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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Erwin Kawata
City & County of Honolulu
630 South Beretania Street
Public Service Bldg. Room 310
Honolulu, Hawaii 96843

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JOB DESCRIPTION

INTERA - Red-Hill-Incident
PFAS 1633 - Site J

JOB NUMBER

380-119198-1

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona CA 91768-2642

See page two for job notes and contact information.

Eurofins Eaton Analytical Pomona

Job Notes

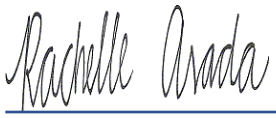
This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Compliance Statement

1. Laboratory is accredited in accordance with TNI 2016 Standards and ISO/IEC 17025:2017.
2. Laboratory certifies that the test results meet all TNI 2016 and ISO/IEC 17025:2017 requirements unless noted under the individual analysis
3. Test results relate only to the sample(s) tested.
4. This report shall not be reproduced except in full, without the written approval of the laboratory.
5. Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below. (DW,Water matrices)

Authorization



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Authorized for release by
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Table of Contents

Definitions/Glossary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Qualifiers

LCMS

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job Narrative
380-119198-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be 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.

Receipt
The sample was received on 10/24/2024 9:25 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C.

Receipt Exceptions
The following sample was received at the laboratory without a sample collection time documented on the chain of custody: BWS2253-J1-AQ (380-119198-1). The client was contacted, and the laboratory was instructed to use a sample collection time of 10/23/24 13:15

PFAS
Method 1633_DOD5: The sample duplicate (DUP) precision for preparation batch 320-810140 and analytical batch 320-810486 was outside control limits. Sample matrix interference is suspected.

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

Detection Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-119198-1

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Client Sample ID: BWS2253-J1-AQ
Date Collected: 10/23/24 13:15
Date Received: 10/24/24 09:25

Lab Sample ID: 380-119198-1
Matrix: Water

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoropentanoic acid (PFPeA)	<3.7		3.7		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorohexanoic acid (PFHxA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoroheptanoic acid (PFHpA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorooctanoic acid (PFOA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorononanoic acid (PFNA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorodecanoic acid (PFDA)	<3.0		3.0		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoroundecanoic acid (PFUnA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorododecanoic acid (PFDoA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorotridecanoic acid (PFTrDA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorotetradecanoic acid (PFTeDA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorobutanesulfonic acid (PFBS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoropentanesulfonic acid (PFPeS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorohexanesulfonic acid (PFHxS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorooctanesulfonic acid (PFOS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorononanesulfonic acid (PFNS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorodecanesulfonic acid (PFDS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorododecanesulfonic acid (PFDoS)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluorooctanesulfonamide (PFOSA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		1.9		ng/L		10/28/24 05:32	10/29/24 12:25	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<19		19		ng/L		10/28/24 05:32	10/29/24 12:25	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<19		19		ng/L		10/28/24 05:32	10/29/24 12:25	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<3.7		3.7		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<3.7		3.7		ng/L		10/28/24 05:32	10/29/24 12:25	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<3.7		3.7		ng/L		10/28/24 05:32	10/29/24 12:25	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1

Client Sample ID: BWS2253-J1-AQ

Date Collected: 10/23/24 13:15
Date Received: 10/24/24 09:25

Lab Sample ID: 380-119198-1

Matrix: Water

Method: EPA Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<7.4		7.4		ng/L		10/28/24 05:32	10/29/24 12:25	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<3.7		3.7		ng/L		10/28/24 05:32	10/29/24 12:25	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	<9.3		9.3		ng/L		10/28/24 05:32	10/29/24 12:25	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	<46		46		ng/L		10/28/24 05:32	10/29/24 12:25	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	<46		46		ng/L		10/28/24 05:32	10/29/24 12:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*5 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C5 PFPeA	*91.3*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C5 PFHxA	*103*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C4 PFHpA	*112*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C8 PFOA	*91.3*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C9 PFNA	*94.2*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C6 PFDA	*93.9*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C7 PFUnA	*93.6*		*30 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C2 PFDoA	*96.0*		*10 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C2 PFTeDA	*85.9*		*10 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C3 PFBS	*103*		*40 - 135*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C3 PFHxS	*102*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C8 PFOS	*88.9*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C8 PFOSA	*85.0*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
d3-NMeFOSAA	*101*		*40 - 170*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
d5-NEtFOSAA	*102*		*25 - 135*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C2 4:2 FTS	*103*		*40 - 200*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C2 6:2 FTS	*103*		*40 - 200*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C2 8:2 FTS	*101*		*40 - 300*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
13C3 HFPO-DA	*105*		*40 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
d7-N-MeFOSE-M	*73.2*		*10 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
d9-N-EtFOSE-M	*72.2*		*10 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
d5-NEtPFOSA	*74.2*		*10 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*
d3-NMePFOSA	*78.7*		*10 - 130*	*10/28/24 05:32*	*10/29/24 12:25*	*1*

Action Limit Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-119198-1

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits have been highlighted for your convenience.

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Perfluorooctanoic acid (PFOA)	<1.9		ng/L	4	1.9	Draft 1633	Total/NA
Perfluorononanoic acid (PFNA)	<1.9		ng/L	10	1.9	Draft 1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<1.9		ng/L	10	1.9	Draft 1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<1.9		ng/L	4	1.9	Draft 1633	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<7.4		ng/L	10	7.4	Draft 1633	Total/NA

