

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

INTERA - Red-Hill-Incident
Site H

JOB NUMBER

380-173324-1

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



Authorized for release by
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Definitions/Glossary

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

Job ID: 380-173324-1
SDG: Site H

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

Case Narrative

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

Job ID: 380-173324-1

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Job Narrative 380-173324-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/24/2025 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

PFAS

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: 380-173324-1
SDG: Site H

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-173324-1

No Detections.

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-173324-2

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-173324-1

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	84		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C6 PFDA	77		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C5 PFHxA	96		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C4 PFHpA	95		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C8 PFOA	91		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C9 PFNA	88		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C7 PFUnA	70		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C2 PFDoA	66		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C4 PFBA	106		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C5 PFPeA	117		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C3 PFBS	116		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C3 PFHxS	117		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C8 PFOS	112		50 - 200	09/25/25 18:00	09/26/25 13:15	1

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Client Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-173324-1

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-4:2-FTS	142		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C2-6:2-FTS	132		50 - 200	09/25/25 18:00	09/26/25 13:15	1
13C2-8:2-FTS	108		50 - 200	09/25/25 18:00	09/26/25 13:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130	09/25/25 18:44	09/26/25 14:43	1
13C2 PFHxA	111		70 - 130	09/25/25 18:44	09/26/25 14:43	1
13C2 PFDA	111		70 - 130	09/25/25 18:44	09/26/25 14:43	1
13C3-GenX	104		70 - 130	09/25/25 18:44	09/26/25 14:43	1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-173324-2

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1

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Client Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-173324-2

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		09/25/25 18:00	09/26/25 13:26	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C6 PFDA	109		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C5 PFHxA	108		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C4 PFHpA	108		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C8 PFOA	112		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C9 PFNA	113		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C7 PFUnA	109		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C2 PFDoA	106		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C4 PFBA	115		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C5 PFPeA	115		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C3 PFBS	118		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C3 PFHxS	115		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C8 PFOS	113		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C2-4:2-FTS	130		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C2-6:2-FTS	116		50 - 200	09/25/25 18:00	09/26/25 13:26	1
13C2-8:2-FTS	104		50 - 200	09/25/25 18:00	09/26/25 13:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-173324-2

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		09/25/25 18:44	09/26/25 14:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130			09/25/25 18:44	09/26/25 14:53	1
13C2 PFHxA	103		70 - 130			09/25/25 18:44	09/26/25 14:53	1
13C2 PFDA	107		70 - 130			09/25/25 18:44	09/26/25 14:53	1
13C3-GenX	95		70 - 130			09/25/25 18:44	09/26/25 14:53	1

Action Limit Summary

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

Job ID: 380-173324-1
 SDG: Site H

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-173324-1

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	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-173324-2

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	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Surrogate Summary

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

Job ID: 380-173324-1
 SDG: Site H

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-173254-B-2-A MS	Matrix Spike	106	113	111	105
380-173254-C-2-A MSD	Matrix Spike Duplicate	110	112	110	103
380-173324-1	BWS2253-H1-AQ	105	111	111	104
380-173324-2	BWS2253-H1-FB	105	103	107	95
LCS 380-176372/22-A	Lab Control Sample	102	105	107	101
MBL 380-176372/20-A	Method Blank	109	108	109	104
MRL 380-176372/21-A	Lab Control Sample	101	101	109	93

