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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
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Tel: (717)656-2300

Laboratory Job ID: 410-10439-1
Client Project/Site: PFAS Testing

For:
City of Delray Beach
200 SW 6th Street
Delray Beach, Florida 33444

Attn: Juan Manzano

Caroline Gorman

Authorized for release by:
8/26/2020 12:02:09 PM

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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 data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. 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.

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Caroline Gorman

Caroline Gorman
Project Manager
8/26/2020 12:02:09 PM

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Definitions/Glossary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

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.
¤	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

Job ID: 410-10439-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-10439-1

Comments
No additional comments.

Receipt
The samples were received on 8/12/2020 11:07 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

LCMS
Method 537 (modified): The following sample(s) were found to contain residual chlorine: FWPOE (410-10439-1).

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

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

Detection Summary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Client Sample ID: FWPOE — Lab Sample ID: 410-10439-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	9.8		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	6.7		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	16		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorononanoic acid	2.6		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorodecanoic acid	1.1	J	1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorobutanesulfonic acid	13		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	8.3		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	33		1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluoropentanesulfonic acid	1.3	J	1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluoroheptanesulfonic acid	0.65	J	1.7	0.43	ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	9.7		4.3	1.7	ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	11		1.7	0.43	ng/L	1		537 IDA	Total/NA

Client Sample ID: FRB — Lab Sample ID: 410-10439-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Client Sample ID: FWPOE

Date Collected: 08/11/20 13:32
Date Received: 08/12/20 11:07

Lab Sample ID: 410-10439-1

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**9.8**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluoroheptanoic acid	**6.7**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorooctanoic acid	**16**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorononanoic acid	**2.6**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorodecanoic acid	**1.1**	**J**	1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorotridecanoic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorotetradecanoic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorobutanesulfonic acid	**13**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorohexanesulfonic acid	**8.3**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorooctanesulfonic acid	**33**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
NEtFOSAA	ND		2.6	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
NMeFOSAA	ND		1.7	0.52	ng/L		08/13/20 09:44	08/14/20 04:45	1
10:2 FTS	ND		4.3	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluoropentanesulfonic acid	**1.3**	**J**	1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluoroheptanesulfonic acid	**0.65**	**J**	1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorononanesulfonic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorodecanesulfonic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.6	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorooctanesulfonamide	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorohexadecanoic acid	ND		2.6	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorooctadecanoic acid	ND		2.6	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorobutanoic acid	**9.7**		4.3	1.7	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluoropentanoic acid	**11**		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
NMeFOSE	ND		2.6	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
NMeFOSA	ND		2.6	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
NEtFOSE	ND		2.6	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
NEtFOSA	ND		4.3	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1
HFPODA	ND		2.6	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
DONA	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
9Cl-PF3ONS	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
11Cl-PF3OUdS	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluorododecanoic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
4:2 Fluorotelomer sulfonic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
Perfluoroundecanoic acid	ND		1.7	0.43	ng/L		08/13/20 09:44	08/14/20 04:45	1
6:2 Fluorotelomer sulfonic acid	ND		4.3	1.7	ng/L		08/13/20 09:44	08/14/20 04:45	1
8:2 Fluorotelomer sulfonic acid	ND		2.6	0.87	ng/L		08/13/20 09:44	08/14/20 04:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*134*		*20 - 187*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
M2-8:2 FTS	*102*		*34 - 182*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
M2-6:2 FTS	*128*		*29 - 189*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C5 PFHxA	*74*		*31 - 142*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C4 PFHpA	*77*		*30 - 144*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C8 PFOA	*79*		*49 - 127*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C9 PFNA	*83*		*47 - 136*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C6 PFDA	*75*		*47 - 128*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C7 PFUnA	*79*		*40 - 135*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C2-PFDoDA	*72*		*28 - 136*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C2 PFTeDA	*65*		*10 - 144*	*08/13/20 09:44*	*08/14/20 04:45*	*1*