Isotope Dilution Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

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

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (5-130)	PFPeA (40-130)	13C5PHA (40-130)	C4PFHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C6PFDA (40-130)	13C7PUA (30-130)
320-116473-B-2-A DU	Duplicate	92.4	85.8	89.5	101	109	100	97.3	110
380-118913-A-1-B MS	Matrix Spike	104	96.2	107	110	99.3	95.5	102	97.3
380-118913-A-1-C MSD	Matrix Spike Duplicate	104	95.0	101	109	109	92.5	91.8	91.9
380-119198-1	BWS2253-J1-AQ	102	91.3	103	112	91.3	94.2	93.9	93.6
LCS 320-810140/3-A	Lab Control Sample	105	99.5	103	113	98.7	93.5	100	99.0
LLCS 320-810140/2-A	Lab Control Sample	106	99.8	102	112	102	97.3		109
LLCS 320-810140/2-A - RA	Lab Control Sample							119	
MB 320-810140/1-A	Method Blank	110	110	119	122	109	108	111	110

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (10-130)	PFTDA (10-130)	C3PFBS (40-135)	C3PFHS (40-130)	C8PFOS (40-130)	PFOSA (40-130)	d3NMFOS (40-170)	d5NEFOS (25-135)
320-116473-B-2-A DU	Duplicate	109	66.6	110	102	93.9	74.3	66.9	75.1
380-118913-A-1-B MS	Matrix Spike	107	104	106	107	102	78.4	94.0	105
380-118913-A-1-C MSD	Matrix Spike Duplicate	89.4	89.7	106	102	102	85.4	88.6	99.4
380-119198-1	BWS2253-J1-AQ	96.0	85.9	103	102	88.9	85.0	101	102
LCS 320-810140/3-A	Lab Control Sample	109	84.4	101	103	105	82.7	107	105
LLCS 320-810140/2-A	Lab Control Sample	104	84.4	109	109	105	83.0	109	113
LLCS 320-810140/2-A - RA	Lab Control Sample	97.5							
MB 320-810140/1-A	Method Blank	112	94.7	109	110	105	90.6	113	101

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M242FTS (40-200)	M262FTS (40-200)	M282FTS (40-300)	HFPODA (40-130)	NMFM (10-130)	NEFM (10-130)	d5NPFSA (10-130)	d3NMFSA (10-130)
320-116473-B-2-A DU	Duplicate	131	133	159	87.8	53.3	47.5	54.5	53.8
380-118913-A-1-B MS	Matrix Spike	107	108	95.8	101	80.6	77.1	77.3	79.9
380-118913-A-1-C MSD	Matrix Spike Duplicate	93.4	97.9	91.7	106	71.8	67.8	71.5	75.1
380-119198-1	BWS2253-J1-AQ	103	103	101	105	73.2	72.2	74.2	78.7
LCS 320-810140/3-A	Lab Control Sample	106	109	101	102	82.8	82.1	81.1	74.8
LLCS 320-810140/2-A	Lab Control Sample	111	122	110	94.9		75.2	77.1	76.0
LLCS 320-810140/2-A - RA	Lab Control Sample					75.0			
MB 320-810140/1-A	Method Blank	115	121	104	115	89.4	86.1	84.9	83.8

Surrogate Legend

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

Isotope Dilution Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 320-810140/1-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 810140

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoropentanoic acid (PFPeA)	<4.0		4.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorodecanoic acid (PFDA)	<3.2		3.2		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorotetradecanoic acid (PFTeDA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorononanesulfonic acid (PFNS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorodecanesulfonic acid (PFDS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorododecanesulfonic acid (PFDoS)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluorooctanesulfonamide (PFOSA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<20		20		ng/L		10/28/24 05:32	10/29/24 06:56	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<20		20		ng/L		10/28/24 05:32	10/29/24 06:56	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<4.0		4.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<4.0		4.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<4.0		4.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-810140/1-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 810140

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<8.0		8.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<4.0		4.0		ng/L		10/28/24 05:32	10/29/24 06:56	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	<10		10		ng/L		10/28/24 05:32	10/29/24 06:56	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	<50		50		ng/L		10/28/24 05:32	10/29/24 06:56	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	<50		50		ng/L		10/28/24 05:32	10/29/24 06:56	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*110*		*5 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C5 PFPeA	*110*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C5 PFHxA	*119*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C4 PFHpA	*122*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C8 PFOA	*109*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C9 PFNA	*108*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C6 PFDA	*111*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C7 PFUnA	*110*		*30 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C2 PFDoA	*112*		*10 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C2 PFTeDA	*94.7*		*10 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C3 PFBS	*109*		*40 - 135*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C3 PFHxS	*110*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C8 PFOS	*105*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C8 PFOSA	*90.6*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
d3-NMeFOSAA	*113*		*40 - 170*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
d5-NEtFOSAA	*101*		*25 - 135*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C2 4:2 FTS	*115*		*40 - 200*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C2 6:2 FTS	*121*		*40 - 200*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C2 8:2 FTS	*104*		*40 - 300*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
13C3 HFPO-DA	*115*		*40 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
d7-N-MeFOSE-M	*89.4*		*10 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
d9-N-EtFOSE-M	*86.1*		*10 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
d5-NEtPFOSA	*84.9*		*10 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*
d3-NMePFOSA	*83.8*		*10 - 130*	*10/28/24 05:32*	*10/29/24 06:56*	*1*

Lab Sample ID: LCS 320-810140/3-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanoic acid (PFBA)			128	110		ng/L		86	70 - 140		
Perfluoropentanoic acid (PFPeA)			64.0	57.0		ng/L		89	65 - 135		
Perfluorohexanoic acid (PFHxA)			32.0	26.9		ng/L		84	70 - 145		
Perfluoroheptanoic acid (PFHpA)			32.0	26.2		ng/L		82	70 - 150		
Perfluorooctanoic acid (PFOA)			32.0	29.5		ng/L		92	70 - 150		
Perfluorononanoic acid (PFNA)			32.0	30.8		ng/L		96	70 - 150		
Perfluorodecanoic acid (PFDA)			32.0	27.9		ng/L		87	70 - 140		

