

ANALYTICAL REPORT

Eurofins Eaton Analytical - South Bend
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South Bend, IN 46617
Tel: (574)233-4777

Laboratory Job ID: 810-6554-1

Client Project/Site: Mass DEP / UMass PFAS Region 3

For:

University of Massachusetts
224 Marston Hall
Amherst, Massachusetts 01003

Attn: Mr. Rick Larson



Authorized for release by:
11/17/2021 8:00:50 AM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: University of Massachusetts
Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Qualifiers

LCMS

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

Case Narrative

Client: University of Massachusetts
Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

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Laboratory: Eurofins Eaton Analytical - South Bend

Narrative

Job Narrative
810-6554-1

Comments

No additional comments.

Receipt

The samples were received on 11/3/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4° C.

LCMS

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

Organic Prep

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

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Detection Summary

Client: University of Massachusetts
Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Client Sample ID: 10015 West St. WTP - Finished Water

Lab Sample ID: 810-6554-1

PWSID Number: 3105000

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.5	J	1.8	0.37	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	0.79	J	1.8	0.37	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.0		1.8	0.37	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.60	J	1.8	0.46	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.79	J	1.8	0.37	ng/L	1		537.1	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.64	J	1.8	0.37	ng/L	1		537.1	Total/NA
PFAS6	2.00		2.00		ng/L	1		PFAS6	Total/NA

Client Sample ID: 20011 WM. Marshall Well - Raw Water

Lab Sample ID: 810-6554-2

PWSID Number: 3105000

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.6	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	0.57	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	1.7	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.56	J	1.9	0.48	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.81	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.50	J	1.9	0.38	ng/L	1		537.1	Total/NA

Client Sample ID: 20012 Commissioners Well - Raw Water

Lab Sample ID: 810-6554-3

PWSID Number: 3105000

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.89	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	0.45	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	1.5	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.0	J	1.9	0.47	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.55	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.41	J	1.9	0.38	ng/L	1		537.1	Total/NA

Client Sample ID: 20013 Duffy (RN. Marshall) Well - Raw Water

Lab Sample ID: 810-6554-4

PWSID Number: 3105000

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.8	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	1.4	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.7		1.9	0.38	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.50	J	1.9	0.47	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.9	0.38	ng/L	1		537.1	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.93	J	1.9	0.38	ng/L	1		537.1	Total/NA
PFAS6	2.70		2.00		ng/L	1		PFAS6	Total/NA

Client Sample ID: 10015 Field Blank

Lab Sample ID: 810-6554-5

PWSID Number: 3105000

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Client Sample ID: 10015 West St. WTP - Finished Water

Lab Sample ID: 810-6554-1

Date Collected: 11/02/21 10:30

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1.5	J	1.8	0.37	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorohexanoic acid (PFHxA)	0.79	J	1.8	0.37	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.37	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorooctanoic acid (PFOA)	2.0		1.8	0.37	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorohexanesulfonic acid (PFHxS)	0.60	J	1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorobutanesulfonic acid (PFBS)	0.79	J	1.8	0.37	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluoroheptanoic acid (PFHpA)	0.64	J	1.8	0.37	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.8	0.55	ng/L		11/04/21 08:12	11/04/21 23:30	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.8	0.55	ng/L		11/04/21 08:12	11/04/21 23:30	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.8	0.46	ng/L		11/04/21 08:12	11/04/21 23:30	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.56	ng/L		11/04/21 08:12	11/04/21 23:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	81		70 - 130				11/04/21 08:12	11/04/21 23:30	1
13C2 PFDA	88		70 - 130				11/04/21 08:12	11/04/21 23:30	1
13C3 HFPO-DA	84		70 - 130				11/04/21 08:12	11/04/21 23:30	1
d5-NEtFOSAA	86		70 - 130				11/04/21 08:12	11/04/21 23:30	1

Method: PFAS6 - PFAS6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PFAS6	2.00		2.00		ng/L			11/04/21 23:30	1

Client Sample ID: 20011 WM. Marshall Well - Raw Water

Lab Sample ID: 810-6554-2

Date Collected: 11/02/21 10:20

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1.6	J	1.9	0.38	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorohexanoic acid (PFHxA)	0.57	J	1.9	0.38	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.38	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorooctanoic acid (PFOA)	1.7	J	1.9	0.38	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorohexanesulfonic acid (PFHxS)	0.56	J	1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1

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Client Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Client Sample ID: 20011 WM. Marshall Well - Raw Water

Lab Sample ID: 810-6554-2

Date Collected: 11/02/21 10:20

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	0.81	J	1.9	0.38	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluoroheptanoic acid (PFHpA)	0.50	J	1.9	0.38	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.9	0.58	ng/L		11/04/21 08:12	11/04/21 23:51	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.9	0.58	ng/L		11/04/21 08:12	11/04/21 23:51	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.9	0.48	ng/L		11/04/21 08:12	11/04/21 23:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.9	0.58	ng/L		11/04/21 08:12	11/04/21 23:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	84		70 - 130				11/04/21 08:12	11/04/21 23:51	1
13C2 PFDA	88		70 - 130				11/04/21 08:12	11/04/21 23:51	1
13C3 HFPO-DA	86		70 - 130				11/04/21 08:12	11/04/21 23:51	1
d5-NEtFOSAA	83		70 - 130				11/04/21 08:12	11/04/21 23:51	1