Surrogate Legend

d5NEFOS = d5-NEtFOSAA
 PFHxA = 13C2 PFHxA
 PFDA = 13C2 PFDA
 GenX = 13C3-GenX



Isotope Dilution Summary

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDoA (50-200)
380-173256-B-1-A MSD	Matrix Spike Duplicate	102	106	104	104	108	107	106	100
380-173256-C-1-A MS	Matrix Spike	111	113	112	114	116	118	114	107
380-173324-1	BWS2253-H1-AQ	84	77	96	95	91	88	70	66
380-173324-2	BWS2253-H1-FB	96	109	108	108	112	113	109	106
LCS 380-176346/22-A	Lab Control Sample	98	105	103	103	105	104	106	98
MBL 380-176346/20-A	Method Blank	102	108	108	108	110	110	108	105
MRL 380-176346/21-A	Lab Control Sample	94	102	104	100	102	103	100	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-173256-B-1-A MSD	Matrix Spike Duplicate	105	110	112	109	109	118	118	106
380-173256-C-1-A MS	Matrix Spike	116	121	117	117	113	128	120	115
380-173324-1	BWS2253-H1-AQ	106	117	116	117	112	142	132	108
380-173324-2	BWS2253-H1-FB	115	115	118	115	113	130	116	104
LCS 380-176346/22-A	Lab Control Sample	104	106	106	108	108	121	114	103
MBL 380-176346/20-A	Method Blank	113	110	114	115	112	127	120	112
MRL 380-176346/21-A	Lab Control Sample	106	106	109	109	105	122	114	104

Surrogate Legend

- HFPODA = 13C3 HFPO-DA
- C6PFDA = 13C6 PFDA
- 13C5PHA = 13C5 PFHxA
- C4PFHA = 13C4 PFHpA
- C8PFOA = 13C8 PFOA
- C9PFNA = 13C9 PFNA
- 13C7PUA = 13C7 PFUnA
- PFDoA = 13C2 PFDoA
- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- C3PFBS = 13C3 PFBS
- C3PFHS = 13C3 PFHxS
- C8PFOS = 13C8 PFOS
- 42FTS = 13C2-4:2-FTS
- 62FTS = 13C2-6:2-FTS
- 82FTS = 13C2-8:2-FTS

QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Lab Sample ID: MBL 380-176346/20-A
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176346

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		09/25/25 18:00	09/26/25 09:08	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C6 PFDA	108		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C5 PFHxA	108		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C4 PFHpA	108		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C8 PFOA	110		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C9 PFNA	110		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C7 PFUnA	108		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C2 PFDoA	105		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C4 PFBA	113		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C5 PFPeA	110		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C3 PFBS	114		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C3 PFHxS	115		50 - 200	09/25/25 18:00	09/26/25 09:08	1

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QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: MBL 380-176346/20-A
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176346

<i>Isotope Dilution</i>	<i>MBL %Recovery</i>	<i>MBL Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 PFOS	112		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C2-4:2-FTS	127		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C2-6:2-FTS	120		50 - 200	09/25/25 18:00	09/26/25 09:08	1
13C2-8:2-FTS	112		50 - 200	09/25/25 18:00	09/26/25 09:08	1

Lab Sample ID: LCS 380-176346/22-A
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176346

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.1	55.4		ng/L		92	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	57.6		ng/L		96	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.1	61.1		ng/L		102	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	59.1		ng/L		98	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	62.1		ng/L		103	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	58.4		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	60.3		ng/L		100	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	59.3		ng/L		99	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	60.2		ng/L		100	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	60.8		ng/L		101	70 - 130
Perfluorononanoic acid (PFNA)	60.1	57.7		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	58.7		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	58.5		ng/L		97	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	55.7		ng/L		93	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	59.6		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	57.7		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	58.9		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	57.0		ng/L		95	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.1	57.8		ng/L		96	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.1	59.5		ng/L		99	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	56.9		ng/L		95	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	58.8		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	56.3		ng/L		94	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	58.1		ng/L		97	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: LCS 380-176346/22-A
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176346

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	58.0		ng/L		96	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	98		50 - 200				
13C6 PFDA	105		50 - 200				
13C5 PFHxA	103		50 - 200				
13C4 PFHpA	103		50 - 200				
13C8 PFOA	105		50 - 200				
13C9 PFNA	104		50 - 200				
13C7 PFUnA	106		50 - 200				
13C2 PFDoA	98		50 - 200				
13C4 PFBA	104		50 - 200				
13C5 PFPeA	106		50 - 200				
13C3 PFBS	106		50 - 200				
13C3 PFHxS	108		50 - 200				
13C8 PFOS	108		50 - 200				
13C2-4:2-FTS	121		50 - 200				
13C2-6:2-FTS	114		50 - 200				
13C2-8:2-FTS	103		50 - 200				