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-810140/3-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	32.0	29.5		ng/L		92	70 - 145
Perfluorododecanoic acid (PFDoA)	32.0	25.9		ng/L		81	70 - 140
Perfluorotridecanoic acid (PFTrDA)	32.0	25.0		ng/L		78	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	32.0	31.2		ng/L		97	60 - 140
Perfluorobutanesulfonic acid (PFBS)	28.4	24.7		ng/L		87	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	30.1	27.7		ng/L		92	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	29.2	25.8		ng/L		89	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	30.5	27.8		ng/L		91	70 - 150
Perfluorooctanesulfonic acid (PFOS)	29.8	24.3		ng/L		82	55 - 150
Perfluorononanesulfonic acid (PFNS)	30.8	25.8		ng/L		84	65 - 145
Perfluorodecanesulfonic acid (PFDS)	30.8	25.8		ng/L		84	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	31.0	24.8		ng/L		80	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	107		ng/L		89	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	122	107		ng/L		88	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	123	112		ng/L		91	60 - 150
Perfluorooctanesulfonamide (PFOSA)	32.0	29.6		ng/L		92	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	32.0	26.9		ng/L		84	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	32.0	24.2		ng/L		76	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	32.0	26.0		ng/L		81	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	32.0	31.2		ng/L		97	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	320	232		ng/L		72	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	320	271		ng/L		85	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	128	113		ng/L		88	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	121	110		ng/L		91	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	64.0	53.8		ng/L		84	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	64.0	52.6		ng/L		82	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	64.0	50.5		ng/L		79	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	120	100		ng/L		84	70 - 155

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-810140/3-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	121	103		ng/L		85	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	57.1	52.1		ng/L		91	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	160	130		ng/L		81	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	799	711		ng/L		89	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	799	629		ng/L		79	50 - 145

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*105*		*5 - 130*
13C5 PFPeA	*99.5*		*40 - 130*
13C5 PFHxA	*103*		*40 - 130*
13C4 PFHpA	*113*		*40 - 130*
13C8 PFOA	*98.7*		*40 - 130*
13C9 PFNA	*93.5*		*40 - 130*
13C6 PFDA	*100*		*40 - 130*
13C7 PFUnA	*99.0*		*30 - 130*
13C2 PFDoA	*109*		*10 - 130*
13C2 PFTeDA	*84.4*		*10 - 130*
13C3 PFBS	*101*		*40 - 135*
13C3 PFHxS	*103*		*40 - 130*
13C8 PFOS	*105*		*40 - 130*
13C8 PFOSA	*82.7*		*40 - 130*
d3-NMeFOSAA	*107*		*40 - 170*
d5-NEtFOSAA	*105*		*25 - 135*
13C2 4:2 FTS	*106*		*40 - 200*
13C2 6:2 FTS	*109*		*40 - 200*
13C2 8:2 FTS	*101*		*40 - 300*
13C3 HFPO-DA	*102*		*40 - 130*
d7-N-MeFOSE-M	*82.8*		*10 - 130*
d9-N-EtFOSE-M	*82.1*		*10 - 130*
d5-NEtPFOSA	*81.1*		*10 - 130*
d3-NMePFOSA	*74.8*		*10 - 130*

Lab Sample ID: LLCS 320-810140/2-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	12.8	9.24		ng/L		72	70 - 140
Perfluoropentanoic acid (PFPeA)	6.40	4.79		ng/L		75	65 - 135
Perfluorohexanoic acid (PFHxA)	3.20	2.39		ng/L		75	70 - 145
Perfluoroheptanoic acid (PFHpA)	3.20	2.34		ng/L		73	70 - 150
Perfluorooctanoic acid (PFOA)	3.20	2.67		ng/L		83	70 - 150
Perfluorononanoic acid (PFNA)	3.20	3.03		ng/L		95	70 - 150
Perfluoroundecanoic acid (PFUnA)	3.20	2.67		ng/L		83	70 - 145

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-810140/2-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotridecanoic acid (PFTrDA)	3.20	2.40		ng/L		75	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	3.20	2.63		ng/L		82	60 - 140
Perfluorobutanesulfonic acid (PFBS)	2.84	2.22		ng/L		78	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.01	2.29		ng/L		76	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	2.92	2.49		ng/L		85	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.05	2.28		ng/L		75	70 - 150
Perfluorooctanesulfonic acid (PFOS)	2.98	2.60		ng/L		87	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.08	2.25		ng/L		73	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.08	2.07		ng/L		67	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.10	1.88	J	ng/L		61	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	12.0	9.00		ng/L		75	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	12.2	8.63		ng/L		71	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	12.3	8.75		ng/L		71	60 - 150
Perfluorooctanesulfonamide (PFOSA)	3.20	2.55		ng/L		80	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	3.20	2.41		ng/L		75	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	3.20	2.21		ng/L		69	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.20	2.20		ng/L		69	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.20	2.52		ng/L		79	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	32.0	24.8		ng/L		78	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	12.8	10.4		ng/L		81	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	12.1	9.68		ng/L		80	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	6.40	4.55		ng/L		71	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	6.40	4.66		ng/L		73	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	6.40	4.36		ng/L		68	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	12.0	9.06		ng/L		76	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	12.1	8.77		ng/L		73	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	5.71	4.42		ng/L		77	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	16.0	10.4		ng/L		65	65 - 130

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-810140/2-A
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
3-Perfluoropentylpropanoic acid (5:3 FTCA)			79.9	57.4		ng/L		72	70 - 135		
3-Perfluoroheptylpropanoic acid (7:3 FTCA)			79.9	55.4		ng/L		69	50 - 145		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*106*		*5 - 130*
13C5 PFPeA	*99.8*		*40 - 130*
13C5 PFHxA	*102*		*40 - 130*
13C4 PFHpA	*112*		*40 - 130*
13C8 PFOA	*102*		*40 - 130*
13C9 PFNA	*97.3*		*40 - 130*
13C7 PFUnA	*109*		*30 - 130*
13C2 PFDoA	*104*		*10 - 130*
13C2 PFTeDA	*84.4*		*10 - 130*
13C3 PFBS	*109*		*40 - 135*
13C3 PFHxS	*109*		*40 - 130*
13C8 PFOS	*105*		*40 - 130*
13C8 PFOSA	*83.0*		*40 - 130*
d3-NMeFOSAA	*109*		*40 - 170*
d5-NEtFOSAA	*113*		*25 - 135*
13C2 4:2 FTS	*111*		*40 - 200*
13C2 6:2 FTS	*122*		*40 - 200*
13C2 8:2 FTS	*110*		*40 - 300*
13C3 HFPO-DA	*94.9*		*40 - 130*
d9-N-EtFOSE-M	*75.2*		*10 - 130*
d5-NEtPFOSA	*77.1*		*10 - 130*
d3-NMePFOSA	*76.0*		*10 - 130*