Method: PFAS6 - PFAS6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PFAS6	ND		2.00		ng/L			11/04/21 23:51	1

Client Sample ID: 20012 Commissioners Well - Raw Water

Lab Sample ID: 810-6554-3

Date Collected: 11/02/21 10:00

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	0.89	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorohexanoic acid (PFHxA)	0.45	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorooctanoic acid (PFOA)	1.5	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorohexanesulfonic acid (PFHxS)	1.0	J	1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorobutanesulfonic acid (PFBS)	0.55	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluoroheptanoic acid (PFHpA)	0.41	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.9	0.57	ng/L		11/04/21 08:12	11/05/21 00:02	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1

Eurofins Eaton Analytical - South Bend

Client Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Client Sample ID: 20012 Commissioners Well - Raw Water

Lab Sample ID: 810-6554-3

Date Collected: 11/02/21 10:00

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.9	0.57	ng/L		11/04/21 08:12	11/05/21 00:02	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.9	0.58	ng/L		11/04/21 08:12	11/05/21 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	92		70 - 130				11/04/21 08:12	11/05/21 00:02	1
13C2 PFDA	88		70 - 130				11/04/21 08:12	11/05/21 00:02	1
13C3 HFPO-DA	91		70 - 130				11/04/21 08:12	11/05/21 00:02	1
d5-NEtFOSAA	70		70 - 130				11/04/21 08:12	11/05/21 00:02	1

Method: PFAS6 - PFAS6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PFAS6	ND		2.00		ng/L			11/05/21 00:02	1

Client Sample ID: 20013 Duffy (RN. Marshall) Well - Raw Water

Lab Sample ID: 810-6554-4

Date Collected: 11/02/21 10:10

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1.8	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorohexanoic acid (PFHxA)	1.4	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorooctanoic acid (PFOA)	2.7		1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorohexanesulfonic acid (PFHxS)	0.50	J	1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluoroheptanoic acid (PFHpA)	0.93	J	1.9	0.38	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.9	0.57	ng/L		11/04/21 08:12	11/05/21 00:12	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.9	0.57	ng/L		11/04/21 08:12	11/05/21 00:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.9	0.47	ng/L		11/04/21 08:12	11/05/21 00:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.9	0.58	ng/L		11/04/21 08:12	11/05/21 00:12	1

Eurofins Eaton Analytical - South Bend

Client Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Client Sample ID: 20013 Duffy (RN. Marshall) Well - Raw Water

Lab Sample ID: 810-6554-4

Date Collected: 11/02/21 10:10

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	87		70 - 130	11/04/21 08:12	11/05/21 00:12	1
13C2 PFDA	100		70 - 130	11/04/21 08:12	11/05/21 00:12	1
13C3 HFPO-DA	91		70 - 130	11/04/21 08:12	11/05/21 00:12	1
d5-NEtFOSAA	91		70 - 130	11/04/21 08:12	11/05/21 00:12	1

Method: PFAS6 - PFAS6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PFAS6	2.70		2.00		ng/L			11/05/21 00:12	1

Client Sample ID: 10015 Field Blank

Lab Sample ID: 810-6554-5

Date Collected: 11/02/21 10:35

Matrix: Drinking Water

Date Received: 11/03/21 09:30

PWSID Number: 3105000

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.36	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.36	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.36	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.36	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.36	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.36	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.8	0.54	ng/L		11/11/21 06:39	11/12/21 16:04	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.8	0.54	ng/L		11/11/21 06:39	11/12/21 16:04	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.8	0.45	ng/L		11/11/21 06:39	11/12/21 16:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.8	0.54	ng/L		11/11/21 06:39	11/12/21 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	88		70 - 130	11/11/21 06:39	11/12/21 16:04	1
13C2 PFDA	87		70 - 130	11/11/21 06:39	11/12/21 16:04	1
13C3 HFPO-DA	81		70 - 130	11/11/21 06:39	11/12/21 16:04	1
d5-NEtFOSAA	79		70 - 130	11/11/21 06:39	11/12/21 16:04	1

Surrogate Summary

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		PFHxA (70-130)	PFDA (70-130)	HFPODA (70-130)	d5NEFOS (70-130)
810-6439-B-1-A DU	Duplicate	91	92	95	86
810-6455-B-1-A LMS	Matrix Spike	90	100	90	87
810-6554-1	10015 West St. WTP - Finished Water	81	88	84	86
810-6554-2	20011 WM. Marshall Well - Raw Water	84	88	86	83
810-6554-3	20012 Commissioners Well - Raw Water	92	88	91	70
810-6554-4	20013 Duffy (RN. Marshall) Well - Raw Water	87	100	91	91
810-6554-5	10015 Field Blank	88	87	81	79
810-7106-B-5-A LMS	Matrix Spike	87	88	93	85
810-7125-B-1-A DU	Duplicate	87	87	85	82
LCS 810-6566/3-A	Lab Control Sample	95	91	93	84
LCS 810-7071/3-A	Lab Control Sample	91	87	92	83
LLCS 810-6566/2-A	Lab Control Sample	95	94	90	89
LLCS 810-7071/2-A	Lab Control Sample	85	87	83	90
MB 810-6566/1-A	Method Blank	90	86	87	84
MB 810-7071/1-A	Method Blank	89	84	83	80