Client Sample ID: FWPOE

Date Collected: 08/11/20 13:32
Date Received: 08/12/20 11:07

Lab Sample ID: 410-10439-1

Matrix: Water

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

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*121*		*19 - 178*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C3 PFHxS	*78*		*32 - 145*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C8 PFOS	*77*		*49 - 126*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
d3-NMeFOSAA	*83*		*32 - 151*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
d5-NEtFOSAA	*91*		*37 - 164*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C8 FOSA	*67*		*10 - 143*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C4 PFBA	*79*		*41 - 132*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C5 PFPeA	*116*		*33 - 155*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
d7-N-MeFOSE-M	*49*		*10 - 143*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
d3-NMePFOSA	*14*		*10 - 107*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
d9-N-EtFOSE-M	*46*		*10 - 142*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
d5-NEtPFOSA	*13*		*10 - 108*	*08/13/20 09:44*	*08/14/20 04:45*	*1*
13C3 HFPO-DA	*59*		*20 - 153*	*08/13/20 09:44*	*08/14/20 04:45*	*1*

Client Sample ID: FRB

Date Collected: 08/11/20 13:25
Date Received: 08/12/20 11:07

Lab Sample ID: 410-10439-2

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluoroheptanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorooctanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorononanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorodecanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorotridecanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorotetradecanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorobutanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorohexanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorooctanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
NEtFOSAA	ND		2.8	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
NMeFOSAA	ND		1.9	0.56	ng/L		08/13/20 09:44	08/14/20 04:55	1
10:2 FTS	ND		4.6	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluoropentanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluoroheptanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorononanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorodecanesulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.8	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorooctanesulfonamide	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorohexadecanoic acid	ND		2.8	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorooctadecanoic acid	ND		2.8	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorobutanoic acid	ND		4.6	1.9	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluoropentanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
NMeFOSE	ND		2.8	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
NMeFOSA	ND		2.8	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
NEtFOSE	ND		2.8	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
NEtFOSA	ND		4.6	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1
HFPODA	ND		2.8	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
DONA	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Client Sample ID: FRB
Date Collected: 08/11/20 13:25
Date Received: 08/12/20 11:07

Lab Sample ID: 410-10439-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9Cl-PF3ONS	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
11Cl-PF3OUdS	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluorododecanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
4:2 Fluorotelomer sulfonic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
Perfluoroundecanoic acid	ND		1.9	0.46	ng/L		08/13/20 09:44	08/14/20 04:55	1
6:2 Fluorotelomer sulfonic acid	ND		4.6	1.9	ng/L		08/13/20 09:44	08/14/20 04:55	1
8:2 Fluorotelomer sulfonic acid	ND		2.8	0.93	ng/L		08/13/20 09:44	08/14/20 04:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*98*		*20 - 187*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
M2-8:2 FTS	*102*		*34 - 182*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
M2-6:2 FTS	*106*		*29 - 189*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C5 PFHxA	*87*		*31 - 142*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C4 PFHpA	*82*		*30 - 144*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C8 PFOA	*89*		*49 - 127*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C9 PFNA	*91*		*47 - 136*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C6 PFDA	*82*		*47 - 128*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C7 PFUnA	*83*		*40 - 135*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C2-PFDoDA	*86*		*28 - 136*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C2 PFTeDA	*81*		*10 - 144*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C3 PFBS	*91*		*19 - 178*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C3 PFHxS	*85*		*32 - 145*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C8 PFOS	*88*		*49 - 126*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
d3-NMeFOSAA	*102*		*32 - 151*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
d5-NEtFOSAA	*102*		*37 - 164*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C8 FOSA	*87*		*10 - 143*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C4 PFBA	*86*		*41 - 132*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C5 PFPeA	*94*		*33 - 155*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
d7-N-MeFOSE-M	*81*		*10 - 143*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
d3-NMePFOSA	*53*		*10 - 107*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
d9-N-EtFOSE-M	*82*		*10 - 142*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
d5-NEtPFOSA	*54*		*10 - 108*	*08/13/20 09:44*	*08/14/20 04:55*	*1*
13C3 HFPO-DA	*81*		*20 - 153*	*08/13/20 09:44*	*08/14/20 04:55*	*1*

