eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-58318-1
Client Project/Site: KI Sawyer WWTP

For:
White Water Associates
429 River Lane
PO BOX 27
Amasa, Michigan 49903

Attn: Bette J Premo

Elizabeth M. Zanar

Authorized for release by:
10/18/2021 12:22:40 PM

Elizabeth Zanar, Project Manager
(717)556-7290
Elizabeth.Zanar@eurofinset.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Elizabeth M. Zanar

Elizabeth Zanar
Project Manager
10/18/2021 12:22:40 PM

Table of Contents

Definitions/Glossary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Job ID: 410-58318-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-58318-1

Receipt
The samples were received on 10/8/2021 11:00 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 time was 1.2°C

PFAS
Method PFC_IDA: Reporting limits were raised for the following samples: Influent (410-58318-2) and Service Center Lift Station (410-58318-6) due to interference from the sample matrix.

Method PFC_IDA: Target analyte(s) were detected in trip blank sample: Trip Blank (410-58318-8). The following action was taken: This sample(s) was re-extracted within the required holding time and target analyte(s) were again detected in the re-extracted trip blank.

Method PFC_IDA: The LCS labeled isotope(s) recovery associated with sample: Field Blank (410-58318-7) is outside the QC acceptance limits. Since the recovery for target analytes is within the limits, the data is reported.

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

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

Detection Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Effluent — Lab Sample ID: 410-58318-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	8.6		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluoroheptanoic acid	2.2		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid	3.6		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorononanoic acid	0.74	J	1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid	5.9		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid	5.5		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid	10		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorobutanoic acid	2.2	J	4.8	1.9	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluoropentanoic acid	4.8		1.9	0.48	ng/L	1		EPA 537 (Mod)	Total/NA

Client Sample ID: Influent — Lab Sample ID: 410-58318-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid	6.3	J	19	4.9	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorohexanesulfonic acid	7.6	J	19	4.9	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid	7.6	J	19	4.9	ng/L	1		EPA 537 (Mod)	Total/NA

Client Sample ID: North Digester — Lab Sample ID: 410-58318-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid	0.59		0.16	0.052	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
NMeFOSAA	0.065	J	0.52	0.052	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonamide	0.073	J	0.16	0.052	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: South Digester — Lab Sample ID: 410-58318-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid	0.23		0.046	0.015	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
NEtFOSAA	0.020	J	0.15	0.015	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
NMeFOSAA	0.028	J	0.15	0.015	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonamide	0.018	J	0.046	0.015	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: Biosolids West — Lab Sample ID: 410-58318-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	0.011	J I	0.027	0.0090	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid	0.017	J	0.027	0.0090	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid	0.18		0.027	0.0090	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
NEtFOSAA	0.015	J	0.090	0.0090	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
NMeFOSAA	0.028	J	0.090	0.0090	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonamide	0.0091	J	0.027	0.0090	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
8:2 Fluorotelomer sulfonic acid	0.042	J	0.14	0.027	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA
6:2 Fluorotelomer sulfonic acid	0.036	J	0.090	0.027	mg/Kg	1	☼	EPA 537 (Mod)	Total/NA

Client Sample ID: Service Center Lift Station — Lab Sample ID: 410-58318-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	76		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluoroheptanoic acid	25		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid	55		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorononanoic acid	8.0	J	20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorodecanoic acid	5.6	J	20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorobutanesulfonic acid	24		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Service Center Lift Station (Continued) — Lab Sample ID: 410-58318-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid	740		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluoropentanesulfonic acid	51		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluoroheptanesulfonic acid	220		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorononanesulfonic acid	15	J	20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonamide	14	J	20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluoropentanoic acid	79		20	5.0	ng/L	1		EPA 537 (Mod)	Total/NA
8:2 Fluorotelomer sulfonic acid	210		30	10	ng/L	1		EPA 537 (Mod)	Total/NA
6:2 Fluorotelomer sulfonic acid	1000		50	20	ng/L	1		EPA 537 (Mod)	Total/NA
Perfluorooctanesulfonic acid - DL	23000		200	50	ng/L	10		EPA 537 (Mod)	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 410-58318-7

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 410-58318-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	3.0	J	4.5	1.8	ng/L	1		EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Effluent
Date Collected: 10/06/21 09:12
Date Received: 10/08/21 11:00

Lab Sample ID: 410-58318-1
Matrix: Water

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**8.6**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluoroheptanoic acid	**2.2**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorooctanoic acid	**3.6**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorononanoic acid	**0.74**	**J**	1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorodecanoic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorotridecanoic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorotetradecanoic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorobutanesulfonic acid	**5.9**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorohexanesulfonic acid	**5.5**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorooctanesulfonic acid	**10**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
NEtFOSAA	ND		2.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
NMeFOSAA	ND		1.9	0.57	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluoropentanesulfonic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluoroheptanesulfonic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorononanesulfonic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorodecanesulfonic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorooctanesulfonamide	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorobutanoic acid	**2.2**	**J**	4.8	1.9	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluoropentanoic acid	**4.8**		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
HFPODA	ND		2.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
DONA	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
9Cl-PF3ONS	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
11Cl-PF3OUdS	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluoroundecanoic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
Perfluorododecanoic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
8:2 Fluorotelomer sulfonic acid	ND		2.9	0.95	ng/L		10/11/21 15:57	10/12/21 19:35	1
4:2 Fluorotelomer sulfonic acid	ND		1.9	0.48	ng/L		10/11/21 15:57	10/12/21 19:35	1
6:2 Fluorotelomer sulfonic acid	ND		4.8	1.9	ng/L		10/11/21 15:57	10/12/21 19:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*116*		*20 - 187*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
M2-8:2 FTS	*108*		*34 - 182*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
M2-6:2 FTS	*127*		*29 - 189*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C5 PFHxA	*85*		*31 - 142*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C4 PFHpA	*93*		*30 - 144*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C8 PFOA	*90*		*49 - 127*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C9 PFNA	*97*		*47 - 136*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C6 PFDA	*87*		*47 - 128*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C7 PFUnA	*94*		*40 - 135*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C2-PFDoDA	*85*		*28 - 136*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C2 PFTeDA	*69*		*10 - 144*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C3 PFBS	*106*		*19 - 178*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C3 PFHxS	*90*		*32 - 145*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C8 PFOS	*96*		*49 - 126*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
d3-NMeFOSAA	*90*		*32 - 151*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
d5-NEtFOSAA	*100*		*37 - 164*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C8 FOSA	*18*		*10 - 143*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C4 PFBA	*86*		*41 - 132*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C5 PFPeA	*96*		*33 - 155*	*10/11/21 15:57*	*10/12/21 19:35*	*1*
13C3 HFPO-DA	*76*		*20 - 153*	*10/11/21 15:57*	*10/12/21 19:35*	*1*

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Influent

Date Collected: 10/06/21 09:20
Date Received: 10/08/21 11:00

Lab Sample ID: 410-58318-2

Matrix: Water

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluoroheptanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorooctanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorononanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorodecanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorotridecanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorotetradecanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorobutanesulfonic acid	**6.3**	**J**	19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorohexanesulfonic acid	**7.6**	**J**	19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorooctanesulfonic acid	**7.6**	**J**	19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
NEtFOSAA	ND		29	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
NMeFOSAA	ND		19	5.8	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluoropentanesulfonic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluoroheptanesulfonic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorononanesulfonic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorodecanesulfonic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorooctanesulfonamide	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorobutanoic acid	ND		49	19	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluoropentanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
HFPODA	ND		29	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
DONA	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
9Cl-PF3ONS	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
11Cl-PF3OUdS	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluoroundecanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
Perfluorododecanoic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
8:2 Fluorotelomer sulfonic acid	ND		29	9.7	ng/L		10/11/21 15:57	10/12/21 19:47	1
4:2 Fluorotelomer sulfonic acid	ND		19	4.9	ng/L		10/11/21 15:57	10/12/21 19:47	1
6:2 Fluorotelomer sulfonic acid	ND		49	19	ng/L		10/11/21 15:57	10/12/21 19:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*126*		*20 - 187*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
M2-8:2 FTS	*124*		*34 - 182*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
M2-6:2 FTS	*142*		*29 - 189*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C5 PFHxA	*80*		*31 - 142*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C4 PFHpA	*90*		*30 - 144*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C8 PFOA	*86*		*49 - 127*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C9 PFNA	*95*		*47 - 136*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C6 PFDA	*90*		*47 - 128*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C7 PFUnA	*94*		*40 - 135*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C2-PFDoDA	*72*		*28 - 136*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C2 PFTeDA	*44*		*10 - 144*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C3 PFBS	*90*		*19 - 178*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C3 PFHxS	*79*		*32 - 145*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C8 PFOS	*97*		*49 - 126*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
d3-NMeFOSAA	*90*		*32 - 151*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
d5-NEtFOSAA	*90*		*37 - 164*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C8 FOSA	*96*		*10 - 143*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C4 PFBA	*84*		*41 - 132*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C5 PFPeA	*83*		*33 - 155*	*10/11/21 15:57*	*10/12/21 19:47*	*1*
13C3 HFPO-DA	*75*		*20 - 153*	*10/11/21 15:57*	*10/12/21 19:47*	*1*

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: North Digester
Date Collected: 10/06/21 10:00
Date Received: 10/08/21 11:00