Lab Sample ID: 380-118913-A-1-B MS
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanoic acid (PFBA)	<7.7		120	106		ng/L		88	70 - 140		
Perfluoropentanoic acid (PFPeA)	<3.8		60.2	57.0		ng/L		93	65 - 135		
Perfluorohexanoic acid (PFHxA)	<1.9		30.1	24.2		ng/L		78	70 - 145		
Perfluoroheptanoic acid (PFHpA)	<1.9		30.1	24.3		ng/L		79	70 - 150		
Perfluorooctanoic acid (PFOA)	<1.9		30.1	27.3		ng/L		87	70 - 150		
Perfluorononanoic acid (PFNA)	<1.9		30.1	28.1		ng/L		93	70 - 150		
Perfluorodecanoic acid (PFDA)	<3.1		30.1	25.6		ng/L		85	70 - 140		
Perfluoroundecanoic acid (PFUnA)	<1.9		30.1	28.8		ng/L		96	70 - 145		
Perfluorododecanoic acid (PFDoA)	<1.9		30.1	24.6		ng/L		82	70 - 140		
Perfluorotridecanoic acid (PFTrDA)	<1.9		30.1	24.2		ng/L		80	65 - 140		
Perfluorotetradecanoic acid (PFTeDA)	<1.9		30.1	24.2		ng/L		80	60 - 140		
Perfluorobutanesulfonic acid (PFBS)	<1.9		26.7	24.4		ng/L		91	60 - 145		

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-118913-A-1-B MS
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	<1.9		28.3	25.0		ng/L		88	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	<1.9		27.4	21.9		ng/L		75	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		28.7	26.1		ng/L		91	70 - 150
Perfluorooctanesulfonic acid (PFOS)	<1.9		28.0	23.3		ng/L		80	55 - 150
Perfluorononanesulfonic acid (PFNS)	<1.9		29.0	23.0		ng/L		79	65 - 145
Perfluorodecanesulfonic acid (PFDS)	<1.9		29.0	24.2		ng/L		83	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	<1.9		29.2	23.5		ng/L		81	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<7.7		113	98.1		ng/L		87	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<7.7		115	98.5		ng/L		86	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<7.7		116	110		ng/L		95	60 - 150
Perfluorooctanesulfonamide (PFOSA)	<1.9		30.1	26.0		ng/L		86	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	<1.9		30.1	27.2		ng/L		90	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<1.9		30.1	26.4		ng/L		88	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.9		30.1	25.8		ng/L		86	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		30.1	27.6		ng/L		92	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<19		301	269		ng/L		89	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<19		301	282		ng/L		94	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<7.7		120	117		ng/L		97	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<7.7		114	100		ng/L		88	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	<3.8		60.2	52.6		ng/L		87	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	<3.8		60.2	54.1		ng/L		90	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<3.8		60.2	43.2		ng/L		72	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<7.7		112	93.9		ng/L		83	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<7.7		114	95.1		ng/L		84	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<3.8		53.7	49.5		ng/L		92	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	<9.6		150	120		ng/L		80	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	<48		751	577		ng/L		77	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	<48		751	575		ng/L		76	50 - 145

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	104		5 - 130
13C5 PFPeA	96.2		40 - 130
13C5 PFHxA	107		40 - 130
13C4 PFHpA	110		40 - 130
13C8 PFOA	99.3		40 - 130
13C9 PFNA	95.5		40 - 130
13C6 PFDA	102		40 - 130
13C7 PFUnA	97.3		30 - 130
13C2 PFDoA	107		10 - 130
13C2 PFTeDA	104		10 - 130
13C3 PFBS	106		40 - 135
13C3 PFHxS	107		40 - 130
13C8 PFOS	102		40 - 130
13C8 PFOSA	78.4		40 - 130
d3-NMeFOSAA	94.0		40 - 170
d5-NEtFOSAA	105		25 - 135
13C2 4:2 FTS	107		40 - 200
13C2 6:2 FTS	108		40 - 200
13C2 8:2 FTS	95.8		40 - 300
13C3 HFPO-DA	101		40 - 130
d7-N-MeFOSE-M	80.6		10 - 130
d9-N-EtFOSE-M	77.1		10 - 130
d5-NEtPFOSA	77.3		10 - 130
d3-NMePFOSA	79.9		10 - 130