Isotope Dilution Summary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Method: 537 IDA - 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)
410-10439-1	FWPOE	134	102	128	74	77	79	83	75
410-10439-2	FRB	98	102	106	87	82	89	91	82
LCS 410-32797/2-A	Lab Control Sample	93	89	99	76	80	79	79	76
LCSD 410-32797/3-A	Lab Control Sample Dup	91	87	101	77	81	83	91	81
MB 410-32797/1-A	Method Blank	93	98	102	78	80	79	85	77

		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)
410-10439-1	FWPOE	79	72	65	121	78	77	83	91
410-10439-2	FRB	83	86	81	91	85	88	102	102
LCS 410-32797/2-A	Lab Control Sample	77	76	69	85	79	77	88	93
LCSD 410-32797/3-A	Lab Control Sample Dup	83	82	77	92	81	87	97	100
MB 410-32797/1-A	Method Blank	83	76	75	86	83	80	89	96

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFOSA	PFBA	PFPeA	NMFM	d3NMFSA	NEFM	d5NPFSA	HFPODA
Lab Sample ID	Client Sample ID	(10-143)	(41-132)	(33-155)	(10-143)	(10-107)	(10-142)	(10-108)	(20-153)
410-10439-1	FWPOE	67	79	116	49	14	46	13	59
410-10439-2	FRB	87	86	94	81	53	82	54	81
LCS 410-32797/2-A	Lab Control Sample	76	79	88	71	42	73	40	80
LCSD 410-32797/3-A	Lab Control Sample Dup	80	85	93	75	44	77	42	76
MB 410-32797/1-A	Method Blank	80	82	86	70	43	73	42	74

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
NMFM = d7-N-MeFOSE-M
d3NMFSA = d3-NMePFOSA
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
HFPODA = 13C3 HFPO-DA

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-32797/1-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluoroheptanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorooctanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorononanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorodecanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorotridecanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorotetradecanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorobutanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorohexanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorooctanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
NEtFOSAA	ND		3.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
NMeFOSAA	ND		2.0	0.60	ng/L		08/13/20 09:44	08/14/20 01:29	1
10:2 FTS	ND		5.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluoropentanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluoroheptanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorononanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorodecanesulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorooctanesulfonamide	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorohexadecanoic acid	ND		3.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorooctadecanoic acid	ND		3.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorobutanoic acid	ND		5.0	2.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluoropentanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
NMeFOSE	ND		3.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
NMeFOSA	ND		3.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
NEtFOSE	ND		3.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
NEtFOSA	ND		5.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
HFPODA	ND		3.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
DONA	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
9Cl-PF3ONS	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
11Cl-PF3OUdS	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluorododecanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
4:2 Fluorotelomer sulfonic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
Perfluoroundecanoic acid	ND		2.0	0.50	ng/L		08/13/20 09:44	08/14/20 01:29	1
6:2 Fluorotelomer sulfonic acid	ND		5.0	2.0	ng/L		08/13/20 09:44	08/14/20 01:29	1
8:2 Fluorotelomer sulfonic acid	ND		3.0	1.0	ng/L		08/13/20 09:44	08/14/20 01:29	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
M2-4:2 FTS	*93*		*20 - 187*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
M2-8:2 FTS	*98*		*34 - 182*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
M2-6:2 FTS	*102*		*29 - 189*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C5 PFHxA	*78*		*31 - 142*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C4 PFHpA	*80*		*30 - 144*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C8 PFOA	*79*		*49 - 127*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C9 PFNA	*85*		*47 - 136*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C6 PFDA	*77*		*47 - 128*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C7 PFUnA	*83*		*40 - 135*	*08/13/20 09:44*	*08/14/20 01:29*	*1*
13C2-PFDoDA	*76*		*28 - 136*	*08/13/20 09:44*	*08/14/20 01:29*	*1*

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

Lab Sample ID: MB 410-32797/1-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32797