Lab Sample ID: 410-58318-3
Matrix: Solid
Percent Solids: 0.4

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluoroheptanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorooctanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorononanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorodecanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorotridecanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorotetradecanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorobutanesulfonic acid	ND		0.52	0.10	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorohexanesulfonic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorooctanesulfonic acid	**0.59**		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
NEtFOSAA	ND		0.52	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
NMeFOSAA	**0.065**	**J**	0.52	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluoropentanesulfonic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluoroheptanesulfonic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorononanesulfonic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorodecanesulfonic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorooctanesulfonamide	**0.073**	**J**	0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorobutanoic acid	ND		0.52	0.21	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluoropentanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
HFPODA	ND		0.52	0.10	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
DONA	ND		0.78	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
9Cl-PF3ONS	ND		0.52	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
11Cl-PF3OUdS	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluoroundecanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
Perfluorododecanoic acid	ND		0.16	0.052	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
8:2 Fluorotelomer sulfonic acid	ND		0.78	0.16	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
4:2 Fluorotelomer sulfonic acid	ND		0.52	0.16	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1
6:2 Fluorotelomer sulfonic acid	ND		0.52	0.16	mg/Kg	☼	10/12/21 21:42	10/14/21 05:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*84*		*10 - 169*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
M2-8:2 FTS	*84*		*10 - 178*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
M2-6:2 FTS	*80*		*10 - 182*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C5 PFHxA	*67*		*11 - 138*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C4 PFHpA	*64*		*15 - 139*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C8 PFOA	*64*		*21 - 133*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C9 PFNA	*62*		*15 - 145*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C6 PFDA	*66*		*21 - 134*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C7 PFUnA	*71*		*15 - 138*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C2-PFDoDA	*61*		*28 - 126*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C2 PFTeDA	*63*		*10 - 138*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C3 PFBS	*61*		*23 - 130*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C3 PFHxS	*61*		*24 - 136*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C8 PFOS	*62*		*31 - 130*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
d3-NMeFOSAA	*74*		*10 - 172*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
d5-NEtFOSAA	*83*		*10 - 176*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C8 FOSA	*69*		*25 - 135*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C4 PFBA	*61*		*12 - 137*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C5 PFPeA	*61*		*12 - 135*	*10/12/21 21:42*	*10/14/21 05:13*	*1*
13C3 HFPO-DA	*70*		*10 - 152*	*10/12/21 21:42*	*10/14/21 05:13*	*1*

Client Sample ID: North Digester

Lab Sample ID: 410-58318-3
Date Collected: 10/06/21 10:00
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 0.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**99.6**		1.0	1.0	%			10/08/21 17:36	1

Client Sample ID: South Digester

Lab Sample ID: 410-58318-4
Date Collected: 10/06/21 10:10
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 1.2

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluoroheptanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorooctanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorononanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorodecanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorotridecanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorotetradecanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorobutanesulfonic acid	ND		0.15	0.031	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorohexanesulfonic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorooctanesulfonic acid	**0.23**		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
NEtFOSAA	**0.020**	**J**	0.15	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
NMeFOSAA	**0.028**	**J**	0.15	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluoropentanesulfonic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluoroheptanesulfonic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorononanesulfonic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorodecanesulfonic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorooctanesulfonamide	**0.018**	**J**	0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorobutanoic acid	ND		0.15	0.062	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluoropentanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
HFPODA	ND		0.15	0.031	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
DONA	ND		0.23	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
9Cl-PF3ONS	ND		0.15	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
11Cl-PF3OUdS	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluoroundecanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
Perfluorododecanoic acid	ND		0.046	0.015	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
8:2 Fluorotelomer sulfonic acid	ND		0.23	0.046	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
4:2 Fluorotelomer sulfonic acid	ND		0.15	0.046	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1
6:2 Fluorotelomer sulfonic acid	ND		0.15	0.046	mg/Kg	☼	10/12/21 21:42	10/14/21 05:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*89*		*10 - 169*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
M2-8:2 FTS	*99*		*10 - 178*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
M2-6:2 FTS	*91*		*10 - 182*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C5 PFHxA	*66*		*11 - 138*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C4 PFHpA	*65*		*15 - 139*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C8 PFOA	*63*		*21 - 133*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C9 PFNA	*74*		*15 - 145*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C6 PFDA	*72*		*21 - 134*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C7 PFUnA	*72*		*15 - 138*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C2-PFDoDA	*65*		*28 - 126*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C2 PFTeDA	*59*		*10 - 138*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C3 PFBS	*69*		*23 - 130*	*10/12/21 21:42*	*10/14/21 05:23*	*1*
13C3 PFHxS	*63*		*24 - 136*	*10/12/21 21:42*	*10/14/21 05:23*	*1*

Client Sample ID: South Digester

Lab Sample ID: 410-58318-4

Date Collected: 10/06/21 10:10
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 1.2

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	74		31 - 130	10/12/21 21:42	10/14/21 05:23	1
d3-NMeFOSAA	76		10 - 172	10/12/21 21:42	10/14/21 05:23	1
d5-NEtFOSAA	92		10 - 176	10/12/21 21:42	10/14/21 05:23	1
13C8 FOSA	72		25 - 135	10/12/21 21:42	10/14/21 05:23	1
13C4 PFBA	68		12 - 137	10/12/21 21:42	10/14/21 05:23	1
13C5 PFPeA	68		12 - 135	10/12/21 21:42	10/14/21 05:23	1
13C3 HFPO-DA	68		10 - 152	10/12/21 21:42	10/14/21 05:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	98.8		1.0	1.0	%			10/08/21 17:36	1

Client Sample ID: Biosolids West

Lab Sample ID: 410-58318-5

Date Collected: 10/06/21 10:15
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 2.2

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	0.011	J I	0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluoroheptanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorooctanoic acid	0.017	J	0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorononanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorodecanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorotridecanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorotetradecanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorobutanesulfonic acid	ND		0.090	0.018	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorohexanesulfonic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorooctanesulfonic acid	0.18		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
NEtFOSAA	0.015	J	0.090	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
NMeFOSAA	0.028	J	0.090	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluoropentanesulfonic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluoroheptanesulfonic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorononanesulfonic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorodecanesulfonic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorooctanesulfonamide	0.0091	J	0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorobutanoic acid	ND		0.090	0.036	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluoropentanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
HFPODA	ND		0.090	0.018	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
DONA	ND		0.14	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
9Cl-PF3ONS	ND		0.090	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
11Cl-PF3OUdS	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluoroundecanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
Perfluorododecanoic acid	ND		0.027	0.0090	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
8:2 Fluorotelomer sulfonic acid	0.042	J	0.14	0.027	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
4:2 Fluorotelomer sulfonic acid	ND		0.090	0.027	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1
6:2 Fluorotelomer sulfonic acid	0.036	J	0.090	0.027	mg/Kg	☼	10/12/21 21:42	10/14/21 05:34	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-4:2 FTS	98		10 - 169	10/12/21 21:42	10/14/21 05:34	1
M2-8:2 FTS	100		10 - 178	10/12/21 21:42	10/14/21 05:34	1
M2-6:2 FTS	103		10 - 182	10/12/21 21:42	10/14/21 05:34	1

Client Sample ID: Biosolids West

Lab Sample ID: 410-58318-5

Date Collected: 10/06/21 10:15
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 2.2

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFHxA	72		11 - 138	10/12/21 21:42	10/14/21 05:34	1
13C4 PFHpA	70		15 - 139	10/12/21 21:42	10/14/21 05:34	1
13C8 PFOA	72		21 - 133	10/12/21 21:42	10/14/21 05:34	1
13C9 PFNA	84		15 - 145	10/12/21 21:42	10/14/21 05:34	1
13C6 PFDA	77		21 - 134	10/12/21 21:42	10/14/21 05:34	1
13C7 PFUnA	76		15 - 138	10/12/21 21:42	10/14/21 05:34	1
13C2-PFDoDA	67		28 - 126	10/12/21 21:42	10/14/21 05:34	1
13C2 PFTeDA	64		10 - 138	10/12/21 21:42	10/14/21 05:34	1
13C3 PFBS	79		23 - 130	10/12/21 21:42	10/14/21 05:34	1
13C3 PFHxS	68		24 - 136	10/12/21 21:42	10/14/21 05:34	1
13C8 PFOS	73		31 - 130	10/12/21 21:42	10/14/21 05:34	1
d3-NMeFOSAA	78		10 - 172	10/12/21 21:42	10/14/21 05:34	1
d5-NEtFOSAA	87		10 - 176	10/12/21 21:42	10/14/21 05:34	1
13C8 FOSA	76		25 - 135	10/12/21 21:42	10/14/21 05:34	1
13C4 PFBA	74		12 - 137	10/12/21 21:42	10/14/21 05:34	1
13C5 PFPeA	77		12 - 135	10/12/21 21:42	10/14/21 05:34	1
13C3 HFPO-DA	78		10 - 152	10/12/21 21:42	10/14/21 05:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	97.8		1.0	1.0	%			10/08/21 17:36	1

Client Sample ID: Service Center Lift Station

Lab Sample ID: 410-58318-6

Date Collected: 10/06/21 11:00
Matrix: Water
Date Received: 10/08/21 11:00

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	76		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluoroheptanoic acid	25		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorooctanoic acid	55		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorononanoic acid	8.0	J	20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorodecanoic acid	5.6	J	20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorotridecanoic acid	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorotetradecanoic acid	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorobutanesulfonic acid	24		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorohexanesulfonic acid	740		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
NEtFOSAA	ND		30	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
NMeFOSAA	ND		20	6.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluoropentanesulfonic acid	51		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluoroheptanesulfonic acid	220		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorononanesulfonic acid	15	J	20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorodecanesulfonic acid	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorooctanesulfonamide	14	J	20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorobutanoic acid	ND		50	20	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluoropentanoic acid	79		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
HFPODA	ND		30	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
DONA	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
9Cl-PF3ONS	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
11Cl-PF3OUdS	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1