Surrogate Legend

PFHxA = 13C2 PFHxA
 PFDA = 13C2 PFDA
 HFPODA = 13C3 HFPO-DA
 d5NEFOS = d5-NEtFOSAA

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS)

Lab Sample ID: MB 810-6566/1-A
Matrix: Drinking Water
Analysis Batch: 6645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6566

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.40	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.40	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.40	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.40	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.40	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.40	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.60	ng/L		11/04/21 08:12	11/04/21 21:02	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.60	ng/L		11/04/21 08:12	11/04/21 21:02	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		2.0	0.50	ng/L		11/04/21 08:12	11/04/21 21:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.61	ng/L		11/04/21 08:12	11/04/21 21:02	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFHxA	90		70 - 130	11/04/21 08:12	11/04/21 21:02	1
13C2 PFDA	86		70 - 130	11/04/21 08:12	11/04/21 21:02	1
13C3 HFPO-DA	87		70 - 130	11/04/21 08:12	11/04/21 21:02	1
d5-NEtFOSAA	84		70 - 130	11/04/21 08:12	11/04/21 21:02	1

Lab Sample ID: LCS 810-6566/3-A
Matrix: Drinking Water
Analysis Batch: 6645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6566

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroundecanoic acid (PFUnA)	185	155		ng/L		84	70 - 130
Perfluorohexanoic acid (PFHxA)	185	166		ng/L		90	70 - 130
Perfluorododecanoic acid (PFDoA)	185	161		ng/L		87	70 - 130
Perfluorooctanoic acid (PFOA)	185	173		ng/L		94	70 - 130
Perfluorodecanoic acid (PFDA)	185	163		ng/L		88	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	185	169		ng/L		91	70 - 130
Perfluorobutanesulfonic acid (PFBS)	185	174		ng/L		94	70 - 130
Perfluoroheptanoic acid (PFHpA)	185	170		ng/L		92	70 - 130
Perfluorononanoic acid (PFNA)	185	170		ng/L		92	70 - 130

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QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: LCS 810-6566/3-A

Matrix: Drinking Water

Analysis Batch: 6645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6566

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Perfluorotetradecanoic acid (PFTeDA)	185	145		ng/L		78	70 - 130	
Perfluorotridecanoic acid (PFTrDA)	185	164		ng/L		89	70 - 130	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	185	161		ng/L		87	70 - 130	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	185	154		ng/L		83	70 - 130	
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	185	163		ng/L		88	70 - 130	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	185	162		ng/L		88	70 - 130	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	185	161		ng/L		87	70 - 130	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	185	165		ng/L		89	70 - 130	
LCS LCS								
Surrogate	%Recovery	Qualifier						Limits
13C2 PFHxA	95							70 - 130
13C2 PFDA	91							70 - 130
13C3 HFPO-DA	93							70 - 130
d5-NEtFOSAA	84							70 - 130

Lab Sample ID: LLCS 810-6566/2-A

Matrix: Drinking Water

Analysis Batch: 6645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6566

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	1.92	1.81	J	ng/L		95	50 - 150
Perfluoroundecanoic acid (PFUnA)	1.92	1.54	J	ng/L		80	50 - 150
Perfluorohexanoic acid (PFHxA)	1.92	1.70	J	ng/L		88	50 - 150
Perfluorododecanoic acid (PFDoA)	1.92	1.60	J	ng/L		83	50 - 150
Perfluorooctanoic acid (PFOA)	1.92	1.82	J	ng/L		95	50 - 150
Perfluorodecanoic acid (PFDA)	1.92	1.64	J	ng/L		85	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.92	1.81	J	ng/L		94	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.92	1.76	J	ng/L		92	50 - 150
Perfluoroheptanoic acid (PFHpA)	1.92	1.87	J	ng/L		97	50 - 150
Perfluorononanoic acid (PFNA)	1.92	1.79	J	ng/L		93	50 - 150
Perfluorotetradecanoic acid (PFTeDA)	1.92	1.36	J	ng/L		71	50 - 150
Perfluorotridecanoic acid (PFTrDA)	1.92	1.60	J	ng/L		84	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.92	1.52	J	ng/L		79	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.92	1.65	J	ng/L		86	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	1.92	1.62	J	ng/L		85	50 - 150

Eurofins Eaton Analytical - South Bend

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: LLCS 810-6566/2-A

Matrix: Drinking Water

Analysis Batch: 6645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6566

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	1.92	1.66	J	ng/L		86	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	1.92	1.55	J	ng/L		81	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.92	1.62	J	ng/L		85	50 - 150
Surrogate	%Recovery	LLCS Qualifier	Limits				
13C2 PFHxA	95		70 - 130				
13C2 PFDA	94		70 - 130				
13C3 HFPO-DA	90		70 - 130				
d5-NEtFOSAA	89		70 - 130				