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	75		10 - 144	08/13/20 09:44	08/14/20 01:29	1
13C3 PFBS	86		19 - 178	08/13/20 09:44	08/14/20 01:29	1
13C3 PFHxS	83		32 - 145	08/13/20 09:44	08/14/20 01:29	1
13C8 PFOS	80		49 - 126	08/13/20 09:44	08/14/20 01:29	1
d3-NMeFOSAA	89		32 - 151	08/13/20 09:44	08/14/20 01:29	1
d5-NEtFOSAA	96		37 - 164	08/13/20 09:44	08/14/20 01:29	1
13C8 FOSA	80		10 - 143	08/13/20 09:44	08/14/20 01:29	1
13C4 PFBA	82		41 - 132	08/13/20 09:44	08/14/20 01:29	1
13C5 PFPeA	86		33 - 155	08/13/20 09:44	08/14/20 01:29	1
d7-N-MeFOSE-M	70		10 - 143	08/13/20 09:44	08/14/20 01:29	1
d3-NMePFOSA	43		10 - 107	08/13/20 09:44	08/14/20 01:29	1
d9-N-EtFOSE-M	73		10 - 142	08/13/20 09:44	08/14/20 01:29	1
d5-NEtPFOSA	42		10 - 108	08/13/20 09:44	08/14/20 01:29	1
13C3 HFPO-DA	74		20 - 153	08/13/20 09:44	08/14/20 01:29	1

Lab Sample ID: LCS 410-32797/2-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid	25.6	27.2		ng/L		106	66 - 137
Perfluoroheptanoic acid	25.6	27.1		ng/L		106	66 - 141
Perfluorooctanoic acid	25.6	28.2		ng/L		110	65 - 136
Perfluorononanoic acid	25.6	27.7		ng/L		108	65 - 140
Perfluorodecanoic acid	25.6	26.8		ng/L		105	63 - 137
Perfluorotridecanoic acid	25.6	27.8		ng/L		108	58 - 146
Perfluorotetradecanoic acid	25.6	29.6		ng/L		115	64 - 141
Perfluorobutanesulfonic acid	22.6	22.9		ng/L		101	65 - 132
Perfluorohexanesulfonic acid	24.2	24.4		ng/L		101	60 - 128
Perfluorooctanesulfonic acid	24.5	22.6		ng/L		92	51 - 126
NEtFOSAA	25.6	27.1		ng/L		106	54 - 134
NMeFOSAA	25.6	28.1		ng/L		110	58 - 143
10:2 FTS	24.7	27.6		ng/L		112	44 - 141
Perfluoropentanesulfonic acid	24.0	27.0		ng/L		112	71 - 136
Perfluoroheptanesulfonic acid	24.4	27.4		ng/L		113	67 - 135
Perfluorononanesulfonic acid	24.6	27.6		ng/L		112	67 - 137
Perfluorodecanesulfonic acid	24.7	26.1		ng/L		106	61 - 134
Perfluorododecanesulfonic acid (PFDoS)	24.8	24.5		ng/L		99	54 - 136
Perfluorooctanesulfonamide	25.6	26.3		ng/L		103	55 - 130
Perfluorohexadecanoic acid	25.6	29.3		ng/L		114	52 - 149
Perfluorooctadecanoic acid	25.6	27.0		ng/L		105	32 - 167
Perfluorobutanoic acid	25.6	27.8		ng/L		109	62 - 156
Perfluoropentanoic acid	25.6	27.7		ng/L		108	72 - 139
NMeFOSE	25.6	24.7		ng/L		96	52 - 131
NMeFOSA	25.6	28.5		ng/L		111	49 - 141
NEtFOSE	25.6	25.6		ng/L		100	49 - 128
NEtFOSA	25.6	25.4		ng/L		99	50 - 136
HFPODA	25.6	22.5		ng/L		88	37 - 147