Lab Sample ID: 380-118913-A-1-C MSD
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	<7.7		123	106		ng/L		87	70 - 140	0	30
Perfluoropentanoic acid (PFPeA)	<3.8		61.3	56.2		ng/L		90	65 - 135	1	30
Perfluorohexanoic acid (PFHxA)	<1.9		30.6	26.5		ng/L		84	70 - 145	9	30
Perfluoroheptanoic acid (PFHpA)	<1.9		30.6	24.0		ng/L		77	70 - 150	1	30
Perfluorooctanoic acid (PFOA)	<1.9		30.6	27.6		ng/L		86	70 - 150	1	30
Perfluorononanoic acid (PFNA)	<1.9		30.6	28.9		ng/L		94	70 - 150	3	30
Perfluorodecanoic acid (PFDA)	<3.1		30.6	27.8		ng/L		91	70 - 140	8	30
Perfluoroundecanoic acid (PFUnA)	<1.9		30.6	30.2		ng/L		99	70 - 145	5	30
Perfluorododecanoic acid (PFDoA)	<1.9		30.6	26.3		ng/L		86	70 - 140	7	30
Perfluorotridecanoic acid (PFTrDA)	<1.9		30.6	25.7		ng/L		84	65 - 140	6	30
Perfluorotetradecanoic acid (PFTeDA)	<1.9		30.6	25.3		ng/L		82	60 - 140	4	30
Perfluorobutanesulfonic acid (PFBS)	<1.9		27.2	22.5		ng/L		83	60 - 145	8	30
Perfluoropentanesulfonic acid (PFPeS)	<1.9		28.8	25.5		ng/L		89	65 - 140	2	30
Perfluorohexanesulfonic acid (PFHxS)	<1.9		27.9	23.4		ng/L		79	65 - 145	7	30
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		29.2	26.4		ng/L		90	70 - 150	1	30

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-118913-A-1-C MSD
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	<1.9		28.5	24.6		ng/L		83	55 - 150	5	30
Perfluorononanesulfonic acid (PFNS)	<1.9		29.5	23.3		ng/L		79	65 - 145	1	30
Perfluorodecanesulfonic acid (PFDS)	<1.9		29.5	23.0		ng/L		78	60 - 145	5	30
Perfluorododecanesulfonic acid (PFDoS)	<1.9		29.7	21.5		ng/L		72	50 - 145	9	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<7.7		115	101		ng/L		88	70 - 145	2	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<7.7		117	105		ng/L		90	65 - 155	6	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<7.7		118	114		ng/L		97	60 - 150	3	30
Perfluorooctanesulfonamide (PFOSA)	<1.9		30.6	26.7		ng/L		87	70 - 145	3	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	<1.9		30.6	26.3		ng/L		86	60 - 150	3	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<1.9		30.6	26.6		ng/L		87	65 - 145	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.9		30.6	26.9		ng/L		88	50 - 140	4	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.9		30.6	26.8		ng/L		87	70 - 145	3	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<19		306	266		ng/L		87	70 - 145	1	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<19		306	283		ng/L		93	70 - 135	0	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<7.7		123	105		ng/L		85	70 - 140	11	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<7.7		116	98.9		ng/L		85	65 - 145	1	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<3.8		61.3	53.4		ng/L		87	55 - 140	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<3.8		61.3	52.2		ng/L		85	60 - 150	3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<3.8		61.3	48.8		ng/L		80	50 - 150	12	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<7.7		114	93.8		ng/L		82	70 - 155	0	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<7.7		116	85.7		ng/L		74	55 - 160	10	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<3.8		54.6	50.6		ng/L		93	70 - 140	2	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	<9.6		153	126		ng/L		82	65 - 130	5	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	<48		764	601		ng/L		79	70 - 135	4	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	<48		764	645		ng/L		84	50 - 145	12	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*104*		*5 - 130*
13C5 PFPeA	*95.0*		*40 - 130*
13C5 PFHxA	*101*		*40 - 130*

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-118913-A-1-C MSD
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 810140

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFHpA	109		40 - 130
13C8 PFOA	109		40 - 130
13C9 PFNA	92.5		40 - 130
13C6 PFDA	91.8		40 - 130
13C7 PFUnA	91.9		30 - 130
13C2 PFDoA	89.4		10 - 130
13C2 PFTeDA	89.7		10 - 130
13C3 PFBS	106		40 - 135
13C3 PFHxS	102		40 - 130
13C8 PFOS	102		40 - 130
13C8 PFOSA	85.4		40 - 130
d3-NMeFOSAA	88.6		40 - 170
d5-NEtFOSAA	99.4		25 - 135
13C2 4:2 FTS	93.4		40 - 200
13C2 6:2 FTS	97.9		40 - 200
13C2 8:2 FTS	91.7		40 - 300
13C3 HFPO-DA	106		40 - 130
d7-N-MeFOSE-M	71.8		10 - 130
d9-N-EtFOSE-M	67.8		10 - 130
d5-NEtPFOSA	71.5		10 - 130
d3-NMePFOSA	75.1		10 - 130

Lab Sample ID: 320-116473-B-2-A DU
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	170			179		ng/L				7	30
Perfluoropentanoic acid (PFPeA)	230			243		ng/L				3	30
Perfluorohexanoic acid (PFHxA)	240			273		ng/L				15	30
Perfluoroheptanoic acid (PFHpA)	120			148		ng/L				21	30
Perfluorooctanoic acid (PFOA)	220			243		ng/L				8	30
Perfluorononanoic acid (PFNA)	8.3			11.1		ng/L				28	30
Perfluorodecanoic acid (PFDA)	<3.2			<3.1		ng/L				NC	30
Perfluoroundecanoic acid (PFUnA)	<2.0			<1.9		ng/L				NC	30
Perfluorododecanoic acid (PFDoA)	<2.0			<1.9		ng/L				NC	30
Perfluorotridecanoic acid (PFTrDA)	<2.0			<1.9		ng/L				NC	30
Perfluorotetradecanoic acid (PFTeDA)	<2.0			<1.9		ng/L				NC	30
Perfluorobutanesulfonic acid (PFBS)	40			40.4		ng/L				1	30
Perfluoropentanesulfonic acid (PFPeS)	27			27.1		ng/L				0.3	30
Perfluoroheptanesulfonic acid (PFHpS)	3.2			4.36	F5	ng/L				32	30
Perfluorooctanesulfonic acid (PFOS)	76			92.7		ng/L				19	30

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 320-116473-B-2-A DU
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 810140