Lab Sample ID: 810-6455-B-1-A LMS

Matrix: Drinking Water

Analysis Batch: 6645

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6566

Analyte	Sample Result	Sample Qualifier	Spike Added	LMS Result	LMS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	1.7	J	1.84	3.21		ng/L		82	50 - 150
Perfluoroundecanoic acid (PFUnA)	ND		1.84	1.55	J	ng/L		84	50 - 150
Perfluorohexanoic acid (PFHxA)	ND		1.84	1.69	J	ng/L		92	50 - 150
Perfluorododecanoic acid (PFDoA)	ND		1.84	1.67	J	ng/L		91	50 - 150
Perfluorooctanoic acid (PFOA)	0.37	J	1.84	2.00		ng/L		89	50 - 150
Perfluorodecanoic acid (PFDA)	ND		1.84	1.65	J	ng/L		90	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	ND		1.84	1.78	J	ng/L		97	50 - 150
Perfluorobutanesulfonic acid (PFBS)	ND		1.84	1.86		ng/L		101	50 - 150
Perfluoroheptanoic acid (PFHpA)	ND		1.84	1.75	J	ng/L		95	50 - 150
Perfluorononanoic acid (PFNA)	ND		1.84	1.87		ng/L		102	50 - 150
Perfluorotetradecanoic acid (PFTeDA)	ND		1.84	1.39	J	ng/L		76	50 - 150
Perfluorotridecanoic acid (PFTrDA)	ND		1.84	1.56	J	ng/L		85	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.84	1.41	J	ng/L		77	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.84	1.54	J	ng/L		84	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.84	1.54	J	ng/L		84	50 - 150
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	ND		1.84	1.39	J	ng/L		76	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.84	1.53	J	ng/L		83	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.84	1.51	J	ng/L		82	50 - 150
Surrogate	%Recovery	LMS Qualifier	Limits						
13C2 PFHxA	90		70 - 130						

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: 810-6455-B-1-A LMS

Matrix: Drinking Water

Analysis Batch: 6645

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6566

Surrogate	LMS		Limits
	%Recovery	Qualifier	
13C2 PFDA	100		70 - 130
13C3 HFPO-DA	90		70 - 130
d5-NEtFOSAA	87		70 - 130

Lab Sample ID: 810-6439-B-1-A DU

Matrix: Drinking Water

Analysis Batch: 6645

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 6566

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Perfluorooctanesulfonic acid (PFOS)	0.46	J	ND		ng/L		NC	30
Perfluoroundecanoic acid (PFUnA)	ND		ND		ng/L		NC	30
Perfluorohexanoic acid (PFHxA)	0.53	J	0.560	J	ng/L		6	30
Perfluorododecanoic acid (PFDoA)	ND		ND		ng/L		NC	30
Perfluorooctanoic acid (PFOA)	0.48	J	0.542	J	ng/L		12	30
Perfluorodecanoic acid (PFDA)	ND		ND		ng/L		NC	30
Perfluorohexanesulfonic acid (PFHxS)	ND		ND		ng/L		NC	30
Perfluorobutanesulfonic acid (PFBS)	0.39	J	0.380	J	ng/L		3	30
Perfluoroheptanoic acid (PFHpA)	0.61	J	0.675	J	ng/L		9	30
Perfluorononanoic acid (PFNA)	ND		ND		ng/L		NC	30
Perfluorotetradecanoic acid (PFTeDA)	ND		ND		ng/L		NC	30
Perfluorotridecanoic acid (PFTrDA)	ND		ND		ng/L		NC	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		ND		ng/L		NC	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		ND		ng/L		NC	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ND		ng/L		NC	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		ND		ng/L		NC	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		ND		ng/L		NC	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND		ng/L		NC	30

Surrogate	DU		Limits
	%Recovery	Qualifier	
13C2 PFHxA	91		70 - 130
13C2 PFDA	92		70 - 130
13C3 HFPO-DA	95		70 - 130
d5-NEtFOSAA	86		70 - 130

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: MB 810-7071/1-A
Matrix: Drinking Water
Analysis Batch: 7137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7071

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.40	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.40	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.40	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.40	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.40	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.40	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.60	ng/L		11/11/21 06:39	11/12/21 12:11	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.60	ng/L		11/11/21 06:39	11/12/21 12:11	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		2.0	0.50	ng/L		11/11/21 06:39	11/12/21 12:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.61	ng/L		11/11/21 06:39	11/12/21 12:11	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFHxA	89		70 - 130	11/11/21 06:39	11/12/21 12:11	1
13C2 PFDA	84		70 - 130	11/11/21 06:39	11/12/21 12:11	1
13C3 HFPO-DA	83		70 - 130	11/11/21 06:39	11/12/21 12:11	1
d5-NEtFOSAA	80		70 - 130	11/11/21 06:39	11/12/21 12:11	1

