

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 4/13/2026 5:04:38 PM

JOB DESCRIPTION

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

JOB NUMBER

380-206748-1

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
4/13/2026 5:04:38 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

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

Definitions/Glossary

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

Job ID: 380-206748-1
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: 380-206748-1

Job ID: 380-206748-1

Eurofins Pomona

Job Narrative 380-206748-1

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 4/7/2026 9:14 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 3.4°C.

Receipt Exceptions

1 of 3 533 bottles received with cracked cap, but no volume lost. However this bottle was put aside and not used for extraction. Enough volume remained for analysis. (XWB4)
BWS2253-H1-AQ (380-206748-1)

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: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-206748-1

☐ No Detections.

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-206748-2

☐ 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: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-206748-1

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

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		04/10/26 17:14	04/11/26 18:08	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9CI-PF3ONS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:08	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	92		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C6 PFDA	95		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C5 PFHxA	98		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C4 PFHpA	97		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C8 PFOA	99		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C9 PFNA	97		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C7 PFUnA	99		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C2 PFDoA	99		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C4 PFBA	103		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C5 PFPeA	115		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C3 PFBS	104		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C3 PFHxS	101		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C8 PFOS	102		50 - 200	04/10/26 17:14	04/11/26 18:08	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-206748-1

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

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	110		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C2-6:2-FTS	110		50 - 200	04/10/26 17:14	04/11/26 18:08	1
13C2-8:2-FTS	109		50 - 200	04/10/26 17:14	04/11/26 18:08	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		04/08/26 02:00	04/08/26 13:57	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 13:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	108		70 - 130			04/08/26 02:00	04/08/26 13:57	1
13C2 PFHxA	113		70 - 130			04/08/26 02:00	04/08/26 13:57	1
13C2 PFDA	114		70 - 130			04/08/26 02:00	04/08/26 13:57	1
13C3-GenX	109		70 - 130			04/08/26 02:00	04/08/26 13:57	1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-206748-2

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

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		04/10/26 17:14	04/11/26 18:18	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-206748-2

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

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		04/10/26 17:14	04/11/26 18:18	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/10/26 17:14	04/11/26 18:18	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C6 PFDA	99		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C5 PFHxA	101		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C4 PFHpA	103		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C8 PFOA	106		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C9 PFNA	101		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C7 PFUnA	105		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C2 PFDoA	106		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C4 PFBA	108		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C5 PFPeA	105		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C3 PFBS	104		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C3 PFHxS	104		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C8 PFOS	103		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C2-4:2-FTS	107		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C2-6:2-FTS	109		50 - 200	04/10/26 17:14	04/11/26 18:18	1
13C2-8:2-FTS	106		50 - 200	04/10/26 17:14	04/11/26 18:18	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		04/08/26 02:00	04/08/26 16:10	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-206748-2

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

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		04/08/26 02:00	04/08/26 16:10	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/08/26 02:00	04/08/26 16:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	97		70 - 130			04/08/26 02:00	04/08/26 16:10	1
13C2 PFHxA	100		70 - 130			04/08/26 02:00	04/08/26 16:10	1
13C2 PFDA	104		70 - 130			04/08/26 02:00	04/08/26 16:10	1
13C3-GenX	95		70 - 130			04/08/26 02:00	04/08/26 16:10	1

Action Limit Summary

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-206748-1

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: 380-206748-2

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: 380-206748-1
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)
380-206748-1	BWS2253-H1-AQ	108	113	114	109
380-206748-1 MS	BWS2253-H1-AQ	108	105	107	106
380-206748-1 MSD	BWS2253-H1-AQ	95	96	99	97
380-206748-2	BWS2253-H1-FB	97	100	104	95
LCS 380-218492/21-A	Lab Control Sample	96	99	104	94
MBL 380-218492/19-A	Method Blank	111	109	110	107
MRL 380-218492/20-A	Lab Control Sample	100	100	101	98