Client Sample ID: Service Center Lift Station

Lab Sample ID: 410-58318-6

Date Collected: 10/06/21 11:00

Matrix: Water

Date Received: 10/08/21 11:00

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
Perfluorododecanoic acid	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
8:2 Fluorotelomer sulfonic acid	**210**		30	10	ng/L		10/11/21 15:57	10/13/21 00:57	1
4:2 Fluorotelomer sulfonic acid	ND		20	5.0	ng/L		10/11/21 15:57	10/13/21 00:57	1
6:2 Fluorotelomer sulfonic acid	**1000**		50	20	ng/L		10/11/21 15:57	10/13/21 00:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*140*		*20 - 187*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
M2-8:2 FTS	*110*		*34 - 182*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
M2-6:2 FTS	*140*		*29 - 189*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C5 PFHxA	*86*		*31 - 142*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C4 PFHpA	*84*		*30 - 144*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C8 PFOA	*83*		*49 - 127*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C9 PFNA	*113*		*47 - 136*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C6 PFDA	*90*		*47 - 128*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C7 PFUnA	*104*		*40 - 135*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C2-PFDoDA	*43*		*28 - 136*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C2 PFTeDA	*35*		*10 - 144*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C3 PFBS	*87*		*19 - 178*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C3 PFHxS	*79*		*32 - 145*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C8 PFOS	*89*		*49 - 126*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
d3-NMeFOSAA	*122*		*32 - 151*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
d5-NEtFOSAA	*138*		*37 - 164*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C8 FOSA	*106*		*10 - 143*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C4 PFBA	*81*		*41 - 132*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C5 PFPeA	*82*		*33 - 155*	*10/11/21 15:57*	*10/13/21 00:57*	*1*
13C3 HFPO-DA	*59*		*20 - 153*	*10/11/21 15:57*	*10/13/21 00:57*	*1*

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid	**23000**		200	50	ng/L		10/11/21 15:57	10/13/21 01:08	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOS	*93*		*49 - 126*	*10/11/21 15:57*	*10/13/21 01:08*	*10*

Client Sample ID: Field Blank

Lab Sample ID: 410-58318-7

Date Collected: 10/06/21 09:10

Matrix: Water

Date Received: 10/08/21 11:00

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluoroheptanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorooctanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorononanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorodecanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorotridecanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorotetradecanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorobutanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorohexanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorooctanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
NEtFOSAA	ND		2.7	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1

Client Sample ID: Field Blank

Lab Sample ID: 410-58318-7

Date Collected: 10/06/21 09:10

Matrix: Water

Date Received: 10/08/21 11:00

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NMeFOSAA	ND		1.8	0.55	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluoropentanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluoroheptanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorononanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorodecanesulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorooctanesulfonamide	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorobutanoic acid	ND		4.5	1.8	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluoropentanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
HFPODA	ND		2.7	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
DONA	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
9Cl-PF3ONS	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
11Cl-PF3OUdS	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluoroundecanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
Perfluorododecanoic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
8:2 Fluorotelomer sulfonic acid	ND		2.7	0.91	ng/L		10/13/21 17:37	10/14/21 20:07	1
4:2 Fluorotelomer sulfonic acid	ND		1.8	0.45	ng/L		10/13/21 17:37	10/14/21 20:07	1
6:2 Fluorotelomer sulfonic acid	ND		4.5	1.8	ng/L		10/13/21 17:37	10/14/21 20:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*135*		*20 - 187*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
M2-8:2 FTS	*130*		*34 - 182*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
M2-6:2 FTS	*127*		*29 - 189*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C5 PFHxA	*115*		*31 - 142*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C4 PFHpA	*117*		*30 - 144*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C8 PFOA	*112*		*49 - 127*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C9 PFNA	*121*		*47 - 136*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C6 PFDA	*117*		*47 - 128*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C7 PFUnA	*117*		*40 - 135*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C2-PFDoDA	*113*		*28 - 136*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C2 PFTeDA	*105*		*10 - 144*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C3 PFBS	*113*		*19 - 178*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C3 PFHxS	*110*		*32 - 145*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C8 PFOS	*123*		*49 - 126*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
d3-NMeFOSAA	*116*		*32 - 151*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
d5-NEtFOSAA	*120*		*37 - 164*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C8 FOSA	*109*		*10 - 143*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C4 PFBA	*112*		*41 - 132*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C5 PFPeA	*109*		*33 - 155*	*10/13/21 17:37*	*10/14/21 20:07*	*1*
13C3 HFPO-DA	*131*		*20 - 153*	*10/13/21 17:37*	*10/14/21 20:07*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 410-58318-8

Date Collected: 10/06/21 11:30

Matrix: Water

Date Received: 10/08/21 11:00

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluoroheptanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorooctanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorononanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorodecanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Trip Blank
Date Collected: 10/06/21 11:30
Date Received: 10/08/21 11:00

Lab Sample ID: 410-58318-8
Matrix: Water

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorotetradecanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorobutanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorohexanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorooctanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
NEtFOSAA	ND		2.7	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
NMeFOSAA	ND		1.8	0.54	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluoropentanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluoroheptanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorononanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorodecanesulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorooctanesulfonamide	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorobutanoic acid	**3.0**	**J**	4.5	1.8	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluoropentanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
HFPODA	ND		2.7	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
DONA	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
9Cl-PF3ONS	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
11Cl-PF3OUdS	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluoroundecanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
Perfluorododecanoic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
8:2 Fluorotelomer sulfonic acid	ND		2.7	0.90	ng/L		10/11/21 15:57	10/12/21 20:20	1
4:2 Fluorotelomer sulfonic acid	ND		1.8	0.45	ng/L		10/11/21 15:57	10/12/21 20:20	1
6:2 Fluorotelomer sulfonic acid	ND		4.5	1.8	ng/L		10/11/21 15:57	10/12/21 20:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*81*		*20 - 187*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
M2-8:2 FTS	*122*		*34 - 182*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
M2-6:2 FTS	*121*		*29 - 189*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C5 PFHxA	*77*		*31 - 142*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C4 PFHpA	*54*		*30 - 144*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C8 PFOA	*89*		*49 - 127*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C9 PFNA	*105*		*47 - 136*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C6 PFDA	*98*		*47 - 128*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C7 PFUnA	*105*		*40 - 135*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C2-PFDoDA	*98*		*28 - 136*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C2 PFTeDA	*98*		*10 - 144*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C3 PFBS	*96*		*19 - 178*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C3 PFHxS	*65*		*32 - 145*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C8 PFOS	*104*		*49 - 126*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
d3-NMeFOSAA	*104*		*32 - 151*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
d5-NEtFOSAA	*108*		*37 - 164*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C8 FOSA	*98*		*10 - 143*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C4 PFBA	*96*		*41 - 132*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C5 PFPeA	*90*		*33 - 155*	*10/11/21 15:57*	*10/12/21 20:20*	*1*
13C3 HFPO-DA	*94*		*20 - 153*	*10/11/21 15:57*	*10/12/21 20:20*	*1*

Isotope Dilution Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M282FTS	M262FTS	13C5PHA	C4PFHA	C8PFOA	C9PFNA	C6PFDA
Lab Sample ID	Client Sample ID	(10-169)	(10-178)	(10-182)	(11-138)	(15-139)	(21-133)	(15-145)	(21-134)
410-58318-3	North Digester	84	84	80	67	64	64	62	66
410-58318-4	South Digester	89	99	91	66	65	63	74	72
410-58318-5	Biosolids West	98	100	103	72	70	72	84	77
LCS 410-181984/2-B	Lab Control Sample	87	92	89	83	79	81	80	86
LCSD 410-181984/3-B	Lab Control Sample Dup	87	85	85	79	75	80	80	84
MB 410-181984/1-B	Method Blank	91	96	99	81	79	86	80	86

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		13C7PUA	PFDoDA	PFTDA	C3PFBS	C3PFHS	C8PFOS	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(15-138)	(28-126)	(10-138)	(23-130)	(24-136)	(31-130)	(10-172)	(10-176)
410-58318-3	North Digester	71	61	63	61	61	62	74	83
410-58318-4	South Digester	72	65	59	69	63	74	76	92
410-58318-5	Biosolids West	76	67	64	79	68	73	78	87
LCS 410-181984/2-B	Lab Control Sample	97	89	89	86	80	86	85	85
LCSD 410-181984/3-B	Lab Control Sample Dup	88	84	87	82	79	87	81	78
MB 410-181984/1-B	Method Blank	96	92	88	82	79	83	87	93

		Percent Isotope Dilution Recovery (Acceptance Limits)			
		PFOSA	PFBA	PFPeA	HFPODA
Lab Sample ID	Client Sample ID	(25-135)	(12-137)	(12-135)	(10-152)
410-58318-3	North Digester	69	61	61	70
410-58318-4	South Digester	72	68	68	68
410-58318-5	Biosolids West	76	74	77	78
LCS 410-181984/2-B	Lab Control Sample	97	82	84	86
LCSD 410-181984/3-B	Lab Control Sample Dup	93	79	78	72
MB 410-181984/1-B	Method Blank	103	77	78	89

Surrogate Legend

M242FTS = M2-4:2 FTS
M282FTS = M2-8:2 FTS
M262FTS = M2-6:2 FTS
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoDA = 13C2-PFDoDA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
PFOSA = 13C8 FOSA
PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
HFPODA = 13C3 HFPO-DA

