

ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/18/2026 4:13:11 PM

JOB DESCRIPTION

INTERA - Red-Hill-Incident
Site H1 PFAS 533/537.1

JOB NUMBER

380-212142-1

Eurofins 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 Drinking Water and Wastewater West, 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
Maria Lopez, Project Manager
Maria.Lopez@et.eurofinsus.com
(626)386-1100

Generated
5/18/2026 4:13:11 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	11
Surrogate Summary	12
Isotope Dilution Summary	13
QC Sample Results	14
QC Association Summary	25
Lab Chronicle	26
Certification Summary	27
Method Summary	28
Sample Summary	29
Chain of Custody	30
Receipt Checklists	31



Definitions/Glossary

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: 380-212142-1

Job ID: 380-212142-1

Eurofins Pomona

Job Narrative 380-212142-1

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 5/6/2026 9:45 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 2.1°C.

PFAS

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

Eurofins Pomona

Detection Summary

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-212142-1

☐ No Detections.

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-212142-2

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Pomona

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

Client Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-212142-1

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

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 (11CI-PF3OUdS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9CI-PF3ONS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:47	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	94		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C6 PFDA	86		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C5 PFHxA	105		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C4 PFHpA	105		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C8 PFOA	99		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C9 PFNA	94		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C7 PFUnA	85		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C2 PFDoA	89		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C4 PFBA	99		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C5 PFPeA	112		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C3 PFBS	111		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C3 PFHxS	110		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C8 PFOS	100		50 - 200	05/13/26 05:49	05/13/26 19:47	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-212142-1

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

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	130		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C2-6:2-FTS	113		50 - 200	05/13/26 05:49	05/13/26 19:47	1
13C2-8:2-FTS	93		50 - 200	05/13/26 05:49	05/13/26 19:47	1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	107		70 - 130			05/10/26 10:50	05/11/26 09:44	1
13C2 PFHxA	110		70 - 130			05/10/26 10:50	05/11/26 09:44	1
13C2 PFDA	107		70 - 130			05/10/26 10:50	05/11/26 09:44	1
13C3-GenX	108		70 - 130			05/10/26 10:50	05/11/26 09:44	1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-212142-2

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-212142-2

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

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		05/13/26 05:49	05/13/26 19:57	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		05/13/26 05:49	05/13/26 19:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	101		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C6 PFDA	95		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C5 PFHxA	109		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C4 PFHpA	108		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C8 PFOA	101		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C9 PFNA	99		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C7 PFUnA	92		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C2 PFDoA	92		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C4 PFBA	104		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C5 PFPeA	103		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C3 PFBS	105		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C3 PFHxS	109		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C8 PFOS	104		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C2-4:2-FTS	125		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C2-6:2-FTS	106		50 - 200	05/13/26 05:49	05/13/26 19:57	1
13C2-8:2-FTS	92		50 - 200	05/13/26 05:49	05/13/26 19:57	1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-212142-2

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	101		70 - 130			05/10/26 10:50	05/11/26 09:53	1
13C2 PFHxA	105		70 - 130			05/10/26 10:50	05/11/26 09:53	1
13C2 PFDA	106		70 - 130			05/10/26 10:50	05/11/26 09:53	1
13C3-GenX	97		70 - 130			05/10/26 10:50	05/11/26 09:53	1

Action Limit Summary

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-212142-1

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
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	EPA 537.1 V2	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-212142-2

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 Limit	RL	Method	Prep Type
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	EPA 537.1 V2	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA

Surrogate Summary

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-212142-1	BWS2253-H1-AQ	107	110	107	108
380-212142-2	BWS2253-H1-FB	101	105	106	97
380-212302-B-1-A MS	Matrix Spike	105	105	111	112
380-212302-C-1-A MSD	Matrix Spike Duplicate	105	103	110	109
LCS 380-225988/23-A	Lab Control Sample	98	99	104	96
MBL 380-225988/21-A	Method Blank	116	117	117	114
MRL 380-225988/22-A	Lab Control Sample	97	105	110	99

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: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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)	PFDaA (50-200)
380-211465-E-1-A MS	Matrix Spike	104	97	111	110	104	103	99	98
380-211465-F-1-A MSD	Matrix Spike Duplicate	103	95	101	104	101	101	98	102
380-212142-1	BWS2253-H1-AQ	94	86	105	105	99	94	85	89
380-212142-2	BWS2253-H1-FB	101	95	109	108	101	99	92	92
LCS 380-226661/22-A	Lab Control Sample	108	99	111	107	108	107	103	103
MBL 380-226661/20-A	Method Blank	106	103	113	112	113	104	105	105
MRL 380-226661/21-A	Lab Control Sample	103	96	107	108	104	102	99	102