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

Lab Sample ID: LCS 410-32797/2-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DONA	24.1	24.1		ng/L		100	49 - 158
9Cl-PF3ONS	23.9	24.2		ng/L		102	52 - 135
11Cl-PF3OUdS	24.1	23.3		ng/L		96	45 - 134
Perfluorododecanoic acid	25.6	29.3		ng/L		115	63 - 140
4:2 Fluorotelomer sulfonic acid	23.9	25.6		ng/L		107	59 - 130
Perfluoroundecanoic acid	25.6	28.0		ng/L		110	62 - 138
6:2 Fluorotelomer sulfonic acid	24.3	26.7		ng/L		110	57 - 137
8:2 Fluorotelomer sulfonic acid	24.5	25.7		ng/L		105	56 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*93*		*20 - 187*
M2-8:2 FTS	*89*		*34 - 182*
M2-6:2 FTS	*99*		*29 - 189*
13C5 PFHxA	*76*		*31 - 142*
13C4 PFHpA	*80*		*30 - 144*
13C8 PFOA	*79*		*49 - 127*
13C9 PFNA	*79*		*47 - 136*
13C6 PFDA	*76*		*47 - 128*
13C7 PFUnA	*77*		*40 - 135*
13C2-PFDoDA	*76*		*28 - 136*
13C2 PFTeDA	*69*		*10 - 144*
13C3 PFBS	*85*		*19 - 178*
13C3 PFHxS	*79*		*32 - 145*
13C8 PFOS	*77*		*49 - 126*
d3-NMeFOSAA	*88*		*32 - 151*
d5-NEtFOSAA	*93*		*37 - 164*
13C8 FOSA	*76*		*10 - 143*
13C4 PFBA	*79*		*41 - 132*
13C5 PFPeA	*88*		*33 - 155*
d7-N-MeFOSE-M	*71*		*10 - 143*
d3-NMePFOSA	*42*		*10 - 107*
d9-N-EtFOSE-M	*73*		*10 - 142*
d5-NEtPFOSA	*40*		*10 - 108*
13C3 HFPO-DA	*80*		*20 - 153*

Lab Sample ID: LCSD 410-32797/3-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32797

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid	25.6	26.7		ng/L		104	66 - 137	2	30
Perfluoroheptanoic acid	25.6	26.1		ng/L		102	66 - 141	4	30
Perfluorooctanoic acid	25.6	26.3		ng/L		103	65 - 136	7	30
Perfluorononanoic acid	25.6	27.0		ng/L		106	65 - 140	3	30
Perfluorodecanoic acid	25.6	25.7		ng/L		100	63 - 137	4	30
Perfluorotridecanoic acid	25.6	28.5		ng/L		111	58 - 146	3	30
Perfluorotetradecanoic acid	25.6	27.1		ng/L		106	64 - 141	9	30
Perfluorobutanesulfonic acid	22.6	21.4		ng/L		94	65 - 132	7	30
Perfluorohexanesulfonic acid	24.2	22.5		ng/L		93	60 - 128	8	30

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

Lab Sample ID: LCSD 410-32797/3-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32797