Isotope Dilution Summary

Client: White Water Associates
Job ID: 410-58318-1
Project/Site: KI Sawyer WWTP

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Matrix: Water
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M282FTS	M262FTS	13C5PHA	C4PFHA	C8PFOA	C9PFNA	C6PFDA
Lab Sample ID	Client Sample ID	(20-187)	(34-182)	(29-189)	(31-142)	(30-144)	(49-127)	(47-136)	(47-128)
410-58318-1	Effluent	116	108	127	85	93	90	97	87
410-58318-2	Influent	126	124	142	80	90	86	95	90
410-58318-6	Service Center Lift Station	140	110	140	86	84	83	113	90
410-58318-6 - DL	Service Center Lift Station								
410-58318-7	Field Blank	135	130	127	115	117	112	121	117
410-58318-8	Trip Blank	81	122	121	77	54	89	105	98
LCS 410-181432/2-A	Lab Control Sample	100	99	102	118	112	108	92	111
LCS 410-182434/2-A	Lab Control Sample	139	143	139	122	124	124	130	129 *5+
LCSD 410-181432/3-A	Lab Control Sample Dup	88	79	88	103	99	94	75	90
LCSD 410-182434/3-A	Lab Control Sample Dup	119	127	119	103	107	106	108	108
MB 410-181432/1-A	Method Blank	91	84	91	114	110	97	85	98
MB 410-182434/1-A	Method Blank	144	137	137	124	122	121	121	119

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		13C7PUA	PFDoDA	PFTDA	C3PFBS	C3PFHS	C8PFOS	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(40-135)	(28-136)	(10-144)	(19-178)	(32-145)	(49-126)	(32-151)	(37-164)
410-58318-1	Effluent	94	85	69	106	90	96	90	100
410-58318-2	Influent	94	72	44	90	79	97	90	90
410-58318-6	Service Center Lift Station	104	43	35	87	79	89	122	138
410-58318-6 - DL	Service Center Lift Station						93		
410-58318-7	Field Blank	117	113	105	113	110	123	116	120
410-58318-8	Trip Blank	105	98	98	96	65	104	104	108
LCS 410-181432/2-A	Lab Control Sample	101	106	111	109	117	109	94	96
LCS 410-182434/2-A	Lab Control Sample	123	124	120	121	122	127 *5+	129	135
LCSD 410-181432/3-A	Lab Control Sample Dup	87	90	94	92	102	94	82	82
LCSD 410-182434/3-A	Lab Control Sample Dup	110	104	100	104	101	112	111	117
MB 410-181432/1-A	Method Blank	93	93	98	99	109	99	86	90
MB 410-182434/1-A	Method Blank	116	116	112	112	118	125	119	127

		Percent Isotope Dilution Recovery (Acceptance Limits)			
		PFOSA	PFBA	PFPeA	HFPODA
Lab Sample ID	Client Sample ID	(10-143)	(41-132)	(33-155)	(20-153)
410-58318-1	Effluent	18	86	96	76
410-58318-2	Influent	96	84	83	75
410-58318-6	Service Center Lift Station	106	81	82	59
410-58318-6 - DL	Service Center Lift Station				
410-58318-7	Field Blank	109	112	109	131
410-58318-8	Trip Blank	98	96	90	94
LCS 410-181432/2-A	Lab Control Sample	69	105	100	114
LCS 410-182434/2-A	Lab Control Sample	118	119	119	124
LCSD 410-181432/3-A	Lab Control Sample Dup	56	88	84	87
LCSD 410-182434/3-A	Lab Control Sample Dup	101	105	105	110
MB 410-181432/1-A	Method Blank	65	97	93	99
MB 410-182434/1-A	Method Blank	110	114	112	109

Surrogate Legend

M242FTS = M2-4:2 FTS
M282FTS = M2-8:2 FTS
M262FTS = M2-6:2 FTS
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA

Isotope Dilution Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoDA = 13C2-PFDoDA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
PFOSA = 13C8 FOSA
PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
HFPODA = 13C3 HFPO-DA

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-181432/1-A
Matrix: Water
Analysis Batch: 181614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluoroheptanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorooctanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorononanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorodecanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorotridecanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorotetradecanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorobutanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorohexanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorooctanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
NEtFOSAA	ND		3.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
NMeFOSAA	ND		2.0	0.60	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluoropentanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluoroheptanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorononanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorodecanesulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorooctanesulfonamide	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorobutanoic acid	ND		5.0	2.0	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluoropentanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
HFPODA	ND		3.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
DONA	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
9Cl-PF3ONS	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
11Cl-PF3OUdS	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluoroundecanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
Perfluorododecanoic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
8:2 Fluorotelomer sulfonic acid	ND		3.0	1.0	ng/L		10/11/21 15:57	10/12/21 11:38	1
4:2 Fluorotelomer sulfonic acid	ND		2.0	0.50	ng/L		10/11/21 15:57	10/12/21 11:38	1
6:2 Fluorotelomer sulfonic acid	ND		5.0	2.0	ng/L		10/11/21 15:57	10/12/21 11:38	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*91*		*20 - 187*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
M2-8:2 FTS	*84*		*34 - 182*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
M2-6:2 FTS	*91*		*29 - 189*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C5 PFHxA	*114*		*31 - 142*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C4 PFHpA	*110*		*30 - 144*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C8 PFOA	*97*		*49 - 127*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C9 PFNA	*85*		*47 - 136*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C6 PFDA	*98*		*47 - 128*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C7 PFUnA	*93*		*40 - 135*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C2-PFDoDA	*93*		*28 - 136*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C2 PFTeDA	*98*		*10 - 144*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C3 PFBS	*99*		*19 - 178*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C3 PFHxS	*109*		*32 - 145*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C8 PFOS	*99*		*49 - 126*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
d3-NMeFOSAA	*86*		*32 - 151*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
d5-NEtFOSAA	*90*		*37 - 164*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C8 FOSA	*65*		*10 - 143*	*10/11/21 15:57*	*10/12/21 11:38*	*1*
13C4 PFBA	*97*		*41 - 132*	*10/11/21 15:57*	*10/12/21 11:38*	*1*

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-181432/1-A
Matrix: Water
Analysis Batch: 181614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181432

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	93		33 - 155	10/11/21 15:57	10/12/21 11:38	1
13C3 HFPO-DA	99		20 - 153	10/11/21 15:57	10/12/21 11:38	1

Lab Sample ID: LCS 410-181432/2-A
Matrix: Water
Analysis Batch: 181614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid	25.6	23.6		ng/L		92	66 - 137
Perfluoroheptanoic acid	25.6	24.5		ng/L		96	66 - 141
Perfluorooctanoic acid	25.6	23.5		ng/L		92	65 - 136
Perfluorononanoic acid	25.6	22.6		ng/L		88	65 - 140
Perfluorodecanoic acid	25.6	21.0		ng/L		82	63 - 137
Perfluorotridecanoic acid	25.6	24.5		ng/L		96	58 - 146
Perfluorotetradecanoic acid	25.6	23.5		ng/L		92	64 - 141
Perfluorobutanesulfonic acid	22.7	21.6		ng/L		95	65 - 132
Perfluorohexanesulfonic acid	23.3	22.9		ng/L		98	60 - 128
Perfluorooctanesulfonic acid	23.7	20.7		ng/L		87	51 - 126
NEtFOSAA	25.6	22.5		ng/L		88	54 - 134
NMeFOSAA	25.6	22.5		ng/L		88	58 - 143
Perfluoropentanesulfonic acid	24.0	22.4		ng/L		93	71 - 136
Perfluoroheptanesulfonic acid	24.4	25.1		ng/L		103	67 - 135
Perfluorononanesulfonic acid	24.6	21.2		ng/L		86	67 - 137
Perfluorodecanesulfonic acid	24.7	21.0		ng/L		85	61 - 134
Perfluorooctanesulfonamide	25.6	21.3		ng/L		83	55 - 130
Perfluorobutanoic acid	25.6	21.5		ng/L		84	62 - 156
Perfluoropentanoic acid	25.6	24.2		ng/L		95	72 - 139
HFPODA	25.6	27.5		ng/L		108	37 - 147
DONA	24.2	23.3		ng/L		96	49 - 158
9Cl-PF3ONS	23.8	21.5		ng/L		90	52 - 135
11Cl-PF3OUdS	23.8	21.4		ng/L		90	45 - 134
Perfluoroundecanoic acid	25.6	25.2		ng/L		98	62 - 138
Perfluorododecanoic acid	25.6	24.3		ng/L		95	63 - 140
8:2 Fluorotelomer sulfonic acid	24.5	20.9		ng/L		85	56 - 140
4:2 Fluorotelomer sulfonic acid	23.9	20.6		ng/L		86	59 - 130
6:2 Fluorotelomer sulfonic acid	24.3	20.8		ng/L		86	57 - 137

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-4:2 FTS	100		20 - 187
M2-8:2 FTS	99		34 - 182
M2-6:2 FTS	102		29 - 189
13C5 PFHxA	118		31 - 142
13C4 PFHpA	112		30 - 144
13C8 PFOA	108		49 - 127
13C9 PFNA	92		47 - 136
13C6 PFDA	111		47 - 128
13C7 PFUnA	101		40 - 135
13C2-PFDoDA	106		28 - 136
13C2 PFTeDA	111		10 - 144

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-181432/2-A
Matrix: Water
Analysis Batch: 181614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181432

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3 PFBS	109		19 - 178
13C3 PFHxS	117		32 - 145
13C8 PFOS	109		49 - 126
d3-NMeFOSAA	94		32 - 151
d5-NEtFOSAA	96		37 - 164
13C8 FOSA	69		10 - 143
13C4 PFBA	105		41 - 132
13C5 PFPeA	100		33 - 155
13C3 HFPO-DA	114		20 - 153