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)
380-211465-E-1-A MS	Matrix Spike	107	111	109	113	105	114	106	96
380-211465-F-1-A MSD	Matrix Spike Duplicate	106	110	103	109	104	107	104	92
380-212142-1	BWS2253-H1-AQ	99	112	111	110	100	130	113	93
380-212142-2	BWS2253-H1-FB	104	103	105	109	104	125	106	92
LCS 380-226661/22-A	Lab Control Sample	106	106	110	109	104	114	102	91
MBL 380-226661/20-A	Method Blank	89	111	114	112	106	122	115	101
MRL 380-226661/21-A	Lab Control Sample	101	104	112	112	107	119	108	95

Surrogate Legend

HFPODA = 13C3 HFPO-DA
C6PFDA = 13C6 PFDA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
13C7PUA = 13C7 PFUnA
PFDaA = 13C2 PFDaA
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: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: MBL 380-226661/20-A

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 226661

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		05/13/26 05:49	05/13/26 16:58	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C6 PFDA	103		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C5 PFHxA	113		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C4 PFHpA	112		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C8 PFOA	113		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C9 PFNA	104		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C7 PFUnA	105		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C2 PFDoA	105		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C4 PFBA	89		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C5 PFPeA	111		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C3 PFBS	114		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C3 PFHxS	112		50 - 200	05/13/26 05:49	05/13/26 16:58	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: MBL 380-226661/20-A

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 226661

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	106		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C2-4:2-FTS	122		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C2-6:2-FTS	115		50 - 200	05/13/26 05:49	05/13/26 16:58	1
13C2-8:2-FTS	101		50 - 200	05/13/26 05:49	05/13/26 16:58	1

Lab Sample ID: LCS 380-226661/22-A

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 226661

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	58.8		ng/L		98	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	60.2	57.7		ng/L		96	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.2	59.2		ng/L		98	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.2	59.9		ng/L		99	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	57.3		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	60.2		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDaA)	60.2	58.4		ng/L		97	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	58.3		ng/L		97	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	57.6		ng/L		96	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	58.3		ng/L		97	70 - 130
Perfluorononanoic acid (PFNA)	60.2	58.4		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	58.7		ng/L		97	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	57.6		ng/L		96	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.2	54.1		ng/L		90	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	58.5		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	63.3		ng/L		105	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	61.7		ng/L		102	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	61.0		ng/L		101	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	58.2		ng/L		97	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.2	57.1		ng/L		95	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	58.8		ng/L		98	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	59.2		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	58.1		ng/L		97	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	60.5		ng/L		100	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: LCS 380-226661/22-A

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 226661

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.2	58.7		ng/L		97	70 - 130
	LCS	LCS					
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	108		50 - 200				
13C6 PFDA	99		50 - 200				
13C5 PFHxA	111		50 - 200				
13C4 PFHpA	107		50 - 200				
13C8 PFOA	108		50 - 200				
13C9 PFNA	107		50 - 200				
13C7 PFUnA	103		50 - 200				
13C2 PFDoA	103		50 - 200				
13C4 PFBA	106		50 - 200				
13C5 PFPeA	106		50 - 200				
13C3 PFBS	110		50 - 200				
13C3 PFHxS	109		50 - 200				
13C8 PFOS	104		50 - 200				
13C2-4:2-FTS	114		50 - 200				
13C2-6:2-FTS	102		50 - 200				
13C2-8:2-FTS	91		50 - 200				

Lab Sample ID: MRL 380-226661/21-A

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 226661

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.02	J	ng/L		100	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.01	1.90	J	ng/L		94	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	1.97	J	ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.95	J	ng/L		97	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	1.96	J	ng/L		98	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.00	J	ng/L		100	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.13	J	ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.00	J	ng/L		100	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.09	J	ng/L		104	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	1.92	J	ng/L		96	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.14	J	ng/L		107	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: MRL 380-226661/21-A

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 226661

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.09	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.27	J	ng/L		113	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.25	J	ng/L		112	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.00	J	ng/L		100	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.01	1.98	J	ng/L		98	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	2.08	J	ng/L		103	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.10	J	ng/L		105	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	1.96	J	ng/L		97	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.98	J	ng/L		99	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	103		50 - 200
13C6 PFDA	96		50 - 200
13C5 PFHxA	107		50 - 200
13C4 PFHpA	108		50 - 200
13C8 PFOA	104		50 - 200
13C9 PFNA	102		50 - 200
13C7 PFUnA	99		50 - 200
13C2 PFDoA	102		50 - 200
13C4 PFBA	101		50 - 200
13C5 PFPeA	104		50 - 200
13C3 PFBS	112		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	107		50 - 200
13C2-4:2-FTS	119		50 - 200
13C2-6:2-FTS	108		50 - 200
13C2-8:2-FTS	95		50 - 200