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Perfluorononanesulfonic acid (PFNS)	<2.0			<1.9		ng/L				NC	30
Perfluorodecanesulfonic acid (PFDS)	<2.0			<1.9		ng/L				NC	30
Perfluorododecanesulfonic acid (PFDoS)	<2.0			<1.9		ng/L				NC	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<7.9			<7.7		ng/L				NC	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<7.9			8.42		ng/L				NC	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<7.9			<7.7		ng/L				NC	30
Perfluorooctanesulfonamide (PFOSA)	<2.0			<1.9		ng/L				NC	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	<2.0			<1.9		ng/L				NC	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<2.0			<1.9		ng/L				NC	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0			<1.9		ng/L				NC	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0			<1.9		ng/L				NC	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<20			<19		ng/L				NC	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<20			<19		ng/L				NC	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<7.9			<7.7		ng/L				NC	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<7.9			<7.7		ng/L				NC	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<4.0			<3.9		ng/L				NC	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<4.0			<3.9		ng/L				NC	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<4.0			<3.9		ng/L				NC	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<7.9			<7.7		ng/L				NC	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<7.9			<7.7		ng/L				NC	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<4.0			<3.9		ng/L				NC	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	<9.9			<9.7		ng/L				NC	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	<50			<48		ng/L				NC	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	<50			<48		ng/L				NC	30

Isotope Dilution	*DU %Recovery*	*DU Qualifier*	*Limits*
13C4 PFBA	*92.4*		*5 - 130*
13C5 PFPeA	*85.8*		*40 - 130*
13C5 PFHxA	*89.5*		*40 - 130*
13C4 PFHpA	*101*		*40 - 130*
13C8 PFOA	*109*		*40 - 130*

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 320-116473-B-2-A DU
Matrix: Water
Analysis Batch: 810486

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 810140

Isotope Dilution	DU %Recovery	DU Qualifier	Limits
13C9 PFNA	100		40 - 130
13C6 PFDA	97.3		40 - 130
13C7 PFUnA	110		30 - 130
13C2 PFDoA	109		10 - 130
13C2 PFTeDA	66.6		10 - 130
13C3 PFBS	110		40 - 135
13C3 PFHxS	102		40 - 130
13C8 PFOS	93.9		40 - 130
13C8 PFOSA	74.3		40 - 130
d3-NMeFOSAA	66.9		40 - 170
d5-NEtFOSAA	75.1		25 - 135
13C2 4:2 FTS	131		40 - 200
13C2 6:2 FTS	133		40 - 200
13C2 8:2 FTS	159		40 - 300
13C3 HFPO-DA	87.8		40 - 130
d7-N-MeFOSE-M	53.3		10 - 130
d9-N-EtFOSE-M	47.5		10 - 130
d5-NEtPFOSA	54.5		10 - 130
d3-NMePFOSA	53.8		10 - 130

Method: Draft 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Lab Sample ID: LLCS 320-810140/2-A
Matrix: Water
Analysis Batch: 812198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 810140

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorodecanoic acid (PFDA) - RA			3.20	2.37	J	ng/L		74	70 - 140		
Perfluorododecanoic acid (PFDoA) - RA			3.20	2.73		ng/L		85	70 - 140		
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE) - RA			32.0	26.1		ng/L		82	70 - 145		

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C6 PFDA - RA	119		40 - 130
13C2 PFDoA - RA	97.5		10 - 130
d7-N-MeFOSE-M - RA	75.0		10 - 130

LCMS

Prep Batch: 810140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119198-1	BWS2253-J1-AQ	Total/NA	Water	1633	
MB 320-810140/1-A	Method Blank	Total/NA	Water	1633	
LCS 320-810140/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 320-810140/2-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 320-810140/2-A - RA	Lab Control Sample	Total/NA	Water	1633	
380-118913-A-1-B MS	Matrix Spike	Total/NA	Water	1633	
380-118913-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	1633	
320-116473-B-2-A DU	Duplicate	Total/NA	Water	1633	

Analysis Batch: 810486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119198-1	BWS2253-J1-AQ	Total/NA	Water	Draft 1633	810140
MB 320-810140/1-A	Method Blank	Total/NA	Water	Draft 1633	810140
LCS 320-810140/3-A	Lab Control Sample	Total/NA	Water	Draft 1633	810140
LLCS 320-810140/2-A	Lab Control Sample	Total/NA	Water	Draft 1633	810140
380-118913-A-1-B MS	Matrix Spike	Total/NA	Water	Draft 1633	810140
380-118913-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	Draft 1633	810140
320-116473-B-2-A DU	Duplicate	Total/NA	Water	Draft 1633	810140

Analysis Batch: 812198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 320-810140/2-A - RA	Lab Control Sample	Total/NA	Water	Draft 1633	810140

Lab Chronicle

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Client Sample ID: BWS2253-J1-AQ

Date Collected: 10/23/24 13:15
Date Received: 10/24/24 09:25

Lab Sample ID: 380-119198-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			810140	SJ	EET SAC	10/28/24 05:32
Total/NA	Analysis	Draft 1633		1	810486	RS1	EET SAC	10/29/24 12:25

Laboratory References:

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

Accreditation/Certification Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-27
ANAB	Dept. of Defense ELAP	L2468	01-20-27
ANAB	Dept. of Energy	L2468.01	11-05-24
ANAB	ISO/IEC 17025	L2468	01-20-27
Arizona	State	AZ0708	08-11-25
Arkansas DEQ	State	88-0691	05-18-25
California	State	2897	01-31-26
Colorado	State	CA00044	08-31-25
Florida	NELAP	E87570	06-30-25
Georgia	State	4040	01-29-25
Hawaii	State	Eurofins Sacramento	01-29-25
Illinois	NELAP	200060	03-31-25
Kansas	NELAP	E-10375	10-31-25
Louisiana	NELAP	01944	06-30-25
Louisiana (All)	NELAP	01944	06-30-25
Maine	State	CA00004	04-14-26
Michigan	State	9947	01-29-25
Minnesota	NELAP	2749448	12-31-24
Nevada	State	CA00044	07-31-25
New Hampshire	NELAP	2997	04-19-25
New Jersey	NELAP	CA005	06-30-25
New York	NELAP	11666	04-01-25
Ohio	State	41252	01-29-25
Oregon	NELAP	4040	01-29-25
Texas	NELAP	T104704399-23-17	05-31-25
US Fish & Wildlife	US Federal Programs	A22139	04-30-25
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-28-25
Virginia	NELAP	460278	03-14-25
Washington	State	C581	05-05-25
West Virginia (DW)	State	9930C	01-31-25
Wisconsin	State	998204680	08-31-25
Wyoming	State Program	8TMS-L	01-28-19 *