Lab Sample ID: LCSD 410-181432/3-A
Matrix: Water
Analysis Batch: 181614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 181432

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid			25.6	24.4		ng/L		95	66 - 137	3	30
Perfluoroheptanoic acid			25.6	26.7		ng/L		104	66 - 141	8	30
Perfluorooctanoic acid			25.6	24.3		ng/L		95	65 - 136	3	30
Perfluorononanoic acid			25.6	25.7		ng/L		100	65 - 140	13	30
Perfluorodecanoic acid			25.6	23.8		ng/L		93	63 - 137	13	30
Perfluorotridecanoic acid			25.6	23.7		ng/L		93	58 - 146	3	30
Perfluorotetradecanoic acid			25.6	24.3		ng/L		95	64 - 141	3	30
Perfluorobutanesulfonic acid			22.7	22.4		ng/L		99	65 - 132	4	30
Perfluorohexanesulfonic acid			23.3	23.5		ng/L		101	60 - 128	3	30
Perfluorooctanesulfonic acid			23.7	20.8		ng/L		88	51 - 126	1	30
NEtFOSAA			25.6	21.6		ng/L		85	54 - 134	4	30
NMeFOSAA			25.6	22.1		ng/L		86	58 - 143	2	30
Perfluoropentanesulfonic acid			24.0	23.1		ng/L		96	71 - 136	3	30
Perfluoroheptanesulfonic acid			24.4	25.1		ng/L		103	67 - 135	0	30
Perfluorononanesulfonic acid			24.6	22.2		ng/L		90	67 - 137	4	30
Perfluorodecanesulfonic acid			24.7	20.7		ng/L		84	61 - 134	2	30
Perfluorooctanesulfonamide			25.6	22.2		ng/L		87	55 - 130	4	30
Perfluorobutanoic acid			25.6	22.3		ng/L		87	62 - 156	4	30
Perfluoropentanoic acid			25.6	24.0		ng/L		94	72 - 139	1	30
HFPODA			25.6	31.7		ng/L		124	37 - 147	14	30
DONA			24.2	24.1		ng/L		100	49 - 158	3	30
9Cl-PF3ONS			23.8	22.6		ng/L		95	52 - 135	5	30
11Cl-PF3OUdS			23.8	21.6		ng/L		91	45 - 134	1	30
Perfluoroundecanoic acid			25.6	24.8		ng/L		97	62 - 138	2	30
Perfluorododecanoic acid			25.6	24.4		ng/L		95	63 - 140	0	30
8:2 Fluorotelomer sulfonic acid			24.5	23.5		ng/L		96	56 - 140	12	30
4:2 Fluorotelomer sulfonic acid			23.9	20.7		ng/L		87	59 - 130	1	30
6:2 Fluorotelomer sulfonic acid			24.3	20.4		ng/L		84	57 - 137	2	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
M2-4:2 FTS	88		20 - 187
M2-8:2 FTS	79		34 - 182
M2-6:2 FTS	88		29 - 189
13C5 PFHxA	103		31 - 142

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-181432/3-A
Matrix: Water
Analysis Batch: 181614

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 181432

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFHpA	99		30 - 144
13C8 PFOA	94		49 - 127
13C9 PFNA	75		47 - 136
13C6 PFDA	90		47 - 128
13C7 PFUnA	87		40 - 135
13C2-PFDoDA	90		28 - 136
13C2 PFTeDA	94		10 - 144
13C3 PFBS	92		19 - 178
13C3 PFHxS	102		32 - 145
13C8 PFOS	94		49 - 126
d3-NMeFOSAA	82		32 - 151
d5-NEtFOSAA	82		37 - 164
13C8 FOSA	56		10 - 143
13C4 PFBA	88		41 - 132
13C5 PFPeA	84		33 - 155
13C3 HFPO-DA	87		20 - 153

Lab Sample ID: MB 410-181984/1-B
Matrix: Solid
Analysis Batch: 182429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181984

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluoroheptanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorooctanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorononanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorodecanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorotridecanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorotetradecanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorobutanesulfonic acid	ND		0.0020	0.00040	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorohexanesulfonic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorooctanesulfonic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
NEtFOSAA	ND		0.0020	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
NMeFOSAA	ND		0.0020	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluoropentanesulfonic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluoroheptanesulfonic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorononanesulfonic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorodecanesulfonic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorooctanesulfonamide	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorobutanoic acid	ND		0.0020	0.00080	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluoropentanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
HFPODA	ND		0.0020	0.00040	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
DONA	ND		0.0030	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
9Cl-PF3ONS	ND		0.0020	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
11Cl-PF3OUdS	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluoroundecanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
Perfluorododecanoic acid	ND		0.00060	0.00020	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
8:2 Fluorotelomer sulfonic acid	ND		0.0030	0.00060	mg/Kg		10/12/21 21:42	10/14/21 04:41	1
4:2 Fluorotelomer sulfonic acid	ND		0.0020	0.00060	mg/Kg		10/12/21 21:42	10/14/21 04:41	1

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-181984/1-B
Matrix: Solid
Analysis Batch: 182429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 181984

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 Fluorotelomer sulfonic acid	ND		0.0020	0.00060	mg/Kg		10/12/21 21:42	10/14/21 04:41	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*91*		*10 - 169*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
M2-8:2 FTS	*96*		*10 - 178*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
M2-6:2 FTS	*99*		*10 - 182*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C5 PFHxA	*81*		*11 - 138*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C4 PFHpA	*79*		*15 - 139*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C8 PFOA	*86*		*21 - 133*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C9 PFNA	*80*		*15 - 145*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C6 PFDA	*86*		*21 - 134*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C7 PFUnA	*96*		*15 - 138*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C2-PFDoDA	*92*		*28 - 126*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C2 PFTeDA	*88*		*10 - 138*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C3 PFBS	*82*		*23 - 130*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C3 PFHxS	*79*		*24 - 136*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C8 PFOS	*83*		*31 - 130*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
d3-NMeFOSAA	*87*		*10 - 172*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
d5-NEtFOSAA	*93*		*10 - 176*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C8 FOSA	*103*		*25 - 135*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C4 PFBA	*77*		*12 - 137*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C5 PFPeA	*78*		*12 - 135*	*10/12/21 21:42*	*10/14/21 04:41*	*1*
13C3 HFPO-DA	*89*		*10 - 152*	*10/12/21 21:42*	*10/14/21 04:41*	*1*

Lab Sample ID: LCS 410-181984/2-B
Matrix: Solid
Analysis Batch: 182429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid	0.0250	0.0290		mg/Kg		116	61 - 147
Perfluoroheptanoic acid	0.0250	0.0304		mg/Kg		122	61 - 151
Perfluorooctanoic acid	0.0250	0.0289		mg/Kg		115	62 - 144
Perfluorononanoic acid	0.0250	0.0324		mg/Kg		130	62 - 148
Perfluorodecanoic acid	0.0250	0.0277		mg/Kg		111	62 - 142
Perfluorotridecanoic acid	0.0250	0.0305		mg/Kg		122	57 - 152
Perfluorotetradecanoic acid	0.0250	0.0279		mg/Kg		112	60 - 147
Perfluorobutanesulfonic acid	0.0221	0.0258		mg/Kg		116	62 - 137
Perfluorohexanesulfonic acid	0.0228	0.0279		mg/Kg		122	57 - 135
Perfluorooctanesulfonic acid	0.0231	0.0248		mg/Kg		107	48 - 134
NEtFOSAA	0.0250	0.0281		mg/Kg		112	50 - 140
NMeFOSAA	0.0250	0.0287		mg/Kg		115	53 - 149
Perfluoropentanesulfonic acid	0.0235	0.0271		mg/Kg		115	65 - 145
Perfluoroheptanesulfonic acid	0.0238	0.0283		mg/Kg		119	67 - 138
Perfluorononanesulfonic acid	0.0240	0.0265		mg/Kg		110	63 - 143
Perfluorodecanesulfonic acid	0.0241	0.0262		mg/Kg		109	60 - 142
Perfluorooctanesulfonamide	0.0250	0.0256		mg/Kg		102	52 - 132
Perfluorobutanoic acid	0.0250	0.0262		mg/Kg		105	50 - 185
Perfluoropentanoic acid	0.0250	0.0276		mg/Kg		110	69 - 144
HFPODA	0.0250	0.0283		mg/Kg		113	29 - 162

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-181984/2-B
Matrix: Solid
Analysis Batch: 182429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 181984

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
DONA			0.0236	0.0285		mg/Kg		120	48 - 155		
9Cl-PF3ONS			0.0233	0.0275		mg/Kg		118	48 - 146		
11Cl-PF3OUdS			0.0233	0.0283		mg/Kg		122	45 - 145		
Perfluoroundecanoic acid			0.0250	0.0282		mg/Kg		113	62 - 144		
Perfluorododecanoic acid			0.0250	0.0306		mg/Kg		123	60 - 147		
8:2 Fluorotelomer sulfonic acid			0.0240	0.0230		mg/Kg		96	50 - 147		
4:2 Fluorotelomer sulfonic acid			0.0234	0.0246		mg/Kg		105	55 - 132		
6:2 Fluorotelomer sulfonic acid			0.0237	0.0241		mg/Kg		102	53 - 137		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*87*		*10 - 169*
M2-8:2 FTS	*92*		*10 - 178*
M2-6:2 FTS	*89*		*10 - 182*
13C5 PFHxA	*83*		*11 - 138*
13C4 PFHpA	*79*		*15 - 139*
13C8 PFOA	*81*		*21 - 133*
13C9 PFNA	*80*		*15 - 145*
13C6 PFDA	*86*		*21 - 134*
13C7 PFUnA	*97*		*15 - 138*
13C2-PFDoDA	*89*		*28 - 126*
13C2 PFTeDA	*89*		*10 - 138*
13C3 PFBS	*86*		*23 - 130*
13C3 PFHxS	*80*		*24 - 136*
13C8 PFOS	*86*		*31 - 130*
d3-NMeFOSAA	*85*		*10 - 172*
d5-NEtFOSAA	*85*		*10 - 176*
13C8 FOSA	*97*		*25 - 135*
13C4 PFBA	*82*		*12 - 137*
13C5 PFPeA	*84*		*12 - 135*
13C3 HFPO-DA	*86*		*10 - 152*