Lab Sample ID: MRL 380-176346/21-A
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176346

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.89	J	ng/L		94	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.01	J	ng/L		100	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.11	J	ng/L		105	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.13	J	ng/L		106	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.93	J	ng/L		96	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	1.94	J	ng/L		96	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.22	J	ng/L		110	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.12	J	ng/L		106	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.21	J	ng/L		110	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.13	J	ng/L		106	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.14	J	ng/L		106	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.12	J	ng/L		105	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: MRL 380-176346/21-A
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176346

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.26	J	ng/L		112	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.28	J	ng/L		113	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.10	J	ng/L		104	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	1.98	J	ng/L		98	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	2.04	J	ng/L		101	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	2.06	J	ng/L		102	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.05	J	ng/L		102	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	2.10	J	ng/L		104	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	2.00	J	ng/L		100	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	94		50 - 200
13C6 PFDA	102		50 - 200
13C5 PFHxA	104		50 - 200
13C4 PFHpA	100		50 - 200
13C8 PFOA	102		50 - 200
13C9 PFNA	103		50 - 200
13C7 PFUnA	100		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	106		50 - 200
13C5 PFPeA	106		50 - 200
13C3 PFBS	109		50 - 200
13C3 PFHxS	109		50 - 200
13C8 PFOS	105		50 - 200
13C2-4:2-FTS	122		50 - 200
13C2-6:2-FTS	114		50 - 200
13C2-8:2-FTS	104		50 - 200

Lab Sample ID: 380-173256-B-1-A MSD
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 176346

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	56.3		ng/L		94	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	58.1		ng/L		96	70 - 130	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	62.9		ng/L		104	70 - 130	2	30

QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: 380-173256-B-1-A MSD
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 176346

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide	<2.0		60.2	60.9		ng/L		101	70 - 130	2	30
Dimer Acid (HFPO-DA/GenX)											
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	59.7		ng/L		99	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		60.2	58.9		ng/L		98	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	60.1		ng/L		100	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	63.5		ng/L		105	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	62.5		ng/L		104	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	60.8		ng/L		101	70 - 130	2	30
Perfluorononanoic acid (PFNA)	<2.0		60.2	57.6		ng/L		96	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	59.9		ng/L		99	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	<2.0		60.2	57.7		ng/L		96	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	55.3		ng/L		92	70 - 130	4	30
Perfluorobutanoic acid (PFBA)	<2.0		60.2	59.7		ng/L		99	70 - 130	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	58.7		ng/L		97	70 - 130	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	59.3		ng/L		98	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	58.0		ng/L		96	70 - 130	7	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	60.9		ng/L		101	70 - 130	0	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.2	56.8		ng/L		94	70 - 130	4	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	59.2		ng/L		98	70 - 130	1	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	57.8		ng/L		96	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	59.5		ng/L		99	70 - 130	3	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	57.6		ng/L		96	70 - 130	4	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	58.7		ng/L		97	70 - 130	1	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C3 HFPO-DA	102		50 - 200
13C6 PFDA	106		50 - 200
13C5 PFHxA	104		50 - 200
13C4 PFHpA	104		50 - 200
13C8 PFOA	108		50 - 200
13C9 PFNA	107		50 - 200
13C7 PFUnA	106		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	110		50 - 200
13C3 PFBS	112		50 - 200
13C3 PFHxS	109		50 - 200
13C8 PFOS	109		50 - 200

QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: 380-173256-B-1-A MSD
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 176346