Lab Sample ID: LCS 810-7071/3-A
Matrix: Drinking Water
Analysis Batch: 7137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroundecanoic acid (PFUnA)	194	166		ng/L		86	70 - 130
Perfluorohexanoic acid (PFHxA)	194	174		ng/L		90	70 - 130
Perfluorododecanoic acid (PFDoA)	194	163		ng/L		84	70 - 130
Perfluorooctanoic acid (PFOA)	194	179		ng/L		93	70 - 130
Perfluorodecanoic acid (PFDA)	194	169		ng/L		87	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	194	183		ng/L		94	70 - 130
Perfluorobutanesulfonic acid (PFBS)	194	176		ng/L		91	70 - 130
Perfluoroheptanoic acid (PFHpA)	194	175		ng/L		91	70 - 130
Perfluorononanoic acid (PFNA)	194	179		ng/L		92	70 - 130

Eurofins Eaton Analytical - South Bend

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: LCS 810-7071/3-A

Matrix: Drinking Water

Analysis Batch: 7137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorotetradecanoic acid (PFTeDA)	194	155		ng/L		80	70 - 130
Perfluorotridecanoic acid (PFTrDA)	194	158		ng/L		82	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	194	172		ng/L		89	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	194	163		ng/L		84	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	194	174		ng/L		90	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	194	175		ng/L		91	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	194	167		ng/L		86	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	194	175		ng/L		90	70 - 130
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
13C2 PFHxA	91		70 - 130				
13C2 PFDA	87		70 - 130				
13C3 HFPO-DA	92		70 - 130				
d5-NEtFOSAA	83		70 - 130				

Lab Sample ID: LLCS 810-7071/2-A

Matrix: Drinking Water

Analysis Batch: 7137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7071

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	1.96	1.90	J	ng/L		97	50 - 150
Perfluoroundecanoic acid (PFUnA)	1.96	1.58	J	ng/L		80	50 - 150
Perfluorohexanoic acid (PFHxA)	1.96	1.64	J	ng/L		84	50 - 150
Perfluorododecanoic acid (PFDoA)	1.96	1.64	J	ng/L		84	50 - 150
Perfluorooctanoic acid (PFOA)	1.96	1.69	J	ng/L		86	50 - 150
Perfluorodecanoic acid (PFDA)	1.96	1.59	J	ng/L		81	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.96	1.82	J	ng/L		93	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.96	1.42	J	ng/L		72	50 - 150
Perfluoroheptanoic acid (PFHpA)	1.96	1.78	J	ng/L		91	50 - 150
Perfluorononanoic acid (PFNA)	1.96	1.70	J	ng/L		87	50 - 150
Perfluorotetradecanoic acid (PFTeDA)	1.96	1.40	J	ng/L		71	50 - 150
Perfluorotridecanoic acid (PFTrDA)	1.96	1.45	J	ng/L		74	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.96	1.67	J	ng/L		85	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	1.96	1.66	J	ng/L		85	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	1.96	1.55	J	ng/L		79	50 - 150

Eurofins Eaton Analytical - South Bend

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: LLCS 810-7071/2-A

Matrix: Drinking Water

Analysis Batch: 7137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7071

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	1.96	1.61	J	ng/L		82	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	1.96	1.58	J	ng/L		80	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.96	1.79	J	ng/L		91	50 - 150
Surrogate	%Recovery	LLCS Qualifier	Limits				
13C2 PFHxA	85		70 - 130				
13C2 PFDA	87		70 - 130				
13C3 HFPO-DA	83		70 - 130				
d5-NEtFOSAA	90		70 - 130				

Lab Sample ID: 810-7106-B-5-A LMS

Matrix: Drinking Water

Analysis Batch: 7137

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7071

Analyte	Sample Result	Sample Qualifier	Spike Added	LMS Result	LMS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	ND		1.72	1.78		ng/L		103	50 - 150
Perfluoroundecanoic acid (PFUnA)	ND		1.72	1.30	J	ng/L		75	50 - 150
Perfluorohexanoic acid (PFHxA)	ND		1.72	1.58	J	ng/L		92	50 - 150
Perfluorododecanoic acid (PFDoA)	ND		1.72	1.34	J	ng/L		78	50 - 150
Perfluorooctanoic acid (PFOA)	ND		1.72	2.00		ng/L		116	50 - 150
Perfluorodecanoic acid (PFDA)	ND		1.72	1.60	J	ng/L		93	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	ND		1.72	1.76		ng/L		102	50 - 150
Perfluorobutanesulfonic acid (PFBS)	ND		1.72	1.67	J	ng/L		97	50 - 150
Perfluoroheptanoic acid (PFHpA)	ND		1.72	1.56	J	ng/L		90	50 - 150
Perfluorononanoic acid (PFNA)	ND		1.72	1.66	J	ng/L		96	50 - 150
Perfluorotetradecanoic acid (PFTeDA)	ND		1.72	1.36	J	ng/L		79	50 - 150
Perfluorotridecanoic acid (PFTrDA)	ND		1.72	1.28	J	ng/L		74	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.72	1.39	J	ng/L		81	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.72	1.52	J	ng/L		88	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.72	1.54	J	ng/L		89	50 - 150
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	ND		1.72	1.43	J	ng/L		83	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		1.72	1.42	J	ng/L		82	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.72	1.61	J	ng/L		93	50 - 150
Surrogate	%Recovery	LMS Qualifier	Limits						
13C2 PFHxA	87		70 - 130						