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid			24.5	20.8		ng/L		85	51 - 126	8	30
NEtFOSAA			25.6	25.3		ng/L		99	54 - 134	7	30
NMeFOSAA			25.6	27.3		ng/L		106	58 - 143	3	30
10:2 FTS			24.7	31.8		ng/L		129	44 - 141	14	30
Perfluoropentanesulfonic acid			24.0	26.1		ng/L		109	71 - 136	3	30
Perfluoroheptanesulfonic acid			24.4	26.1		ng/L		107	67 - 135	5	30
Perfluorononanesulfonic acid			24.6	25.0		ng/L		102	67 - 137	10	30
Perfluorodecanesulfonic acid			24.7	24.3		ng/L		99	61 - 134	7	30
Perfluorododecanesulfonic acid (PFDoS)			24.8	23.6		ng/L		95	54 - 136	4	30
Perfluorooctanesulfonamide			25.6	25.2		ng/L		99	55 - 130	4	30
Perfluorohexadecanoic acid			25.6	27.9		ng/L		109	52 - 149	5	30
Perfluorooctadecanoic acid			25.6	26.9		ng/L		105	32 - 167	0	30
Perfluorobutanoic acid			25.6	26.2		ng/L		103	62 - 156	6	30
Perfluoropentanoic acid			25.6	26.1		ng/L		102	72 - 139	6	30
NMeFOSE			25.6	24.0		ng/L		94	52 - 131	3	30
NMeFOSA			25.6	26.5		ng/L		104	49 - 141	7	30
NEtFOSE			25.6	25.5		ng/L		99	49 - 128	0	30
NEtFOSA			25.6	24.3		ng/L		95	50 - 136	5	30
HFPODA			25.6	23.0		ng/L		90	37 - 147	2	30
DONA			24.1	23.3		ng/L		97	49 - 158	3	30
9Cl-PF3ONS			23.9	23.3		ng/L		98	52 - 135	4	30
11Cl-PF3OUdS			24.1	22.3		ng/L		92	45 - 134	4	30
Perfluorododecanoic acid			25.6	28.1		ng/L		110	63 - 140	4	30
4:2 Fluorotelomer sulfonic acid			23.9	23.6		ng/L		99	59 - 130	8	30
Perfluoroundecanoic acid			25.6	26.6		ng/L		104	62 - 138	5	30
6:2 Fluorotelomer sulfonic acid			24.3	25.8		ng/L		106	57 - 137	3	30
8:2 Fluorotelomer sulfonic acid			24.5	27.0		ng/L		110	56 - 140	5	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
M2-4:2 FTS	*91*		*20 - 187*
M2-8:2 FTS	*87*		*34 - 182*
M2-6:2 FTS	*101*		*29 - 189*
13C5 PFHxA	*77*		*31 - 142*
13C4 PFHpA	*81*		*30 - 144*
13C8 PFOA	*83*		*49 - 127*
13C9 PFNA	*91*		*47 - 136*
13C6 PFDA	*81*		*47 - 128*
13C7 PFUnA	*83*		*40 - 135*
13C2-PFDoDA	*82*		*28 - 136*
13C2 PFTeDA	*77*		*10 - 144*
13C3 PFBS	*92*		*19 - 178*
13C3 PFHxS	*81*		*32 - 145*
13C8 PFOS	*87*		*49 - 126*
d3-NMeFOSAA	*97*		*32 - 151*
d5-NEtFOSAA	*100*		*37 - 164*
13C8 FOSA	*80*		*10 - 143*
13C4 PFBA	*85*		*41 - 132*
13C5 PFPeA	*93*		*33 - 155*

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

Lab Sample ID: LCSD 410-32797/3-A
Matrix: Water
Analysis Batch: 32907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32797

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
d7-N-MeFOSE-M	75		10 - 143
d3-NMePFOSA	44		10 - 107
d9-N-EtFOSE-M	77		10 - 142
d5-NEtPFOSA	42		10 - 108
13C3 HFPO-DA	76		20 - 153

QC Association Summary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

LCMS

Prep Batch: 32797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-10439-1	FWPOE	Total/NA	Water	537 IDA	
410-10439-2	FRB	Total/NA	Water	537 IDA	
MB 410-32797/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-32797/2-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-32797/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Analysis Batch: 32907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-10439-1	FWPOE	Total/NA	Water	537 IDA	32797
410-10439-2	FRB	Total/NA	Water	537 IDA	32797
MB 410-32797/1-A	Method Blank	Total/NA	Water	537 IDA	32797
LCS 410-32797/2-A	Lab Control Sample	Total/NA	Water	537 IDA	32797
LCSD 410-32797/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	32797

Lab Chronicle

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Client Sample ID: FWPOE
Date Collected: 08/11/20 13:32
Date Received: 08/12/20 11:07

Lab Sample ID: 410-10439-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			32797	08/13/20 09:44	NF	ELLE
Total/NA	Analysis	537 IDA		1	32907	08/14/20 04:45	OLN7	ELLE

Client Sample ID: FRB
Date Collected: 08/11/20 13:25
Date Received: 08/12/20 11:07

Lab Sample ID: 410-10439-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			32797	08/13/20 09:44	NF	ELLE
Total/NA	Analysis	537 IDA		1	32907	08/14/20 04:55	OLN7	ELLE

Laboratory References:

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

Accreditation/Certification Summary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

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
Florida	NELAP	E87997	07-01-21