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: 380-206748-1
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)
380-206748-1	BWS2253-H1-AQ	92	95	98	97	99	97	99	99
380-206748-2	BWS2253-H1-FB	96	99	101	103	106	101	105	106
380-207139-E-1-A MS	Matrix Spike	105	99	106	104	104	104	112	112
380-207139-F-1-A MSD	Matrix Spike Duplicate	101	99	102	99	102	99	111	106
LCS 380-219211/22-A	Lab Control Sample	102	101	103	102	106	101	107	104
MBL 380-219211/20-A	Method Blank	99	96	112	99	101	100	106	108
MRL 380-219211/21-A	Lab Control Sample	94	98	106	100	102	99	106	104

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)
380-206748-1	BWS2253-H1-AQ	103	115	104	101	102	110	110	109
380-206748-2	BWS2253-H1-FB	108	105	104	104	103	107	109	106
380-207139-E-1-A MS	Matrix Spike	110	115	105	103	107	104	107	107
380-207139-F-1-A MSD	Matrix Spike Duplicate	105	113	112	103	107	106	115	111
LCS 380-219211/22-A	Lab Control Sample	105	105	112	107	111	110	110	106
MBL 380-219211/20-A	Method Blank	107	105	103	102	103	102	105	102
MRL 380-219211/21-A	Lab Control Sample	105	103	110	103	103	99	110	101

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: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: MBL 380-219211/20-A

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219211

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		04/10/26 17:14	04/11/26 16:59	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		04/10/26 17:14	04/11/26 16:59	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	99		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C6 PFDA	96		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C5 PFHxA	112		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C4 PFHpA	99		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C8 PFOA	101		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C9 PFNA	100		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C7 PFUnA	106		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C2 PFDoA	108		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C4 PFBA	107		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C5 PFPeA	105		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C3 PFBS	103		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C3 PFHxS	102		50 - 200	04/10/26 17:14	04/11/26 16:59	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: MBL 380-219211/20-A

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219211

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	103		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C2-4:2-FTS	102		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C2-6:2-FTS	105		50 - 200	04/10/26 17:14	04/11/26 16:59	1
13C2-8:2-FTS	102		50 - 200	04/10/26 17:14	04/11/26 16:59	1

Lab Sample ID: LCS 380-219211/22-A

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.0	58.4		ng/L		97	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	60.0	58.9		ng/L		98	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.0	61.1		ng/L		102	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.0	57.8		ng/L		96	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.0	57.0		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	60.0	60.2		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDaA)	60.0	61.5		ng/L		102	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.0	59.5		ng/L		99	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.0	59.6		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	60.0	61.8		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	60.0	59.3		ng/L		99	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.0	57.8		ng/L		96	70 - 130
Perfluorooctanoic acid (PFOA)	60.0	59.5		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.0	60.7		ng/L		101	70 - 130
Perfluorobutanoic acid (PFBA)	60.0	59.1		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.0	61.2		ng/L		102	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.0	56.2		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.0	61.3		ng/L		102	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.0	65.3		ng/L		109	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.0	58.1		ng/L		97	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.0	58.1		ng/L		97	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.0	58.9		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	60.0	59.2		ng/L		99	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.0	57.9		ng/L		96	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: LCS 380-219211/22-A

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.0	66.0		ng/L		110	70 - 130
	LCS	LCS					
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	102		50 - 200				
13C6 PFDA	101		50 - 200				
13C5 PFHxA	103		50 - 200				
13C4 PFHpA	102		50 - 200				
13C8 PFOA	106		50 - 200				
13C9 PFNA	101		50 - 200				
13C7 PFUnA	107		50 - 200				
13C2 PFDoA	104		50 - 200				
13C4 PFBA	105		50 - 200				
13C5 PFPeA	105		50 - 200				
13C3 PFBS	112		50 - 200				
13C3 PFHxS	107		50 - 200				
13C8 PFOS	111		50 - 200				
13C2-4:2-FTS	110		50 - 200				
13C2-6:2-FTS	110		50 - 200				
13C2-8:2-FTS	106		50 - 200				