Lab Sample ID: 380-211465-E-1-A MS

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 226661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	58.0		ng/L		96	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	57.7		ng/L		96	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	55.9		ng/L		93	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: 380-211465-E-1-A MS

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 226661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.4	58.5		ng/L		97	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	59.9		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	58.2		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	56.5		ng/L		94	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	57.2		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	3.6		60.4	61.0		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	2.9		60.4	57.8		ng/L		91	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.4	57.5		ng/L		95	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	59.7		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	2.0		60.4	58.5		ng/L		94	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	56.2		ng/L		93	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.4	58.2		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	58.8		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	63.4		ng/L		105	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	60.2		ng/L		100	70 - 130
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		60.4	55.9		ng/L		93	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	58.5		ng/L		97	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	58.4		ng/L		97	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	57.4		ng/L		95	70 - 130
Perfluoropentanoic acid (PFPeA)	3.5		60.4	60.4		ng/L		94	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	59.2		ng/L		98	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	56.4		ng/L		92	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	MS Limits
13C3 HFPO-DA	104		50 - 200
13C6 PFDA	97		50 - 200
13C5 PFHxA	111		50 - 200
13C4 PFHpA	110		50 - 200
13C8 PFOA	104		50 - 200
13C9 PFNA	103		50 - 200
13C7 PFUnA	99		50 - 200
13C2 PFDoA	98		50 - 200
13C4 PFBA	107		50 - 200
13C5 PFPeA	111		50 - 200
13C3 PFBS	109		50 - 200
13C3 PFHxS	113		50 - 200
13C8 PFOS	105		50 - 200

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: 380-211465-E-1-A MS

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 226661

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2-4:2-FTS	114		50 - 200
13C2-6:2-FTS	106		50 - 200
13C2-8:2-FTS	96		50 - 200

Lab Sample ID: 380-211465-F-1-A MSD

Matrix: Water

Analysis Batch: 226831

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 226661

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		60.5	59.3		ng/L		98	70 - 130	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		60.5	58.5		ng/L		97	70 - 130	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.5	59.5		ng/L		98	70 - 130	6	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.5	59.1		ng/L		98	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.5	60.9		ng/L		99	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		60.5	59.1		ng/L		98	70 - 130	1	30
Perfluorododecanoic acid (PFDaA)	<2.0		60.5	58.9		ng/L		97	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.5	58.8		ng/L		96	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)	3.6		60.5	61.8		ng/L		96	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	2.9		60.5	63.4		ng/L		100	70 - 130	9	30
Perfluorononanoic acid (PFNA)	<2.0		60.5	58.9		ng/L		97	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.5	58.9		ng/L		96	70 - 130	1	30
Perfluorooctanoic acid (PFOA)	2.0		60.5	61.9		ng/L		99	70 - 130	6	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.5	57.9		ng/L		96	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0		60.5	59.8		ng/L		97	70 - 130	3	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.5	62.7		ng/L		104	70 - 130	6	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.5	63.6		ng/L		105	70 - 130	0	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.5	60.8		ng/L		101	70 - 130	1	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.5	61.9		ng/L		102	70 - 130	10	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		60.5	63.1		ng/L		104	70 - 130	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.5	59.8		ng/L		99	70 - 130	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.5	58.9		ng/L		97	70 - 130	3	30
Perfluoropentanoic acid (PFPeA)	3.5		60.5	60.9		ng/L		95	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.5	59.3		ng/L		98	70 - 130	0	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.5	57.9		ng/L		95	70 - 130	3	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

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

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C3 HFPO-DA	103		50 - 200
13C6 PFDA	95		50 - 200
13C5 PFHxA	101		50 - 200
13C4 PFHpA	104		50 - 200
13C8 PFOA	101		50 - 200
13C9 PFNA	101		50 - 200
13C7 PFUnA	98		50 - 200
13C2 PFDoA	102		50 - 200
13C4 PFBA	106		50 - 200
13C5 PFPeA	110		50 - 200
13C3 PFBS	103		50 - 200
13C3 PFHxS	109		50 - 200
13C8 PFOS	104		50 - 200
13C2-4:2-FTS	107		50 - 200
13C2-6:2-FTS	104		50 - 200
13C2-8:2-FTS	92		50 - 200

