Job ID: 320-73984-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-73984-1	MW-01-202105	Water	05/17/21 12:45	05/20/21 09:40	
320-73984-2	MW-02-202105	Water	05/17/21 15:12	05/20/21 09:40	
320-73984-3	MW-03-202105	Water	05/17/21 16:35	05/20/21 09:40	
320-73984-4	IPW-01-202105	Water	05/17/21 16:10	05/20/21 09:40	
320-73984-5	IPW-02-202105	Water	05/17/21 16:03	05/20/21 09:40	
320-73984-6	MW-07-202105	Water	05/19/21 08:41	05/20/21 09:40	
320-73984-7	FB-03-202105	Water	05/19/21 09:50	05/20/21 09:40	
320-73984-8	MW-05-202105	Water	05/19/21 10:43	05/20/21 09:40	
320-73984-9	MW-06-202105	Water	05/19/21 12:58	05/20/21 09:40	
320-73984-10	EB-08-202105	Water	05/19/21 13:45	05/20/21 09:40	
320-73984-11	MW-04-202105	Water	05/19/21 14:29	05/20/21 09:40	
320-73984-12	DUP-01-202105	Water	05/17/21 00:00	05/20/21 09:40	

Chain of Custody Record 511377

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Jeff Ramey	Site Contact:	Date:	COC No:
Company Name: TRC	Tel/Email: (414) 294-9247	Lab Contact:	Carrier:	1 of 1 COCs
Address: 708 Heartland TH Ste 3000	Analysis Turnaround Time			Sampler: M. Westaus
City/State/Zip: Madison, WI 53717	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 608 358 5035	TAT if different from Below 5 Days			Walk-in Client:
Fax: N/A	☐ 2 weeks			Lab Sampling:
Project Name: Rockton Cambridge	☐ 1 week			
Site: 437865.0000	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PFAS - WI-33 list	Sample Specific Notes:
MW-01-202105	5/17/21	1245	G	GW	2	N	N	X	
MW-02-202105		1512						X	
MW-03-202105		1635						X	
~~Well 1~~ IPW-01-202105		1610						X	
~~Well 2~~ IPW-02-202105		1603						X	
MW-07-202105	5/19/21	841						X	
FB-03-202105		950						X	
MW-05-202105		1043						X	
MW-06-202105		1258						X	
EB-08-202105		1345						X	
MW-04-202105		1429						X	
DUP-01-202105	5/17/21	—						X	

320-73984 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 165687-165688 | Cooler Temp. (°C): Obs'd: 1.1 Corr'd: 1.1 | Therm ID No.: 204

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
to FedEx	TRC	5/19/21 1745			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
				ETAS BC	5/20/21 9:18
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/25/2021

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-73984-1

Login Number: 73984
List Number: 1
Creator: Her, David A

List Source: Eurofins TestAmerica, Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	