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

Method Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Method	Method Description	Protocol	Laboratory
Draft 1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET SAC
1633	Solid-Phase Extraction (SPE)	EPA	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-119198-1
SDG: PFAS 1633 - Site J

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-119198-1	BWS2253-J1-AQ	Water	10/23/24 13:15	10/24/24 09:25

Eurofins Pomona, CA
941 Corporate Center Drive
Pomona, CA 91768

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: N Mattner/J Joseph	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Mr Erwin Kawata	Phone: 858-205-0730	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street	Due Date Requested			
City: Honolulu	TAT Requested (days): Standard			
State, Zip: HI, 96843	Compliance Project: Δ Yes Δ No			
Phone: 808-748-5066(Tel)	PO #: C20525101 exp 05312023			
Email: ekawata@hbws.org	WO #:			
Project Name: HRS-340E - RED-HILL - INTERA	Project #: 38000861			
Site: Site J	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, Y - Trizma, Z - other (specify)
Other: Ammonium Acetate

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)	SUBCONTRACT - 625 - PAH Only - EEA	SUBCONTRACT - TPH 8015 D+M, JP5, JP8	8260B - (MOD) Super+Volatiles List	SUBCONTRACT - 8015 Gas	PFAS 533 - All Analytes	PFAS 537.1_DW_PREC537.1 Full list	PFAS 1633_DOD5_1633 Std List	Total Number of containers	Special Instructions/Note: x = testing comes from another container.
Preservation Code:					X	X	N	Q	A	A	Z	V	N		
BWS2253-J1-AQ			G	Water			2	2	4	4	3	3	2	20	
BWS2253-J1-TB			G	Water					2	2				4	
BWS2253-J1-FB			G	Water							1	1		2	
														0	
														4	
														8	

380-119198 COC

Subcontract Notes:
~~625 PAH - EEA Pom -> Ship to Calscience~~
~~8015 TPH D+M, JP5, JP8 - EEA Pom~~
~~8015 Gas - EEA Pom~~
~~8260B - EEA POM~~
~~PFAS 537.1 & 533 - EEA POM~~
PFAS 1633 - EEA SAC
Bill and Report to EEA - Pomona

Possible Hazard Identification
X 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 X 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: FEDEX Priority Overnight		
Relinquished by: Natalie Mattner	Date/Time: 10/23/2024 1430	Company: INTERA Inc	Received by:	Date/Time: 10/24 905	Company: EEA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: B.Gu

Ver 01/16/2019

Bottle Order Information

Bottle Order: INTERA - Site J (EEA_Sac-1633)
Bottle Order #. 7757
Request From Client: 10/1/2024
Date Order Posted. 3/22/2023 4:57:00PM
Order Status: Ready To Process
Prepared By: Michelle Do
Deliver By Date: ***10/7/2024 11:59:00PM***
Lab Project Number: 38000861
PWSID:

Order Completion Information

Creator: Rachelle Arada
Filled by:
Sent Date:
Sent Via:
Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
1	2	2	Plastic 500ml - unpreserved	None	1633_DOD5 - EPA Method 1633 Std List	Water	Normal	1633	

Total Bottle Summary

Bottle Type Description	Preservative	Bottle Count
Normal		**2**
Plastic 500ml - unpreserved	None	2
	Total Bottles:	**2**

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:
Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Arada, Rachelle	Carrier Tracking No(s): N/A	COC No: 380-164461 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Northern Ca		Accreditations Required (See note): State - Hawaii		Job #: 380-119198-1
Address: 880 Riverside Parkway ,	Due Date Requested: 11/6/2024			Preservation Codes: -
City: West Sacramento	TAT Requested (days): N/A			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: INTERA - Red-Hill-Incident	Project #: 38000861			
Site: Honolulu BWS Sites	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	1633_DOD5/1633_SPE EPA Method 1633 Std List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
BWS2253-J1-AQ (380-119198-1)	10/23/24	13 15 Hawaiian	G	Water			X	2	

Note: Since laboratory accreditations are subject to change Eurofins Eaton Analytical LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Eaton Analytical LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Eaton Analytical LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Pomona, CA
941 Corporate Center Drive
Pomona, CA 91768

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: N Mattner/J Joseph	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Mr Erwin Kawata	Phone: 858-205-0730	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street	Due Date Requested			
City: Honolulu	TAT Requested (days): Standard			
State, Zip: HI, 96843	Compliance Project: Δ Yes Δ No			
Phone: 808-748-5066(Tel)	PO #: C20525101 exp 05312023			
Email: ekawata@hbws.org	WO #:			
Project Name: HRS-340E - RED-HILL - INTERA	Project #: 38000861			
Site: Site J	SSOW#:			

Analysis Requested

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)	SUBCONTRACT - 625 - PAH Only - EEA	SUBCONTRACT - TPH 8015 D+M, JP5, JP8	8260B - (MOD) Super+Volatiles List	SUBCONTRACT - 8015 Gas	PFAS 533 - All Analytes	PFAS 537.1 - DW_PREC 3537 Full List	PFAS 1633_DOD5_1633 Std List	Total Number of containers
Preservation Code:					X	X	N	Q	A	A	Z	Y	N	
BWS2253-J1-AQ	10/23/24	1315	G	Water			2	2	4	4	3	3	2	20
BWS2253-J1-TB			G	Water					2	2				4
BWS2253-J1-FB			G	Water							1	1		2
														0
														4
														8

380-119198 COC

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, Y - Trizma, Z - other (specify)
Other: Ammonium Acetate

Special Instructions/Note:
x = testing comes from another container.