Lab Sample ID: MRL 380-219211/21-A

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219211

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.31	J	ng/L		116	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.00	2.17	J	ng/L		108	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.38	J	ng/L		119	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.35	J	ng/L		117	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.27	J	ng/L		114	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.34	J	ng/L		117	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.33	J	ng/L		117	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.31	J	ng/L		116	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.29	J	ng/L		114	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.32	J	ng/L		116	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.23	J	ng/L		112	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.42	J	ng/L		121	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.33	J	ng/L		116	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: MRL 380-219211/21-A

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219211

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.53	J	ng/L		126	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.38	J	ng/L		119	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.38	J	ng/L		119	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.00	2.13	J	ng/L		107	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.16	J	ng/L		108	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	2.23	J	ng/L		112	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.43	J	ng/L		121	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.28	J	ng/L		114	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.55	J	ng/L		128	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	94		50 - 200
13C6 PFDA	98		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	100		50 - 200
13C8 PFOA	102		50 - 200
13C9 PFNA	99		50 - 200
13C7 PFUnA	106		50 - 200
13C2 PFDoA	104		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	103		50 - 200
13C3 PFBS	110		50 - 200
13C3 PFHxS	103		50 - 200
13C8 PFOS	103		50 - 200
13C2-4:2-FTS	99		50 - 200
13C2-6:2-FTS	110		50 - 200
13C2-8:2-FTS	101		50 - 200

Lab Sample ID: 380-207139-E-1-A MS

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 219211

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		120	118		ng/L		98	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	115		ng/L		96	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	122		ng/L		102	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: 380-207139-E-1-A MS

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 219211

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		120	121		ng/L		100	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	120		ng/L		99	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		120	124		ng/L		103	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		120	118		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		120	117		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	125		ng/L		102	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		120	124		ng/L		102	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		120	120		ng/L		99	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	122		ng/L		100	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		120	122		ng/L		101	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		120	116		ng/L		96	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		120	120		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	116		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	111		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	122		ng/L		102	70 - 130
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		120	119		ng/L		99	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		120	120		ng/L		100	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	118		ng/L		98	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	115		ng/L		96	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		120	115		ng/L		94	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	116		ng/L		97	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	135		ng/L		112	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3 HFPO-DA	105		50 - 200
13C6 PFDA	99		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	104		50 - 200
13C8 PFOA	104		50 - 200
13C9 PFNA	104		50 - 200
13C7 PFUnA	112		50 - 200
13C2 PFDoA	112		50 - 200
13C4 PFBA	110		50 - 200
13C5 PFPeA	115		50 - 200
13C3 PFBS	105		50 - 200
13C3 PFHxS	103		50 - 200
13C8 PFOS	107		50 - 200

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: 380-207139-E-1-A MS

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 219211

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2-4:2-FTS	104		50 - 200
13C2-6:2-FTS	107		50 - 200
13C2-8:2-FTS	107		50 - 200