<i>Isotope Dilution</i>	<i>MSD %Recovery</i>	<i>MSD Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	118		50 - 200
13C2-6:2-FTS	118		50 - 200
13C2-8:2-FTS	106		50 - 200

Lab Sample ID: 380-173256-C-1-A MS
Matrix: Water
Analysis Batch: 176454

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 176346

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	57.2		ng/L		95	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	60.2		ng/L		100	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	61.7		ng/L		102	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.2	59.6		ng/L		99	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	61.6		ng/L		102	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.2	58.5		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	60.1		ng/L		100	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	62.5		ng/L		104	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	61.7		ng/L		102	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	61.9		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.2	58.0		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	61.0		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.2	60.8		ng/L		101	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	57.6		ng/L		96	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.2	59.0		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	59.2		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	60.1		ng/L		100	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	62.4		ng/L		104	70 - 130
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	60.7		ng/L		101	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.2	59.3		ng/L		98	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	59.9		ng/L		99	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	56.9		ng/L		94	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	57.8		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	60.0		ng/L		100	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	58.2		ng/L		97	70 - 130

QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

<i>Isotope Dilution</i>	<i>MS MS</i>	<i>Qualifier</i>	<i>Limits</i>
<i>%Recovery</i>			
13C3 HFPO-DA	111		50 - 200
13C6 PFDA	113		50 - 200
13C5 PFHxA	112		50 - 200
13C4 PFHpA	114		50 - 200
13C8 PFOA	116		50 - 200
13C9 PFNA	118		50 - 200
13C7 PFUnA	114		50 - 200
13C2 PFDoA	107		50 - 200
13C4 PFBA	116		50 - 200
13C5 PFPeA	121		50 - 200
13C3 PFBS	117		50 - 200
13C3 PFHxS	117		50 - 200
13C8 PFOS	113		50 - 200
13C2-4:2-FTS	128		50 - 200
13C2-6:2-FTS	120		50 - 200
13C2-8:2-FTS	115		50 - 200

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

Lab Sample ID: MBL 380-176372/20-A
Matrix: Water
Analysis Batch: 176478

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176372

<i>Analyte</i>	<i>MBL</i>	<i>MBL</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>Result</i>	<i>Qualifier</i>						
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		09/25/25 18:44	09/26/25 11:16	1
<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>%Recovery</i>	<i>Qualifier</i>						
d5-NEtFOSAA	109		70 - 130			09/25/25 18:44	09/26/25 11:16	1
13C2 PFHxA	108		70 - 130			09/25/25 18:44	09/26/25 11:16	1
13C2 PFDA	109		70 - 130			09/25/25 18:44	09/26/25 11:16	1

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QC Sample Results

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

Job ID: 380-173324-1
 SDG: Site H

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

Lab Sample ID: MBL 380-176372/20-A
Matrix: Water
Analysis Batch: 176478

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176372

<i>Surrogate</i>	<i>MBL</i> <i>%Recovery</i>	<i>MBL</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	104		70 - 130	09/25/25 18:44	09/26/25 11:16	1

Lab Sample ID: LCS 380-176372/22-A
Matrix: Water
Analysis Batch: 176478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176372

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> <i>Limits</i>
Hexafluoropropylene Oxide	50.2	48.0		ng/L		96	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	50.2	51.2		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	50.2	50.9		ng/L		101	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.2	48.4		ng/L		96	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.2	48.3		ng/L		96	70 - 130
Perfluorohexanoic acid (PFHxA)	50.2	49.6		ng/L		99	70 - 130
Perfluorododecanoic acid (PFDoA)	50.2	50.5		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	50.2	49.2		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	50.2	50.7		ng/L		101	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.2	50.9		ng/L		101	70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.2	49.7		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	50.2	49.5		ng/L		99	70 - 130
Perfluorononanoic acid (PFNA)	50.2	50.4		ng/L		100	70 - 130
Perfluorotetradecanoic acid (PFTA)	50.2	47.3		ng/L		94	70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.2	50.4		ng/L		100	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	50.2	50.7		ng/L		101	70 - 130
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.2	50.2		ng/L		100	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.2	48.2		ng/L		96	70 - 130