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Lab Sample ID: MBL 380-225988/21-A
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 225988

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		05/10/26 10:50	05/11/26 09:16	1
Surrogate	MBL %Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	116		70 - 130			05/10/26 10:50	05/11/26 09:16	1
13C2 PFHxA	117		70 - 130			05/10/26 10:50	05/11/26 09:16	1
13C2 PFDA	117		70 - 130			05/10/26 10:50	05/11/26 09:16	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Lab Sample ID: MBL 380-225988/21-A
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 225988

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-GenX	114		70 - 130	05/10/26 10:50	05/11/26 09:16	1

Lab Sample ID: LCS 380-225988/23-A
Matrix: Water
Analysis Batch: 226117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 225988

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	25.0	23.1		ng/L		92	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	25.0	27.1		ng/L		108	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.0	27.3		ng/L		109	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.0	24.3		ng/L		97	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.0	24.2		ng/L		97	70 - 130
Perfluorohexanoic acid (PFHxA)	25.0	24.4		ng/L		98	70 - 130
Perfluorododecanoic acid (PFDoA)	25.0	25.7		ng/L		103	70 - 130
Perfluorooctanoic acid (PFOA)	25.0	25.5		ng/L		102	70 - 130
Perfluorodecanoic acid (PFDA)	25.0	24.6		ng/L		98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.0	27.4		ng/L		110	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.0	27.3		ng/L		109	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.0	26.0		ng/L		104	70 - 130
Perfluorononanoic acid (PFNA)	25.0	27.3		ng/L		109	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.0	24.8		ng/L		99	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.0	26.4		ng/L		106	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	25.0	26.4		ng/L		106	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.0	24.8		ng/L		99	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.0	23.3		ng/L		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	98		70 - 130
13C2 PFHxA	99		70 - 130
13C2 PFDA	104		70 - 130
13C3-GenX	96		70 - 130

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Lab Sample ID: MRL 380-225988/22-A

Matrix: Water

Analysis Batch: 226117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 225988

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.20	J	ng/L		110	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.20	J	ng/L		110	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.91	J	ng/L		96	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.76	J	ng/L		88	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.07	J	ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.16	J	ng/L		108	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.11	J	ng/L		106	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.25	J	ng/L		113	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.28	J	ng/L		114	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.05	J	ng/L		103	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.22	J	ng/L		111	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.10	J	ng/L		105	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.86	J	ng/L		93	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.10	J	ng/L		105	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	97		70 - 130
13C2 PFHxA	105		70 - 130
13C2 PFDA	110		70 - 130
13C3-GenX	99		70 - 130

Lab Sample ID: 380-212302-B-1-A MS

Matrix: Water

Analysis Batch: 226117

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 225988

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		25.1	27.2		ng/L		109	70 - 130
Perfluorooctanesulfonic acid (PFOS)	2.5		25.1	28.0		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	28.2		ng/L		112	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	25.3		ng/L		101	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Lab Sample ID: 380-212302-B-1-A MS

Matrix: Water

Analysis Batch: 226117

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 225988

Appendix B: Data									
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	24.7		ng/L		98	70 - 130
Perfluorohexanoic acid (PFHxA)	3.3		25.1	29.2		ng/L		103	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	26.6		ng/L		106	70 - 130
Perfluorooctanoic acid (PFOA)	2.9		25.1	30.4		ng/L		110	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.1	26.3		ng/L		105	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.1	27.7		ng/L		104	70 - 130
Perfluorobutanesulfonic acid (PFBS)	2.5		25.1	29.3		ng/L		107	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		25.1	28.4		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.1	27.0		ng/L		108	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	24.9		ng/L		99	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.1	26.9		ng/L		107	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	26.4		ng/L		106	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	24.5		ng/L		98	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	27.4		ng/L		109	70 - 130
</									

Lab Sample ID: 380-212302-C-1-A MSD

Matrix: Water

Analysis Batch: 226117

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 225988

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.1	25.5		ng/L		102	70 - 130	6	30
Perfluorooctanesulfonic acid (PFOS)	2.5		25.1	28.6		ng/L		104	70 - 130	2	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	26.9		ng/L		107	70 - 130	5	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	24.8		ng/L		99	70 - 130	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	24.2		ng/L		97	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	3.3		25.1	29.8		ng/L		106	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	27.1		ng/L		108	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	2.9		25.1	29.6		ng/L		106	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		25.1	24.7		ng/L		98	70 - 130	7	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Lab Sample ID: 380-212302-C-1-A MSD