Lab Sample ID: 380-207139-F-1-A MSD

Matrix: Water

Analysis Batch: 219383

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 219211

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		120	120		ng/L		99	70 - 130	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		120	113		ng/L		94	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	127		ng/L		105	70 - 130	3	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	120		ng/L		100	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	119		ng/L		98	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		120	125		ng/L		104	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)	<2.0		120	118		ng/L		98	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		120	124		ng/L		102	70 - 130	6	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	127		ng/L		104	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		120	125		ng/L		103	70 - 130	1	30
Perfluorononanoic acid (PFNA)	<2.0		120	119		ng/L		99	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	119		ng/L		98	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	<2.0		120	120		ng/L		98	70 - 130	2	30
Perfluoroundecanoic acid (PFUnA)	<2.0		120	114		ng/L		95	70 - 130	1	30
Perfluorobutanoic acid (PFBA)	<2.0		120	120		ng/L		99	70 - 130	0	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	118		ng/L		98	70 - 130	2	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	111		ng/L		92	70 - 130	0	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	119		ng/L		98	70 - 130	3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	125		ng/L		104	70 - 130	5	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		120	117		ng/L		97	70 - 130	3	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	121		ng/L		101	70 - 130	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	117		ng/L		97	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	<2.0		120	117		ng/L		96	70 - 130	2	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	117		ng/L		97	70 - 130	0	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	136		ng/L		113	70 - 130	0	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
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	101		50 - 200
13C6 PFDA	99		50 - 200
13C5 PFHxA	102		50 - 200
13C4 PFHpA	99		50 - 200
13C8 PFOA	102		50 - 200
13C9 PFNA	99		50 - 200
13C7 PFUnA	111		50 - 200
13C2 PFDoA	106		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	113		50 - 200
13C3 PFBS	112		50 - 200
13C3 PFHxS	103		50 - 200
13C8 PFOS	107		50 - 200
13C2-4:2-FTS	106		50 - 200
13C2-6:2-FTS	115		50 - 200
13C2-8:2-FTS	111		50 - 200

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

Lab Sample ID: MBL 380-218492/19-A
Matrix: Water
Analysis Batch: 218620

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 218492

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		04/08/26 02:00	04/08/26 13:29	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/08/26 02:00	04/08/26 13:29	1
Surrogate	MBL %Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	111		70 - 130			04/08/26 02:00	04/08/26 13:29	1
13C2 PFHxA	109		70 - 130			04/08/26 02:00	04/08/26 13:29	1
13C2 PFDA	110		70 - 130			04/08/26 02:00	04/08/26 13:29	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
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 380-218492/19-A
Matrix: Water
Analysis Batch: 218620

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 218492

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-GenX	107		70 - 130	04/08/26 02:00	04/08/26 13:29	1

Lab Sample ID: LCS 380-218492/21-A
Matrix: Water
Analysis Batch: 218620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 218492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	25.1	22.4		ng/L		89	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	25.1	25.5		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	25.0		ng/L		100	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	25.2		ng/L		101	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	22.9		ng/L		91	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	24.3		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	25.6		ng/L		102	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	25.4		ng/L		102	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	26.4		ng/L		105	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.1	26.3		ng/L		105	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.1	26.4		ng/L		105	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	25.0		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	25.1	25.4		ng/L		101	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	23.6		ng/L		94	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	25.9		ng/L		103	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.1	25.0		ng/L		100	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	25.3		ng/L		101	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	23.3		ng/L		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	96		70 - 130
13C2 PFHxA	99		70 - 130
13C2 PFDA	104		70 - 130
13C3-GenX	94		70 - 130

QC Sample Results

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

Job ID: 380-206748-1
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 380-218492/20-A

Matrix: Water

Analysis Batch: 218620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 218492

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	2.00	1.88	J	ng/L		94	50 - 150
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	2.00	2.04	J	ng/L		102	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.01	J	ng/L		100	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.00	J	ng/L		100	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.06	J	ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	1.90	J	ng/L		95	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	1.99	J	ng/L		99	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.08	J	ng/L		104	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.06	J	ng/L		103	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.05	J	ng/L		102	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	1.98	J	ng/L		99	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	1.78	J	ng/L		89	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.00	J	ng/L		100	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.05	J	ng/L		102	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.98	J	ng/L		99	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.90	J	ng/L		95	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	100		70 - 130
13C2 PFHxA	100		70 - 130
13C2 PFDA	101		70 - 130
13C3-GenX	98		70 - 130

Lab Sample ID: 380-206748-1 MS

Matrix: Water

Analysis Batch: 218620

Client Sample ID: BWS2253-H1-AQ

Prep Type: Total/NA

Prep Batch: 218492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		25.1	25.3		ng/L		101	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.1	27.2		ng/L		109	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	25.6		ng/L		102	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	26.3		ng/L		105	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: 380-206748-1 MS