<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
d5-NEtFOSAA	102		70 - 130
13C2 PFHxA	105		70 - 130
13C2 PFDA	107		70 - 130
13C3-GenX	101		70 - 130

QC Sample Results

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

Job ID: 380-173324-1
SDG: Site H

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

Lab Sample ID: MRL 380-176372/21-A
Matrix: Water
Analysis Batch: 176478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176372

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.15	J	ng/L		107	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.20	J	ng/L		109	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	2.07	J	ng/L		103	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.06	J	ng/L		102	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.00	J	ng/L		99	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.20	J	ng/L		109	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.15	J	ng/L		107	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.16	J	ng/L		107	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.16	J	ng/L		107	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.15	J	ng/L		107	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.19	J	ng/L		109	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.35	J	ng/L		117	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	2.18	J	ng/L		108	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	2.29	J	ng/L		114	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.18	J	ng/L		108	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.11	J	ng/L		105	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.00	J	ng/L		99	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	101		70 - 130
13C2 PFHxA	101		70 - 130
13C2 PFDA	109		70 - 130
13C3-GenX	93		70 - 130

Lab Sample ID: 380-173254-B-2-A MS
Matrix: Water
Analysis Batch: 176478

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 176372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.4	48.3		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	2.0		50.4	53.2		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.4	53.0		ng/L		105	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.4	49.1		ng/L		97	70 - 130

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QC Association Summary

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

Job ID: 380-173324-1
 SDG: Site H

LCMS

Prep Batch: 176346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173324-1	BWS2253-H1-AQ	Total/NA	Water	533	
380-173324-2	BWS2253-H1-FB	Total/NA	Water	533	
MBL 380-176346/20-A	Method Blank	Total/NA	Water	533	
LCS 380-176346/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-176346/21-A	Lab Control Sample	Total/NA	Water	533	
380-173256-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	
380-173256-C-1-A MS	Matrix Spike	Total/NA	Water	533	

Prep Batch: 176372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173324-1	BWS2253-H1-AQ	Total/NA	Water	537.1 DW	
380-173324-2	BWS2253-H1-FB	Total/NA	Water	537.1 DW	
MBL 380-176372/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-176372/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-176372/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-173254-B-2-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-173254-C-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 176454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173324-1	BWS2253-H1-AQ	Total/NA	Water	533	176346
380-173324-2	BWS2253-H1-FB	Total/NA	Water	533	176346
MBL 380-176346/20-A	Method Blank	Total/NA	Water	533	176346
LCS 380-176346/22-A	Lab Control Sample	Total/NA	Water	533	176346
MRL 380-176346/21-A	Lab Control Sample	Total/NA	Water	533	176346
380-173256-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	176346
380-173256-C-1-A MS	Matrix Spike	Total/NA	Water	533	176346

Analysis Batch: 176478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173324-1	BWS2253-H1-AQ	Total/NA	Water	537.1	176372
380-173324-2	BWS2253-H1-FB	Total/NA	Water	537.1	176372
MBL 380-176372/20-A	Method Blank	Total/NA	Water	537.1	176372
LCS 380-176372/22-A	Lab Control Sample	Total/NA	Water	537.1	176372
MRL 380-176372/21-A	Lab Control Sample	Total/NA	Water	537.1	176372
380-173254-B-2-A MS	Matrix Spike	Total/NA	Water	537.1	176372
380-173254-C-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	176372

Lab Chronicle

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

Job ID: 380-173324-1
 SDG: Site H

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-173324-1

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			176346	E2HD	EA POM	09/25/25 18:00
Total/NA	Analysis	533		1	176454	SZ9R	EA POM	09/26/25 13:15
Total/NA	Prep	537.1 DW			176372	N8NE	EA POM	09/25/25 18:44
Total/NA	Analysis	537.1		1	176478	Y5FM	EA POM	09/26/25 14:43