QC Sample Results

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method: 537.1 - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: 810-7106-B-5-A LMS

Matrix: Drinking Water

Analysis Batch: 7137

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7071

Surrogate	LMS		Limits
	%Recovery	Qualifier	
13C2 PFDA	88		70 - 130
13C3 HFPO-DA	93		70 - 130
d5-NEtFOSAA	85		70 - 130

Lab Sample ID: 810-7125-B-1-A DU

Matrix: Drinking Water

Analysis Batch: 7137

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 7071

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Perfluorooctanesulfonic acid (PFOS)	ND		ND		ng/L		NC	30
Perfluoroundecanoic acid (PFUnA)	ND		ND		ng/L		NC	30
Perfluorohexanoic acid (PFHxA)	ND		ND		ng/L		NC	30
Perfluorododecanoic acid (PFDoA)	ND		ND		ng/L		NC	30
Perfluorooctanoic acid (PFOA)	ND		ND		ng/L		NC	30
Perfluorodecanoic acid (PFDA)	ND		ND		ng/L		NC	30
Perfluorohexanesulfonic acid (PFHxS)	ND		ND		ng/L		NC	30
Perfluorobutanesulfonic acid (PFBS)	ND		ND		ng/L		NC	30
Perfluoroheptanoic acid (PFHpA)	ND		ND		ng/L		NC	30
Perfluorononanoic acid (PFNA)	ND		ND		ng/L		NC	30
Perfluorotetradecanoic acid (PFTeDA)	ND		ND		ng/L		NC	30
Perfluorotridecanoic acid (PFTrDA)	ND		ND		ng/L		NC	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			ND		ng/L			30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			ND		ng/L			30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)			ND		ng/L			30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid			ND		ng/L			30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid			ND		ng/L			30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			ND		ng/L			30

Surrogate	DU		Limits
	%Recovery	Qualifier	
13C2 PFHxA	87		70 - 130
13C2 PFDA	87		70 - 130
13C3 HFPO-DA	85		70 - 130
d5-NEtFOSAA	82		70 - 130

QC Association Summary

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

LCMS

Prep Batch: 6566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-6554-1	10015 West St. WTP - Finished Water	Total/NA	Drinking Water	537.1 DW	
810-6554-2	20011 WM. Marshall Well - Raw Water	Total/NA	Drinking Water	537.1 DW	
810-6554-3	20012 Commissioners Well - Raw Water	Total/NA	Drinking Water	537.1 DW	
810-6554-4	20013 Duffy (RN. Marshall) Well - Raw Water	Total/NA	Drinking Water	537.1 DW	
MB 810-6566/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW	
LCS 810-6566/3-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	
LLCS 810-6566/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	
810-6455-B-1-A LMS	Matrix Spike	Total/NA	Drinking Water	537.1 DW	
810-6439-B-1-A DU	Duplicate	Total/NA	Drinking Water	537.1 DW	

Analysis Batch: 6645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-6554-1	10015 West St. WTP - Finished Water	Total/NA	Drinking Water	537.1	6566
810-6554-2	20011 WM. Marshall Well - Raw Water	Total/NA	Drinking Water	537.1	6566
810-6554-3	20012 Commissioners Well - Raw Water	Total/NA	Drinking Water	537.1	6566
810-6554-4	20013 Duffy (RN. Marshall) Well - Raw Water	Total/NA	Drinking Water	537.1	6566
MB 810-6566/1-A	Method Blank	Total/NA	Drinking Water	537.1	6566
LCS 810-6566/3-A	Lab Control Sample	Total/NA	Drinking Water	537.1	6566
LLCS 810-6566/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1	6566
810-6455-B-1-A LMS	Matrix Spike	Total/NA	Drinking Water	537.1	6566
810-6439-B-1-A DU	Duplicate	Total/NA	Drinking Water	537.1	6566

Analysis Batch: 6825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-6554-1	10015 West St. WTP - Finished Water	Total/NA	Drinking Water	PFAS6	
810-6554-2	20011 WM. Marshall Well - Raw Water	Total/NA	Drinking Water	PFAS6	
810-6554-3	20012 Commissioners Well - Raw Water	Total/NA	Drinking Water	PFAS6	
810-6554-4	20013 Duffy (RN. Marshall) Well - Raw Water	Total/NA	Drinking Water	PFAS6	

Prep Batch: 7071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-6554-5	10015 Field Blank	Total/NA	Drinking Water	537.1 DW	
MB 810-7071/1-A	Method Blank	Total/NA	Drinking Water	537.1 DW	
LCS 810-7071/3-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	
LLCS 810-7071/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	
810-7106-B-5-A LMS	Matrix Spike	Total/NA	Drinking Water	537.1 DW	
810-7125-B-1-A DU	Duplicate	Total/NA	Drinking Water	537.1 DW	