Matrix: Water

Analysis Batch: 218620

Client Sample ID: BWS2253-H1-AQ

Prep Type: Total/NA

Prep Batch: 218492

Perfluorooctanoic acid (PFOA)									
Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	<2.0		25.1	27.0		ng/L		108	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.1	25.9		ng/L		103	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	25.8		ng/L		103	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.1	26.2		ng/L		105	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.1	27.5		ng/L		110	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.1	27.6		ng/L		109	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.1	26.8		ng/L		107	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		25.1	26.4		ng/L		105	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.1	26.9		ng/L		107	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	26.0		ng/L		104	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.1	27.7		ng/L		111	70 - 130
9-Chlorohexadecafluoro-3-oxan onane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	27.0		ng/L		108	70 - 130
11-Chloroeicosafluoro-3-oxaund ecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	27.4		ng/L		109	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	25.4		ng/L		102	70 - 130
Surrogate	MS	MS							
	%Recovery	Qualifier	Limits						
d5-NEtFOSAA	108		70 - 130						
13C2 PFHxA	105		70 - 130						
13C2 PFDA	107		70 - 130						
13C3-GenX	106		70 - 130						

Lab Sample ID: 380-206748-1 MSD

Matrix: Water

Analysis Batch: 218620

Client Sample ID: BWS2253-H1-AQ

Prep Type: Total/NA

Prep Batch: 218492

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	24.1		ng/L		96	70 - 130	5	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.1	26.1		ng/L		104	70 - 130	4	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	25.3		ng/L		101	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	26.0		ng/L		104	70 - 130	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	24.4		ng/L		98	70 - 130	10	30
Perfluorohexanoic acid (PFHxA)	<2.0		25.1	25.2		ng/L		100	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	25.0		ng/L		100	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		25.1	25.0		ng/L		100	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	<2.0		25.1	26.4		ng/L		106	70 - 130	4	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

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

Lab Sample ID: 380-206748-1 MSD

Matrix: Water

Analysis Batch: 218620

Client Sample ID: BWS2253-H1-AQ

Prep Type: Total/NA

Prep Batch: 218492

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	26.7		ng/L		105	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.1	26.2		ng/L		105	70 - 130	2	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.1	24.9		ng/L		99	70 - 130	6	30
Perfluorononanoic acid (PFNA)	<2.0		25.1	25.3		ng/L		101	70 - 130	6	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	24.7		ng/L		99	70 - 130	5	30
Perfluorotridecanoic acid (PFTTrDA)	<2.0		25.1	25.5		ng/L		102	70 - 130	8	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	25.5		ng/L		102	70 - 130	6	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	26.0		ng/L		104	70 - 130	5	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	24.9		ng/L		99	70 - 130	2	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
d5-NEtFOSAA	95		70 - 130								
13C2 PFHxA	96		70 - 130								
13C2 PFDA	99		70 - 130								
13C3-GenX	97		70 - 130								

QC Association Summary

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

LCMS

Prep Batch: 218492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-206748-1	BWS2253-H1-AQ	Total/NA	Water	537.1 DW	
380-206748-2	BWS2253-H1-FB	Total/NA	Water	537.1 DW	
MBL 380-218492/19-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-218492/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-218492/20-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-206748-1 MS	BWS2253-H1-AQ	Total/NA	Water	537.1 DW	
380-206748-1 MSD	BWS2253-H1-AQ	Total/NA	Water	537.1 DW	

Analysis Batch: 218620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-206748-1	BWS2253-H1-AQ	Total/NA	Water	EPA 537.1 V2	218492
380-206748-2	BWS2253-H1-FB	Total/NA	Water	EPA 537.1 V2	218492
MBL 380-218492/19-A	Method Blank	Total/NA	Water	EPA 537.1 V2	218492
LCS 380-218492/21-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	218492
MRL 380-218492/20-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	218492
380-206748-1 MS	BWS2253-H1-AQ	Total/NA	Water	EPA 537.1 V2	218492
380-206748-1 MSD	BWS2253-H1-AQ	Total/NA	Water	EPA 537.1 V2	218492