Lab Sample ID: LCSD 410-181984/3-B
Matrix: Solid
Analysis Batch: 182429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 181984

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid			0.0250	0.0289		mg/Kg		115	61 - 147	1	30
Perfluoroheptanoic acid			0.0250	0.0297		mg/Kg		119	61 - 151	2	30
Perfluorooctanoic acid			0.0250	0.0273		mg/Kg		109	62 - 144	6	30
Perfluorononanoic acid			0.0250	0.0298		mg/Kg		119	62 - 148	8	30
Perfluorodecanoic acid			0.0250	0.0268		mg/Kg		107	62 - 142	3	30
Perfluorotridecanoic acid			0.0250	0.0283		mg/Kg		113	57 - 152	8	30
Perfluorotetradecanoic acid			0.0250	0.0254		mg/Kg		102	60 - 147	9	30
Perfluorobutanesulfonic acid			0.0221	0.0252		mg/Kg		114	62 - 137	2	30
Perfluorohexanesulfonic acid			0.0228	0.0257		mg/Kg		113	57 - 135	8	30
Perfluorooctanesulfonic acid			0.0231	0.0244		mg/Kg		106	48 - 134	2	30
NEtFOSAA			0.0250	0.0302		mg/Kg		121	50 - 140	7	30
NMeFOSAA			0.0250	0.0277		mg/Kg		111	53 - 149	4	30
Perfluoropentanesulfonic acid			0.0235	0.0256		mg/Kg		109	65 - 145	5	30

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-181984/3-B
Matrix: Solid
Analysis Batch: 182429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 181984

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluoroheptanesulfonic acid			0.0238	0.0277		mg/Kg		116	67 - 138	2	30
Perfluorononanesulfonic acid			0.0240	0.0249		mg/Kg		104	63 - 143	6	30
Perfluorodecanesulfonic acid			0.0241	0.0255		mg/Kg		106	60 - 142	3	30
Perfluorooctanesulfonamide			0.0250	0.0243		mg/Kg		97	52 - 132	5	30
Perfluorobutanoic acid			0.0250	0.0256		mg/Kg		102	50 - 185	2	30
Perfluoropentanoic acid			0.0250	0.0283		mg/Kg		113	69 - 144	3	30
HFPODA			0.0250	0.0311		mg/Kg		124	29 - 162	10	30
DONA			0.0236	0.0279		mg/Kg		118	48 - 155	2	30
9Cl-PF3ONS			0.0233	0.0253		mg/Kg		109	48 - 146	8	30
11Cl-PF3OUdS			0.0233	0.0255		mg/Kg		110	45 - 145	10	30
Perfluoroundecanoic acid			0.0250	0.0304		mg/Kg		122	62 - 144	7	30
Perfluorododecanoic acid			0.0250	0.0278		mg/Kg		111	60 - 147	10	30
8:2 Fluorotelomer sulfonic acid			0.0240	0.0261		mg/Kg		109	50 - 147	13	30
4:2 Fluorotelomer sulfonic acid			0.0234	0.0235		mg/Kg		101	55 - 132	5	30
6:2 Fluorotelomer sulfonic acid			0.0237	0.0251		mg/Kg		106	53 - 137	4	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
M2-4:2 FTS	*87*		*10 - 169*
M2-8:2 FTS	*85*		*10 - 178*
M2-6:2 FTS	*85*		*10 - 182*
13C5 PFHxA	*79*		*11 - 138*
13C4 PFHpA	*75*		*15 - 139*
13C8 PFOA	*80*		*21 - 133*
13C9 PFNA	*80*		*15 - 145*
13C6 PFDA	*84*		*21 - 134*
13C7 PFUnA	*88*		*15 - 138*
13C2-PFDoDA	*84*		*28 - 126*
13C2 PFTeDA	*87*		*10 - 138*
13C3 PFBS	*82*		*23 - 130*
13C3 PFHxS	*79*		*24 - 136*
13C8 PFOS	*87*		*31 - 130*
d3-NMeFOSAA	*81*		*10 - 172*
d5-NEtFOSAA	*78*		*10 - 176*
13C8 FOSA	*93*		*25 - 135*
13C4 PFBA	*79*		*12 - 137*
13C5 PFPeA	*78*		*12 - 135*
13C3 HFPO-DA	*72*		*10 - 152*

Lab Sample ID: MB 410-182434/1-A
Matrix: Water
Analysis Batch: 182886

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluoroheptanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorooctanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorononanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorodecanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorotridecanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-182434/1-A
Matrix: Water
Analysis Batch: 182886

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorobutanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorohexanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorooctanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
NEtFOSAA	ND		3.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
NMeFOSAA	ND		2.0	0.60	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluoropentanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluoroheptanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorononanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorodecanesulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorooctanesulfonamide	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorobutanoic acid	ND		5.0	2.0	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluoropentanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
HFPODA	ND		3.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
DONA	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
9Cl-PF3ONS	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
11Cl-PF3OUdS	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluoroundecanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
Perfluorododecanoic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
8:2 Fluorotelomer sulfonic acid	ND		3.0	1.0	ng/L		10/13/21 17:37	10/14/21 19:34	1
4:2 Fluorotelomer sulfonic acid	ND		2.0	0.50	ng/L		10/13/21 17:37	10/14/21 19:34	1
6:2 Fluorotelomer sulfonic acid	ND		5.0	2.0	ng/L		10/13/21 17:37	10/14/21 19:34	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*144*		*20 - 187*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
M2-8:2 FTS	*137*		*34 - 182*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
M2-6:2 FTS	*137*		*29 - 189*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C5 PFHxA	*124*		*31 - 142*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C4 PFHpA	*122*		*30 - 144*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C8 PFOA	*121*		*49 - 127*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C9 PFNA	*121*		*47 - 136*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C6 PFDA	*119*		*47 - 128*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C7 PFUnA	*116*		*40 - 135*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C2-PFDoDA	*116*		*28 - 136*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C2 PFTeDA	*112*		*10 - 144*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C3 PFBS	*112*		*19 - 178*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C3 PFHxS	*118*		*32 - 145*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C8 PFOS	*125*		*49 - 126*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
d3-NMeFOSAA	*119*		*32 - 151*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
d5-NEtFOSAA	*127*		*37 - 164*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C8 FOSA	*110*		*10 - 143*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C4 PFBA	*114*		*41 - 132*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C5 PFPeA	*112*		*33 - 155*	*10/13/21 17:37*	*10/14/21 19:34*	*1*
13C3 HFPO-DA	*109*		*20 - 153*	*10/13/21 17:37*	*10/14/21 19:34*	*1*

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-182434/2-A
Matrix: Water
Analysis Batch: 182886

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid	25.6	24.6		ng/L		96	66 - 137
Perfluoroheptanoic acid	25.6	25.6		ng/L		100	66 - 141
Perfluorooctanoic acid	25.6	25.1		ng/L		98	65 - 136
Perfluorononanoic acid	25.6	23.3		ng/L		91	65 - 140
Perfluorodecanoic acid	25.6	22.7		ng/L		89	63 - 137
Perfluorotridecanoic acid	25.6	23.9		ng/L		93	58 - 146
Perfluorotetradecanoic acid	25.6	24.3		ng/L		95	64 - 141
Perfluorobutanesulfonic acid	22.7	21.5		ng/L		95	65 - 132
Perfluorohexanesulfonic acid	23.3	22.8		ng/L		97	60 - 128
Perfluorooctanesulfonic acid	23.7	22.4		ng/L		95	51 - 126
NEtFOSAA	25.6	23.1		ng/L		90	54 - 134
NMeFOSAA	25.6	22.6		ng/L		88	58 - 143
Perfluoropentanesulfonic acid	24.0	23.1		ng/L		96	71 - 136
Perfluoroheptanesulfonic acid	24.4	25.1		ng/L		103	67 - 135
Perfluorononanesulfonic acid	24.6	22.3		ng/L		91	67 - 137
Perfluorodecanesulfonic acid	24.7	23.1		ng/L		94	61 - 134
Perfluorooctanesulfonamide	25.6	23.9		ng/L		94	55 - 130
Perfluorobutanoic acid	25.6	23.7		ng/L		93	62 - 156
Perfluoropentanoic acid	25.6	25.0		ng/L		98	72 - 139
HFPODA	25.6	20.5		ng/L		80	37 - 147
DONA	24.2	23.9		ng/L		99	49 - 158
9Cl-PF3ONS	23.8	22.3		ng/L		94	52 - 135
11Cl-PF3OUdS	23.8	22.0		ng/L		92	45 - 134
Perfluoroundecanoic acid	25.6	25.2		ng/L		98	62 - 138
Perfluorododecanoic acid	25.6	24.3		ng/L		95	63 - 140
8:2 Fluorotelomer sulfonic acid	24.5	21.0		ng/L		86	56 - 140
4:2 Fluorotelomer sulfonic acid	23.9	21.6		ng/L		91	59 - 130
6:2 Fluorotelomer sulfonic acid	24.3	22.9		ng/L		94	57 - 137