Analysis Batch: 7137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-6554-5	10015 Field Blank	Total/NA	Drinking Water	537.1	7071
MB 810-7071/1-A	Method Blank	Total/NA	Drinking Water	537.1	7071
LCS 810-7071/3-A	Lab Control Sample	Total/NA	Drinking Water	537.1	7071
LLCS 810-7071/2-A	Lab Control Sample	Total/NA	Drinking Water	537.1	7071
810-7106-B-5-A LMS	Matrix Spike	Total/NA	Drinking Water	537.1	7071
810-7125-B-1-A DU	Duplicate	Total/NA	Drinking Water	537.1	7071

Lab Chronicle

Client: University of Massachusetts
 Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Client Sample ID: 10015 West St. WTP - Finished Water

Lab Sample ID: 810-6554-1

Date Collected: 11/02/21 10:30

Matrix: Drinking Water

Date Received: 11/03/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537.1 DW			6566	11/04/21 08:12	CM	EA SB
Total/NA	Analysis	537.1		1	6645	11/04/21 23:30	MH	EA SB
Total/NA	Analysis	PFAS6		1	6825	11/04/21 23:30	MH	EA SB

Client Sample ID: 20011 WM. Marshall Well - Raw Water

Lab Sample ID: 810-6554-2

Date Collected: 11/02/21 10:20

Matrix: Drinking Water

Date Received: 11/03/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537.1 DW			6566	11/04/21 08:12	CM	EA SB
Total/NA	Analysis	537.1		1	6645	11/04/21 23:51	MH	EA SB
Total/NA	Analysis	PFAS6		1	6825	11/04/21 23:51	MH	EA SB

Client Sample ID: 20012 Commissioners Well - Raw Water

Lab Sample ID: 810-6554-3

Date Collected: 11/02/21 10:00

Matrix: Drinking Water

Date Received: 11/03/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537.1 DW			6566	11/04/21 08:12	CM	EA SB
Total/NA	Analysis	537.1		1	6645	11/05/21 00:02	MH	EA SB
Total/NA	Analysis	PFAS6		1	6825	11/05/21 00:02	MH	EA SB

Client Sample ID: 20013 Duffy (RN. Marshall) Well - Raw Water

Lab Sample ID: 810-6554-4

Date Collected: 11/02/21 10:10

Matrix: Drinking Water

Date Received: 11/03/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537.1 DW			6566	11/04/21 08:12	CM	EA SB
Total/NA	Analysis	537.1		1	6645	11/05/21 00:12	MH	EA SB
Total/NA	Analysis	PFAS6		1	6825	11/05/21 00:12	MH	EA SB

Client Sample ID: 10015 Field Blank

Lab Sample ID: 810-6554-5

Date Collected: 11/02/21 10:35

Matrix: Drinking Water

Date Received: 11/03/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537.1 DW			7071	11/11/21 06:39	TR	EA SB
Total/NA	Analysis	537.1		1	7137	11/12/21 16:04	MH	EA SB

Laboratory References:

EA SB = Eurofins Eaton Analytical - South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: University of Massachusetts
Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Laboratory: Eurofins Eaton Analytical - South Bend

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

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-IN035	06-30-22

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
PFAS6		Drinking Water	PFAS6



Method Summary

Client: University of Massachusetts
Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Method	Method Description	Protocol	Laboratory
537.1	Perfluorinated Alkyl Acids (LC/MS)	EPA	EA SB
PFAS6	PFAS6	EPA	EA SB
537.1 DW	Extraction of Perfluorinated Alkyl Acids	EPA	EA SB

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EA SB = Eurofins Eaton Analytical - South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777



Sample Summary

Client: University of Massachusetts
Project/Site: Mass DEP / UMass PFAS Region 3

Job ID: 810-6554-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
810-6554-1	10015 West St. WTP - Finished Water	Drinking Water	11/02/21 10:30	11/03/21 09:30	3105000
810-6554-2	20011 WM. Marshall Well - Raw Water	Drinking Water	11/02/21 10:20	11/03/21 09:30	3105000
810-6554-3	20012 Commissioners Well - Raw Water	Drinking Water	11/02/21 10:00	11/03/21 09:30	3105000
810-6554-4	20013 Duffy (RN. Marshall) Well - Raw Water	Drinking Water	11/02/21 10:10	11/03/21 09:30	3105000
810-6554-5	10015 Field Blank	Drinking Water	11/02/21 10:35	11/03/21 09:30	3105000