Prep Batch: 219211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-206748-1	BWS2253-H1-AQ	Total/NA	Water	533	
380-206748-2	BWS2253-H1-FB	Total/NA	Water	533	
MBL 380-219211/20-A	Method Blank	Total/NA	Water	533	
LCS 380-219211/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-219211/21-A	Lab Control Sample	Total/NA	Water	533	
380-207139-E-1-A MS	Matrix Spike	Total/NA	Water	533	
380-207139-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 219383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-206748-1	BWS2253-H1-AQ	Total/NA	Water	533	219211
380-206748-2	BWS2253-H1-FB	Total/NA	Water	533	219211
MBL 380-219211/20-A	Method Blank	Total/NA	Water	533	219211
LCS 380-219211/22-A	Lab Control Sample	Total/NA	Water	533	219211
MRL 380-219211/21-A	Lab Control Sample	Total/NA	Water	533	219211
380-207139-E-1-A MS	Matrix Spike	Total/NA	Water	533	219211
380-207139-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	219211

Lab Chronicle

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

Job ID: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Client Sample ID: BWS2253-H1-AQ

Lab Sample ID: 380-206748-1

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			219211	N8NE	EA POM	04/10/26 17:14
Total/NA	Analysis	533		1	219383	M7ML	EA POM	04/11/26 18:08
Total/NA	Prep	537.1 DW			218492	G9MN	EA POM	04/08/26 02:00
Total/NA	Analysis	EPA 537.1 V2		1	218620	Y5FM	EA POM	04/08/26 13:57

Client Sample ID: BWS2253-H1-FB

Lab Sample ID: 380-206748-2

Date Collected: 04/06/26 12:30

Matrix: Water

Date Received: 04/07/26 09:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			219211	N8NE	EA POM	04/10/26 17:14
Total/NA	Analysis	533		1	219383	M7ML	EA POM	04/11/26 18:18
Total/NA	Prep	537.1 DW			218492	G9MN	EA POM	04/08/26 02:00
Total/NA	Analysis	EPA 537.1 V2		1	218620	Y5FM	EA POM	04/08/26 16:10

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: 380-206748-1
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 *

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

Method Summary

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

Job ID: 380-206748-1
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: 380-206748-1
SDG: Site H1 PFAS 533/537.1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-206748-1	BWS2253-H1-AQ	Water	04/06/26 12:30	04/07/26 09:14	Hawaii
380-206748-2	BWS2253-H1-FB	Water	04/06/26 12:30	04/07/26 09:14	Hawaii

Client Information		Lab PM		Carrier Tracking No(s)		COC No*															
Client Contact:		Lopez, Maria		State of Origin:		Page: Page 1 of 1															
Client Name:		Maria Lopez@eteurofinsus.com		Hawaii																	
Company		PWSID:		Analysis Requested		Job #:															
City & County of Honolulu		Due Date Requested*		Preservation Codes		A - HCL N - None															
Address:		5330 South Beretania Street		380-206748 COC		Other:															
City:		Honolulu		TAT Requested (days)		Standard															
State, Zip:		HI 96843		Compliance Project: ☐ Yes ☐ No																	
Phone:		808-748-5066		PO #:																	
Email:		ekawata@hbws.org		WO #:																	
Project Name:		INTERA - Red-Hill-Incident		Project #:		38000861															
Site:		H1		SSOW#:																	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=oil, BT=Tissue, AA=Air, DW=Drinking Water)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		633 - All Analytes		637 T, DW, PREC - 637 T Full List		Total Number of Containers		Special Instructions/Note:	
BWS2253-H1-AQ		4/10/20		12:30		G		Water		☒		☒		3		3				FIELD REAGENT BLANK	
BWS2253-H1-FB		4/10/20		12:30		G		Water		☒		☒		1		1					
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									
										☒		☒									

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-206748-1
SDG Number: Site H1 PFAS 533/537.1

Login Number: 206748

List Number: 1

Creator: Ngo, Theodore

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").	True	
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	