Matrix: Water

Analysis Batch: 226117

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 225988

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.1	27.5		ng/L		103	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	2.5		25.1	28.9		ng/L		105	70 - 130	2	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.1	27.5		ng/L		103	70 - 130	3	30
Perfluorononanoic acid (PFNA)	<2.0		25.1	25.9		ng/L		104	70 - 130	4	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	23.6		ng/L		94	70 - 130	5	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.1	26.6		ng/L		106	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	25.4		ng/L		101	70 - 130	4	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	24.6		ng/L		98	70 - 130	0	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	26.4		ng/L		105	70 - 130	4	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
d5-NEtFOSAA	105		70 - 130								
13C2 PFHxA	103		70 - 130								
13C2 PFDA	110		70 - 130								
13C3-GenX	109		70 - 130								

QC Association Summary

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

LCMS

Prep Batch: 225988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-212142-1	BWS2253-H1-AQ	Total/NA	Water	537.1 DW	
380-212142-2	BWS2253-H1-FB	Total/NA	Water	537.1 DW	
MBL 380-225988/21-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-225988/23-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-225988/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-212302-B-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-212302-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 226117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-212142-1	BWS2253-H1-AQ	Total/NA	Water	EPA 537.1 V2	225988
380-212142-2	BWS2253-H1-FB	Total/NA	Water	EPA 537.1 V2	225988
MBL 380-225988/21-A	Method Blank	Total/NA	Water	EPA 537.1 V2	225988
LCS 380-225988/23-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	225988
MRL 380-225988/22-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	225988
380-212302-B-1-A MS	Matrix Spike	Total/NA	Water	EPA 537.1 V2	225988
380-212302-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 537.1 V2	225988

Prep Batch: 226661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-212142-1	BWS2253-H1-AQ	Total/NA	Water	533	
380-212142-2	BWS2253-H1-FB	Total/NA	Water	533	
MBL 380-226661/20-A	Method Blank	Total/NA	Water	533	
LCS 380-226661/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-226661/21-A	Lab Control Sample	Total/NA	Water	533	
380-211465-E-1-A MS	Matrix Spike	Total/NA	Water	533	
380-211465-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 226831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-212142-1	BWS2253-H1-AQ	Total/NA	Water	533	226661
380-212142-2	BWS2253-H1-FB	Total/NA	Water	533	226661
MBL 380-226661/20-A	Method Blank	Total/NA	Water	533	226661
LCS 380-226661/22-A	Lab Control Sample	Total/NA	Water	533	226661
MRL 380-226661/21-A	Lab Control Sample	Total/NA	Water	533	226661
380-211465-E-1-A MS	Matrix Spike	Total/NA	Water	533	226661
380-211465-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	226661

Lab Chronicle

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-212142-1

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			226661	XTD8	EA POM	05/13/26 05:49
Total/NA	Analysis	533		1	226831	M7ML	EA POM	05/13/26 19:47
Total/NA	Prep	537.1 DW			225988	E9PK	EA POM	05/10/26 10:50
Total/NA	Analysis	EPA 537.1 V2		1	226117	SZ9R	EA POM	05/11/26 09:44

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-212142-2

Date Collected: 05/05/26 12:00

Matrix: Water

Date Received: 05/06/26 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			226661	XTD8	EA POM	05/13/26 05:49
Total/NA	Analysis	533		1	226831	M7ML	EA POM	05/13/26 19:57
Total/NA	Prep	537.1 DW			225988	E9PK	EA POM	05/10/26 10:50
Total/NA	Analysis	EPA 537.1 V2		1	226117	SZ9R	EA POM	05/11/26 09:53

Laboratory References:

EA POM = Eurofins 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: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Laboratory: Eurofins 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
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

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

Method Summary

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

Job ID: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA POM
EPA 537.1 V2	EPA 537.1 Ver. 2.0 March 2020	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 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: 380-212142-1
SDG: Site H1 PFAS 533/537.1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-212142-1	BWS2253-H1-AQ	Water	05/05/26 12:00	05/06/26 09:45	Hawaii
380-212142-2	BWS2253-H1-FB	Water	05/05/26 12:00	05/06/26 09:45	Hawaii

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-212142-1
SDG Number: Site H1 PFAS 533/537.1

Login Number: 212142

List Number: 1

Creator: Tran, Kristine

List Source: Eurofins 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").	N/A	
CIO4 headspace requirement met (>50% for CA, >30% for other states).	N/A	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	