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South Bend, IN

110 S Hill Street
 South Bend, IN 46617
 Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record



810-6554 Chain of Custody

euromins Environment Testing America

Client Information		Sampler: <i>Martene Ladderbush</i>		Lab PM: Trowbridge, Nathan		No: 10-2624-851.1	
Client Contact: Mr. Rick Larson		Phone: <i>978 888 7931</i>		E-Mail: nathan.trowbridge@eurominset.com		Page: Page 1 of 1	
Company: University of Massachusetts		PWSID: <i>3105000</i>		Analysis Requested		Job #:	
Address: 224 Marston Hall		Due Date Requested:		Field Filtered Sample (Yes or No) MS/MSD (Yes or No) 537.1_DW_PREC - 537.1_PFC18		Total Number of containers	
City: Amherst		TAT Requested (days):					
State, Zip: MA, 01003		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Phone: 413-221-4776(Tel)		PO #: MAEQE5000PFASLABSERVCSBWR2020					
Email: rlarson@umass.edu		WO #:					
Project Name: Mass DEP / UMass PFAS Region 3		Project #: 81000214				Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
Site:		SSOW#:				Other:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Special Instructions/Note:	
				Preservation Code:			
10015WEST ST. WTP - FINISHED WATER		11/2/21	10:30	G	Drinking Water	X	
20011WM. MARSHALL WELL-RAW WATER		11/2/21	10:20	G	Drinking Water	X	
20012COMMISSIONERS WELL-RAW WATER		11/2/21	10:00	G	Drinking Water	X	
20013DUFFY (RN. MARSHALL) WELL-RAW WATE		11/2/21	10:10	G	Drinking Water	X	
10015 Field blank		11/2/21	10:35	G	Drinking Water	X	
20011 Field blank		11/2/21	10:20	G	Drinking Water	X	
20012 Field blank		11/2/21	10:05	G	Drinking Water	X	
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Deliverable Requested: I, II, III, IV, Other (specify)						<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Special Instructions/QC Requirements:							
Empty Kit Relinquished by: <i>Martene Ladderbush</i>		Date: 11/2/21		Time: 10:40am		Method of Shipment: FEDEX	
Relinquished by: <i>Martene Lh</i>		Date/Time: 11/2/21 10:40am		Company: GWD		Received by: _____	
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: _____	
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: <i>Riley J...</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <i>3.4</i>			





MASSDEP TASK ORDER FOR LABORATORY ASSISTANCE

PWS Sampling
Analysis: PFAS by EPA Method 537.1

Contract Laboratory:	Eurofins Eaton Analytical, 110 South Hill Street, South Bend, IN 46617-2702		
Lab phone # (Office and Cell) :	574-233-4777		
Lab Contact 1 Name & Email:	Nathan Trowbridge	NathanTrowbridge@eurofinsET.com	
Lab Contact 2 Name & Email:	Brian Remus	Brian.Remus@EurofinsET.com	
Lab Task Order#:	3105000-1		
MMARS Number:	MA-EQE-5000-PFASLABSERVCSBWR2020		
DEP Region:	NE		
DEP Regional Contact:	Amy LaPusata		
DEP Regional Contact Email:	amy.lapusata@mass.gov		
DEP Order Date:	10/4/2021		
UMass Contract Manager Approval:	Jaana Pietari		
UMass Contract Manager Email:	jpietari@ramboll.com		
Expedited Turn around Time	No		
Umass Technical Assistance Provider (TAP)	Larry Durkin		
TAP Email:	Durkineng@gmail.com		
TAP Phone:	978-578-1326		
PWS ID # :	3105000		

PWS Name and Official Town:	Georgetown Water Department	GEORGETOWN		
PWS Shipping Address	C/O Marlene Ladderbush Water Department,	1 Moulton St	GEORGETOWN, MA	01833
PWS Contact 1 & Contact 2 (PWS Owner)	Marlene Ladderbush (Utilities Director)	Jim Gallagher (Operations Manager)		
PWS Contact Email 1,2,3:	mladderbush@georgetownma.gov	jjgallagher@georgetownma.gov		
PWS Phone 1,2,3:	(978) 888-7931 (cell)	(978) 352-5750		

SAMPLE_LOC_CODE	Location Name	Raw or Finished (post treatment)?	Field Blank (Y/N)	# Bottles
**see below	Matrix Spike & Matrix Spike Duplicate	Sample from any of your sample locations for these bottles	No	4
10015	WEST ST. WTP - FINISHED WATER	F	Yes	4
20011	WM. MARSHALL WELL-RAW WATER	R	Yes	4
20012	COMMISSIONERS WELL-RAW WATER	R	Yes	4
20013	DUFFY (RN. MARSHALL) WELL-RAW WATER	R	No	2
Total samples of drinking water sources this order:		4	3	18

Instructions to Lab		Instructions to TAPS	Double Check Bottle Counts
1. A field blank must be included as part of EPA Method 537.1	amy.lapusata@mass.gov pfas-testing@umass.edu	Fill in all tan fields Check Field Blank locations with PWS	Bottles Sample 1 is a QA/QC sample required for analysis Please fill these four bottles with sample from one of your location codes, you may choose any sampling location IDENTIFY WHICH LOCATION CODE THESE SAMPLES ARE FOR BY WRITING THE LOCATION CODE IN THE RED BOXPLEASE WRITE CLEARLY
2. Email the complete laboratory report to:	jpietari@ramboll.com rlarson@umass.edu mladderbush@georgetownma.gov jjgallagher@georgetownma.gov	**QA/QC	
3. Invoice should be made out to: referencing the Lab Task Order # and MMARS numbers listed above	Ms Yvette DePeiza Massachusetts DEP MassDEP Drinking Water Program 1 Winter Street, 5th floor Boston, MA 02108	**QA/QC	
4. Email invoice to:	pfas-testing@umass.edu		

Login Sample Receipt Checklist

Client: University of Massachusetts

Job Number: 810-6554-1

Login Number: 6554

List Source: Eurofins Eaton Analytical - South Bend

List Number: 1

Creator: Trott, Riley

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	