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-173324-2

Date Collected: 09/23/25 11:15

Matrix: Water

Date Received: 09/24/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			176346	E2HD	EA POM	09/25/25 18:00
Total/NA	Analysis	533		1	176454	SZ9R	EA POM	09/26/25 13:26
Total/NA	Prep	537.1 DW			176372	N8NE	EA POM	09/25/25 18:44
Total/NA	Analysis	537.1		1	176478	Y5FM	EA POM	09/26/25 14:53

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100



Accreditation/Certification Summary

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

Job ID: 380-173324-1
SDG: Site H

Laboratory: Eurofins Eaton Analytical Pomona

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-26

- 1
- 2
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Method Summary

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

Job ID: 380-173324-1
SDG: Site H

Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA POM
537.1	Perfluorinated Alkyl Acids (LC/MS)	EPA	EA POM
533	Extraction of Perfluorinated and Polyfluorinated Alkyl Acids	EPA	EA POM
537.1 DW	Extraction of Perfluorinated Alkyl Acids	EPA	EA POM

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100



Sample Summary

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

Job ID: 380-173324-1
SDG: Site H

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-173324-1	BWS2253-H1-AQ	Water	09/23/25 11:15	09/24/25 10:00	Hawaii
380-173324-2	BWS2253-H1-FB	Water	09/23/25 11:15	09/24/25 10:00	Hawaii

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- 17

Chain of Custody Record

Client Information		Sampler: J. Joseph/H. Bentley		Lab PM: Lopez, Maria		Carrier Tracking No(\$):		COC No:	
Client Contact: Mr. Erwin Kawata		Phone: 858-205-0730		E-Mail: Maria.Lopez@et.eurofins.com		State of Origin: Hawaii		Page: Page 1 of 1	
Company: City & County of Honolulu		Address: 630 South Beretania Street		City: Honolulu		State: HI, 96843		Job #:	
Phone: 808-748-5066(Tel)		PO #: C20525101 exp 06312023		Warranty #: 38000861		Project Name: HRS-340E - RED-HILL - INTERA		Preservation Codes:	
Email: ekawata@hbws.org		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Project #: 38000861		Site: Site H		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 Other:	
Due Date Requested:		TAT Requested (days): Standard		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Matrix (Water, Seawater, Overstabil, BT+Fluore, Acid)		Preservation Code:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		SUBCONTRACT - 625-PAH Only + TICs		SUBCONTRACT - TPH 6015-D-M, JP5, JP8		SUBCONTRACT - (MOD), Super Volatiles List	
SUBCONTRACT - 625-PAH Only + TICs		SUBCONTRACT - TPH 6015-D-M, JP5, JP8		SUBCONTRACT - (MOD), Super Volatiles List		SUBCONTRACT - 8046-Gas		PFAS 533 - All Analytes	
PFAS 537.1_DW_PREC-537.1 Full List		PFAS 1633_DDS_1633 Std List		PFAS 1633_DDS_1633 Std List		PFAS 537.1_DW_PREC-537.1 Full List		PFAS 1633_DDS_1633 Std List	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Preservation Code:	
BWS2253-H1-AQ		9/23/25		11:15		G		Water	
BWS2253-H1-FB		9/23/25		11:15		G		Water	
BWS2253-H1-FB		9/23/25		11:15		G		Water	
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		Total Number of Containers		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		Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Date		Time		Method of Shipment: FEDEX Priority Overnight 835 3005461	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by: H BENTLEY		Date: 9/23/25		Time: 13:00		Company: INTERA Inc	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 6/8/2020 = 2.0 C		Company:		Company:	



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-173324-1

SDG Number: Site H

Login Number: 173324

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The coolers custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
CIO4 headspace requirement met (>50% for CA, >30% for other states).	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	