Subcontract Notes:
~~625 PAH - EEA Pom -> Ship to Calscience~~
~~8015 TPH D+M, JP5, JP8 - EEA Pom~~
~~8015 Gas - EEA Pom~~
~~8260B - EEA POM~~
~~PFAS 537.1 & 533 - EEA POM~~
PFAS 1633 - EEA SAC
Bill and Report to EEA - Pomona

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: FEDEX Priority Overnight	
Relinquished by: Natalie Mattner	Date/Time: 10/23/2024 1430	Company: INTERA Inc	Received by:	Date/Time: 10/24 925
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: B.Gu

Ver 01/16/2019

Bottle Order Information

Bottle Order: INTERA - Site J (EEA_Sac-1633)
Bottle Order #. 7757
Request From Client: 10/1/2024
Date Order Posted. 3/22/2023 4:57:00PM
Order Status: Ready To Process
Prepared By: Michelle Do
Deliver By Date: ***10/7/2024 11:59:00PM***
Lab Project Number: 38000861
PWSID:

Order Completion Information

Creator: Rachelle Arada
Filled by:
Sent Date:
Sent Via:
Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
1	2	2	Plastic 500ml - unpreserved	None	1633_DOD5 - EPA Method 1633 Std List	Water	Normal	1633	

Total Bottle Summary

Bottle Type Description	Preservative	Bottle Count
Normal		**2**
Plastic 500ml - unpreserved	None	2
	Total Bottles:	**2**

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:
Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Arada, Rachelle	Carrier Tracking No(s): N/A	COC No: 380-164461 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Northern Ca		Accreditations Required (See note): State - Hawaii		Job #: 380-119198-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 11/6/2024			Preservation Codes: -
City: West Sacramento	TAT Requested (days): N/A			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: INTERA - Red-Hill-Incident	Project #: 38000861			
Site: Honolulu BWS Sites	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	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)	1633_DOD5/1633_SPE EPA Method 1633 Std List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
BWS2253-J1-AQ (380-119198-1)	10/23/24	13:15 Hawaiian	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification: Unconfirmed	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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				10/24/24 0925	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 0.9

Ver: 10/10/2024

11/6/2024

Eurofins Pomona, CA
941 Corporate Center Drive
Pomona CA 91768

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: N Mattner/J Joseph	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Mr Erwin Kawata	Phone: 858-205-0730	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street	Due Date Requested			
City: Honolulu	TAT Requested (days): Standard			
State, Zip: HI 96843	Compliance Project: Δ Yes Δ No			
Phone: 808-748-5066(Tel)	PO #: C20525101 exp 05312023			
Email: ekawata@hbws org	WO #:			
Project Name: HRS-340E - RED-HILL - INTERA	Project #: 38000861			
Site: Site J	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, Y Trizma, Z other (specify)
Other: Ammonium Acetate

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)	~~SUBCONTRACT - 625 - PAH Only + TICs~~	~~SUBCONTRACT - TPH 8015 D+M, JP5, JP8~~	~~8260B - (MOD) Super Volatiles List~~	~~SUBCONTRACT - 8015 Gas~~	~~PFAS 633 - All Analytes~~	~~PFAS 537.1 DW_PREC 537.1 Full List~~	PFAS 1633_DOD5_1633 Std List						Total Number of containers	Special Instructions/Note. x = testing comes from another container.
			Preservation Code.				N	Q	A	A	Z	Y	N							
BWS2253-J1-AQ			G	Water			2	2	4	4	3	3	2						20	
BWS2253-J1-TB			G	Water					2	2									4	
BWS2253-J1-FB			G	Water							1	1							2	
																			0	
																			4	
																			8	

Subcontract Notes
~~625 PAH - EEA Pom -> Ship to Calscience~~
~~8015 TPH-D+M, JP5, JP8 - EEA Pom~~
~~8015 Gas - EEA Pom~~
~~8260B - EEA POM~~
~~PFAS 537.1 & 533 - EEA POM~~
PFAS 1633 - EEA SAC
Bill and Report to EEA Pomona

380-119198 Chain of Custody

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: FEDEX Priority Overnight

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Natalie Mattner	10/23/2024 1430	INTERA Inc		10.24.24 905	[illegible]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks: 0.6c

Ver: 01/16/2019

eurofins | Environment Testing

Sacramento Sample Receiving Notes (SSRN)

Job _____ 380-119198 Field Sheet

Tracking # 281000991684

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations
File in the job folder with the COC

Therm ID G11 Corr Factor (+ / -) NA °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal —

Cooler ID —

Temp Observed 0.9 °C Corrected 0.9 °C

From Temp Blank ☐ Sandwich ☑ Sidewall ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials KT Date 10.24.24

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☐	☑	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☑	☐	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials SO Date 10/24/24

Notes:
Date 10/23/24
Time 1318

Trizma Lot #(s) _____

Ammonium Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials SO Date 10/24/24

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-119198-1
SDG Number: PFAS 1633 - Site J

Login Number: 119198
List Number: 1
Creator: Sanchez Velasquez, Gustavo

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The coolers custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler(s) Temperature is acceptable.	True	
Cooler(s) Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and is legible.	True	
COC is filled out with all pertinent information.	False	No sample date and/or time on COC, logged in per container labels.
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.	False	No date or time on COC, logged in per container labels.
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	
ClO4 headspace requirement met (>50% for CA, >30% for other states).	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-119198-1
SDG Number: PFAS 1633 - Site J

Login Number: 119198
List Number: 2
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento
List Creation: 10/24/24 02:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	