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*139*		*20 - 187*
M2-8:2 FTS	*143*		*34 - 182*
M2-6:2 FTS	*139*		*29 - 189*
13C5 PFHxA	*122*		*31 - 142*
13C4 PFHpA	*124*		*30 - 144*
13C8 PFOA	*124*		*49 - 127*
13C9 PFNA	*130*		*47 - 136*
13C6 PFDA	*129*	*5+	*47 - 128*
13C7 PFUnA	*123*		*40 - 135*
13C2-PFDoDA	*124*		*28 - 136*
13C2 PFTeDA	*120*		*10 - 144*
13C3 PFBS	*121*		*19 - 178*
13C3 PFHxS	*122*		*32 - 145*
13C8 PFOS	*127*	*5+	*49 - 126*
d3-NMeFOSAA	*129*		*32 - 151*
d5-NEtFOSAA	*135*		*37 - 164*
13C8 FOSA	*118*		*10 - 143*
13C4 PFBA	*119*		*41 - 132*

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-182434/2-A
Matrix: Water
Analysis Batch: 182886

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182434

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C5 PFPeA	119		33 - 155
13C3 HFPO-DA	124		20 - 153

Lab Sample ID: LCSD 410-182434/3-A
Matrix: Water
Analysis Batch: 182886

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182434

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid			25.6	24.4		ng/L		95	66 - 137	1	30
Perfluoroheptanoic acid			25.6	25.3		ng/L		99	66 - 141	1	30
Perfluorooctanoic acid			25.6	25.0		ng/L		98	65 - 136	0	30
Perfluorononanoic acid			25.6	24.3		ng/L		95	65 - 140	4	30
Perfluorodecanoic acid			25.6	23.1		ng/L		90	63 - 137	2	30
Perfluorotridecanoic acid			25.6	24.5		ng/L		96	58 - 146	3	30
Perfluorotetradecanoic acid			25.6	25.2		ng/L		99	64 - 141	4	30
Perfluorobutanesulfonic acid			22.7	21.5		ng/L		95	65 - 132	0	30
Perfluorohexanesulfonic acid			23.3	24.0		ng/L		103	60 - 128	6	30
Perfluorooctanesulfonic acid			23.7	22.2		ng/L		94	51 - 126	1	30
NEtFOSAA			25.6	21.8		ng/L		85	54 - 134	6	30
NMeFOSAA			25.6	21.5		ng/L		84	58 - 143	5	30
Perfluoropentanesulfonic acid			24.0	23.6		ng/L		98	71 - 136	2	30
Perfluoroheptanesulfonic acid			24.4	25.9		ng/L		106	67 - 135	3	30
Perfluorononanesulfonic acid			24.6	21.9		ng/L		89	67 - 137	2	30
Perfluorodecanesulfonic acid			24.7	21.9		ng/L		89	61 - 134	6	30
Perfluorooctanesulfonamide			25.6	24.0		ng/L		94	55 - 130	0	30
Perfluorobutanoic acid			25.6	23.4		ng/L		92	62 - 156	1	30
Perfluoropentanoic acid			25.6	25.1		ng/L		98	72 - 139	0	30
HFPODA			25.6	21.1		ng/L		82	37 - 147	3	30
DONA			24.2	24.1		ng/L		100	49 - 158	1	30
9Cl-PF3ONS			23.8	22.0		ng/L		92	52 - 135	1	30
11Cl-PF3OUdS			23.8	22.0		ng/L		93	45 - 134	0	30
Perfluoroundecanoic acid			25.6	24.5		ng/L		96	62 - 138	3	30
Perfluorododecanoic acid			25.6	25.1		ng/L		98	63 - 140	3	30
8:2 Fluorotelomer sulfonic acid			24.5	19.7		ng/L		80	56 - 140	6	30
4:2 Fluorotelomer sulfonic acid			23.9	22.2		ng/L		93	59 - 130	2	30
6:2 Fluorotelomer sulfonic acid			24.3	22.2		ng/L		91	57 - 137	3	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
M2-4:2 FTS	119		20 - 187
M2-8:2 FTS	127		34 - 182
M2-6:2 FTS	119		29 - 189
13C5 PFHxA	103		31 - 142
13C4 PFHpA	107		30 - 144
13C8 PFOA	106		49 - 127
13C9 PFNA	108		47 - 136
13C6 PFDA	108		47 - 128
13C7 PFUnA	110		40 - 135
13C2-PFDoDA	104		28 - 136
13C2 PFTeDA	100		10 - 144

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-182434/3-A
Matrix: Water
Analysis Batch: 182886

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182434

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 PFBS	104		19 - 178
13C3 PFHxS	101		32 - 145
13C8 PFOS	112		49 - 126
d3-NMeFOSAA	111		32 - 151
d5-NEtFOSAA	117		37 - 164
13C8 FOSA	101		10 - 143
13C4 PFBA	105		41 - 132
13C5 PFPeA	105		33 - 155
13C3 HFPO-DA	110		20 - 153

LCMS

Prep Batch: 181432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-1	Effluent	Total/NA	Water	EPA 537 (mod)	
410-58318-2	Influent	Total/NA	Water	EPA 537 (mod)	
410-58318-6	Service Center Lift Station	Total/NA	Water	EPA 537 (mod)	
410-58318-6 - DL	Service Center Lift Station	Total/NA	Water	EPA 537 (mod)	
410-58318-8	Trip Blank	Total/NA	Water	EPA 537 (mod)	
MB 410-181432/1-A	Method Blank	Total/NA	Water	EPA 537 (mod)	
LCS 410-181432/2-A	Lab Control Sample	Total/NA	Water	EPA 537 (mod)	
LCSD 410-181432/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 (mod)	

Analysis Batch: 181614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-181432/1-A	Method Blank	Total/NA	Water	EPA 537 (Mod)	181432
LCS 410-181432/2-A	Lab Control Sample	Total/NA	Water	EPA 537 (Mod)	181432
LCSD 410-181432/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 (Mod)	181432

Analysis Batch: 181909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-1	Effluent	Total/NA	Water	EPA 537 (Mod)	181432
410-58318-2	Influent	Total/NA	Water	EPA 537 (Mod)	181432
410-58318-6	Service Center Lift Station	Total/NA	Water	EPA 537 (Mod)	181432
410-58318-6 - DL	Service Center Lift Station	Total/NA	Water	EPA 537 (Mod)	181432
410-58318-8	Trip Blank	Total/NA	Water	EPA 537 (Mod)	181432

Prep Batch: 181984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-3	North Digester	Total/NA	Solid	537 (mod)	
410-58318-4	South Digester	Total/NA	Solid	537 (mod)	
410-58318-5	Biosolids West	Total/NA	Solid	537 (mod)	
MB 410-181984/1-B	Method Blank	Total/NA	Solid	537 (mod)	
LCS 410-181984/2-B	Lab Control Sample	Total/NA	Solid	537 (mod)	
LCSD 410-181984/3-B	Lab Control Sample Dup	Total/NA	Solid	537 (mod)	

Cleanup Batch: 182000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-3	North Digester	Total/NA	Solid	Extract Aliquot	181984
410-58318-4	South Digester	Total/NA	Solid	Extract Aliquot	181984
410-58318-5	Biosolids West	Total/NA	Solid	Extract Aliquot	181984
MB 410-181984/1-B	Method Blank	Total/NA	Solid	Extract Aliquot	181984
LCS 410-181984/2-B	Lab Control Sample	Total/NA	Solid	Extract Aliquot	181984
LCSD 410-181984/3-B	Lab Control Sample Dup	Total/NA	Solid	Extract Aliquot	181984

Analysis Batch: 182429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-3	North Digester	Total/NA	Solid	EPA 537 (Mod)	182000
410-58318-4	South Digester	Total/NA	Solid	EPA 537 (Mod)	182000
410-58318-5	Biosolids West	Total/NA	Solid	EPA 537 (Mod)	182000
MB 410-181984/1-B	Method Blank	Total/NA	Solid	EPA 537 (Mod)	182000
LCS 410-181984/2-B	Lab Control Sample	Total/NA	Solid	EPA 537 (Mod)	182000
LCSD 410-181984/3-B	Lab Control Sample Dup	Total/NA	Solid	EPA 537 (Mod)	182000

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

LCMS

Prep Batch: 182434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-7	Field Blank	Total/NA	Water	EPA 537 (mod)	
410-58318-8 - RE	Trip Blank	Total/NA	Water	EPA 537 (mod)	
MB 410-182434/1-A	Method Blank	Total/NA	Water	EPA 537 (mod)	
LCS 410-182434/2-A	Lab Control Sample	Total/NA	Water	EPA 537 (mod)	
LCSD 410-182434/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 (mod)	

Analysis Batch: 182886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-7	Field Blank	Total/NA	Water	EPA 537 (Mod)	182434
410-58318-8 - RE	Trip Blank	Total/NA	Water	EPA 537 (Mod)	182434
MB 410-182434/1-A	Method Blank	Total/NA	Water	EPA 537 (Mod)	182434
LCS 410-182434/2-A	Lab Control Sample	Total/NA	Water	EPA 537 (Mod)	182434
LCSD 410-182434/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 (Mod)	182434