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
537 IDA	537 IDA	Water	10:2 FTS
537 IDA	537 IDA	Water	11Cl-PF3OUdS
537 IDA	537 IDA	Water	4:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	6:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	8:2 Fluorotelomer sulfonic acid
537 IDA	537 IDA	Water	9Cl-PF3ONS
537 IDA	537 IDA	Water	DONA
537 IDA	537 IDA	Water	HFPODA
537 IDA	537 IDA	Water	NEtFOSA
537 IDA	537 IDA	Water	NEtFOSAA
537 IDA	537 IDA	Water	NEtFOSE
537 IDA	537 IDA	Water	NMeFOSA
537 IDA	537 IDA	Water	NMeFOSAA
537 IDA	537 IDA	Water	NMeFOSE
537 IDA	537 IDA	Water	Perfluorobutanesulfonic acid
537 IDA	537 IDA	Water	Perfluorobutanoic acid
537 IDA	537 IDA	Water	Perfluorodecanesulfonic acid
537 IDA	537 IDA	Water	Perfluorodecanoic acid
537 IDA	537 IDA	Water	Perfluorododecanesulfonic acid (PFDoS)
537 IDA	537 IDA	Water	Perfluorododecanoic acid
537 IDA	537 IDA	Water	Perfluoroheptanesulfonic acid
537 IDA	537 IDA	Water	Perfluoroheptanoic acid
537 IDA	537 IDA	Water	Perfluorohexadecanoic acid
537 IDA	537 IDA	Water	Perfluorohexanesulfonic acid
537 IDA	537 IDA	Water	Perfluorohexanoic acid
537 IDA	537 IDA	Water	Perfluorononanesulfonic acid
537 IDA	537 IDA	Water	Perfluorononanoic acid
537 IDA	537 IDA	Water	Perfluorooctadecanoic acid
537 IDA	537 IDA	Water	Perfluorooctanesulfonamide
537 IDA	537 IDA	Water	Perfluorooctanesulfonic acid
537 IDA	537 IDA	Water	Perfluorooctanoic acid
537 IDA	537 IDA	Water	Perfluoropentanesulfonic acid
537 IDA	537 IDA	Water	Perfluoropentanoic acid
537 IDA	537 IDA	Water	Perfluorotetradecanoic acid
537 IDA	537 IDA	Water	Perfluorotridecanoic acid
537 IDA	537 IDA	Water	Perfluoroundecanoic acid

Method Summary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: City of Delray Beach
Project/Site: PFAS Testing

Job ID: 410-10439-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-10439-1	FWPOE	Water	08/11/20 13:32	08/12/20 11:07	
410-10439-2	FRB	Water	08/11/20 13:25	08/12/20 11:07	

Chain of Custody Record

410-10439 Chain of Custody

eurofins Environment Testing America

Client Information	Sampler: Juan Manzano/JMM	Lab PM: Gorman, Caroline M	Carrier Tracking No(s):	COC No: 410-8886-2443.1
Client Contact: Juan Manzano	Phone: 561-243-7272	E-Mail: carolinegorman@eurofinsus.com		Page: Page 1 of 1
Company: City of Delray Beach				Job #:
Address: 200 SW 6th Street	Due Date Requested:			
City: Delray Beach	TAT Requested (days):			
State, Zip: FL, 33444				
Phone: 561-243-7272(Tel)	PO #: 2020-0000150B Purchase Order not required			
Email: manzano@mydelraybeach.com	WO #:			
Project Name: PFAS Testing	Project #: 41003031			
Site: Waters treatment Plant CDB	SSOW#:			

Analysis Requested

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)

Other: G trizma

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 - 36 PFAS by 537	Total Number of containers	Special Instructions/Note:
			Preservation Code:				Z, I		
FW POE	8/11/20	13:32	G	Water	N		X	2	Preservation Z, I
FRB	8/11/20	13:25	G	water	N		X	2	" "

Possible Hazard Identification

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

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

☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/6/20 14:15		8/7/20 Juan Manzano	8/7/20 15:00	CDB
2	Juan Manzano	8/7/20 14:30	CDB			
3					8/12/20 1107	ELE

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.3

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: City of Delray Beach

Job Number: 410-10439-1

Login Number: 10439
List Number: 1
Creator: Rivera, Tatiana

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	