General Chemistry

Analysis Batch: 180772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-58318-3	North Digester	Total/NA	Solid	Moisture	
410-58318-4	South Digester	Total/NA	Solid	Moisture	
410-58318-5	Biosolids West	Total/NA	Solid	Moisture	

Lab Chronicle

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Effluent
Lab Sample ID: 410-58318-1
Date Collected: 10/06/21 09:12
Matrix: Water
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 (mod)			181432	10/11/21 15:57	QLP7	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	181909	10/12/21 19:35	PY4D	ELLE

Client Sample ID: Influent
Lab Sample ID: 410-58318-2
Date Collected: 10/06/21 09:20
Matrix: Water
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 (mod)			181432	10/11/21 15:57	QLP7	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	181909	10/12/21 19:47	PY4D	ELLE

Client Sample ID: North Digester
Lab Sample ID: 410-58318-3
Date Collected: 10/06/21 10:00
Matrix: Solid
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	180772	10/08/21 17:36	OEL4	ELLE

Client Sample ID: North Digester
Lab Sample ID: 410-58318-3
Date Collected: 10/06/21 10:00
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 0.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 (mod)			181984	10/12/21 21:42	K9VR	ELLE
Total/NA	Cleanup	Extract Aliquot			182000	10/12/21 23:00	K9VR	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	182429	10/14/21 05:13	QD9Y	ELLE

Client Sample ID: South Digester
Lab Sample ID: 410-58318-4
Date Collected: 10/06/21 10:10
Matrix: Solid
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	180772	10/08/21 17:36	OEL4	ELLE

Client Sample ID: South Digester
Lab Sample ID: 410-58318-4
Date Collected: 10/06/21 10:10
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 1.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 (mod)			181984	10/12/21 21:42	K9VR	ELLE
Total/NA	Cleanup	Extract Aliquot			182000	10/12/21 23:00	K9VR	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	182429	10/14/21 05:23	QD9Y	ELLE

Lab Chronicle

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Client Sample ID: Biosolids West
Lab Sample ID: 410-58318-5
Date Collected: 10/06/21 10:15
Matrix: Solid
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	180772	10/08/21 17:36	OEL4	ELLE

Client Sample ID: Biosolids West
Lab Sample ID: 410-58318-5
Date Collected: 10/06/21 10:15
Matrix: Solid
Date Received: 10/08/21 11:00
Percent Solids: 2.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 (mod)			181984	10/12/21 21:42	K9VR	ELLE
Total/NA	Cleanup	Extract Aliquot			182000	10/12/21 23:00	K9VR	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	182429	10/14/21 05:34	QD9Y	ELLE

Client Sample ID: Service Center Lift Station
Lab Sample ID: 410-58318-6
Date Collected: 10/06/21 11:00
Matrix: Water
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 (mod)			181432	10/11/21 15:57	QLP7	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	181909	10/13/21 00:57	PY4D	ELLE
Total/NA	Prep	EPA 537 (mod)	DL		181432	10/11/21 15:57	QLP7	ELLE
Total/NA	Analysis	EPA 537 (Mod)	DL	10	181909	10/13/21 01:08	PY4D	ELLE

Client Sample ID: Field Blank
Lab Sample ID: 410-58318-7
Date Collected: 10/06/21 09:10
Matrix: Water
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 (mod)			182434	10/13/21 17:37	K9VR	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	182886	10/14/21 20:07	PY4D	ELLE

Client Sample ID: Trip Blank
Lab Sample ID: 410-58318-8
Date Collected: 10/06/21 11:30
Matrix: Water
Date Received: 10/08/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 (mod)			181432	10/11/21 15:57	QLP7	ELLE
Total/NA	Analysis	EPA 537 (Mod)		1	181909	10/12/21 20:20	PY4D	ELLE
Total/NA	Prep	EPA 537 (mod)	RE		182434	10/13/21 17:37	K9VR	ELLE
Total/NA	Analysis	EPA 537 (Mod)	RE	1	182886	10/14/21 20:18	PY4D	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9930	01-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 537 (Mod)	537 (mod)	Solid	11Cl-PF3OUdS
EPA 537 (Mod)	537 (mod)	Solid	4:2 Fluorotelomer sulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	6:2 Fluorotelomer sulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	8:2 Fluorotelomer sulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	9Cl-PF3ONS
EPA 537 (Mod)	537 (mod)	Solid	DONA
EPA 537 (Mod)	537 (mod)	Solid	HFPODA
EPA 537 (Mod)	537 (mod)	Solid	NEtFOSAA
EPA 537 (Mod)	537 (mod)	Solid	NMeFOSAA
EPA 537 (Mod)	537 (mod)	Solid	Perfluorobutanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorobutanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorodecanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorodecanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorododecanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluoroheptanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluoroheptanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorohexanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorohexanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorononanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorononanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorooctanesulfonamide
EPA 537 (Mod)	537 (mod)	Solid	Perfluorooctanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorooctanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluoropentanesulfonic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluoropentanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorotetradecanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluorotridecanoic acid
EPA 537 (Mod)	537 (mod)	Solid	Perfluoroundecanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	11Cl-PF3OUdS
EPA 537 (Mod)	EPA 537 (mod)	Water	4:2 Fluorotelomer sulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	6:2 Fluorotelomer sulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	8:2 Fluorotelomer sulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	9Cl-PF3ONS
EPA 537 (Mod)	EPA 537 (mod)	Water	DONA
EPA 537 (Mod)	EPA 537 (mod)	Water	HFPODA
EPA 537 (Mod)	EPA 537 (mod)	Water	NEtFOSAA
EPA 537 (Mod)	EPA 537 (mod)	Water	NMeFOSAA
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorobutanesulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorobutanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorodecanesulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorodecanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorododecanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluoroheptanesulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluoroheptanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorohexanesulfonic acid

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorohexanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorononanesulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorononanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorooctanesulfonamide
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorooctanesulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorooctanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluoropentanesulfonic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluoropentanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorotetradecanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluorotridecanoic acid
EPA 537 (Mod)	EPA 537 (mod)	Water	Perfluoroundecanoic acid
Moisture		Solid	Percent Moisture

Method Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Method	Method Description	Protocol	Laboratory
EPA 537 (Mod)	EPA 537 Isotope Dilution	EPA	ELLE
Moisture	Percent Moisture	EPA	ELLE
537 (mod)	EPA 537 Isotope Dilution	EPA	ELLE
EPA 537 (mod)	EPA 537 Isotope Dilution	EPA	ELLE
Extract Aliquot	Preparation, Extract Aliquot	None	ELLE

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: White Water Associates
Project/Site: KI Sawyer WWTP

Job ID: 410-58318-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-58318-1	Effluent	Water	10/06/21 09:12	10/08/21 11:00
410-58318-2	Influent	Water	10/06/21 09:20	10/08/21 11:00
410-58318-3	North Digester	Solid	10/06/21 10:00	10/08/21 11:00
410-58318-4	South Digester	Solid	10/06/21 10:10	10/08/21 11:00
410-58318-5	Biosolids West	Solid	10/06/21 10:15	10/08/21 11:00
410-58318-6	Service Center Lift Station	Water	10/06/21 11:00	10/08/21 11:00
410-58318-7	Field Blank	Water	10/06/21 09:10	10/08/21 11:00
410-58318-8	Trip Blank	Water	10/06/21 11:30	10/08/21 11:00

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone 717-656-2300 Fax 717-656-2681

Chain of Custody Record

410-58318 Chain of Custody

eurofins Environment Testing America

Client Information	Sampler: Nicholas Hawbaker	Lab PM: Zanar, Elizabeth M	COC No: 0-34448-3761.1
Client Contact: Bette Premo	Phone: 906-346-9403	E-Mail: Elizabeth.Zanar@eurofinset.com	Page: Page 1 of 1
Company: White Water Associates	PWSID:	Analysis Requested	Job #:
Address: 429 River Lane PO BOX 27	Due Date Requested: Please Rush ASAP		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Amasa	TAT Requested (days):		
State, Zip: MI, 49903	Compliance Project: Yes / No		
Phone: 906-822-7889(Tel) 906-822-7977(Fax)	PO #: Purchase Order not required		
Email: bette.premo@white-water-associates.com	WO #:		Other:
Project Name: KI Sawyer WWTP	Project #: 41002275		
Site: KI Sawyer WWTP	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA - MI List 28 PFAS	Total Number of containers	Special Instructions/Note:
Preservation Code:					N		N		
Effluent	10/6/21	9:12 Am	G	Water	N		X		
PFAS Batch QC Effluent	10/6/21	9:12 Am	G	Water	N		X		
Influent	10/6/21	9:20 Am	G	Water	N		X		
North Digester	10/6/21	10:00 Am	G	S ~~Water~~	N		X		ng/kg Dry
South Digester	10/6/21	10:10 Am	G	S	N		X		Ng/kg Dry
Biosolids West	10/6/21	10:15 Am	G	S	N		X		Ng/kg Dry
Service Center Lift Station	10/6/21	11:00 Am	G	Water	N		X		
Field Blank	10/6/21	9:10 Am	G	Water	N		X		
Trip Blank	10/6/21	11:30 Am	G	Water	N		X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Kara L Mott	9-22-21 08:55	ELLE			
2	Shawn Hutt	10/6/21 2:45pm	KIS			
3					10/8/21 1:00	ELLE

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.7

Ver: 06/08/2021

10/18/2021

Login Sample Receipt Checklist

Client: White Water Associates

Job Number: 410-58318-1

Login Number: 58318

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

Creator: Slagle, Vaiyanna

Question	Answer	Comment
The cooler's custody seal is intact.	True	
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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	